Infor EAM

Release 11.4

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Contacting Infor

If you have questions about Infor products, go to Infor Concierge at https://concierge.infor.com/ and create a support incident.

If we update this document after the product release, we will post the new version on the Infor Support Portal. To access documentation, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Getting started

Welcome

Welcome to Infor EAM online help, version 11.4.

Use this online help to familiarize yourself with the EAM application and to perform tasks in the system.

Note: It may be necessary to update internet settings to properly run Infor EAM on Internet Explorer, Google Chrome, or Safari.

See Configuring your internet browser to work with the application on page 1415.

What's new in this release?

This topic includes features introduced in Infor EAM 11.4.

Note: This topic briefly discusses significant changes found in the latest version. It is not intended to be a comprehensive list of all the new enhancements and changes.

See the *Infor EAM 11.4 Product Release Notes* for more information on all of the features in this release.

Browse our full suite of EAM documentation on the Infor Xtreme Support portal.

Table 1: New features in this release

Screen/Tab	Module	Feature	Help topic(s)
User Setup	Administration	Allows users the option to use or hide the Contains and Does Not Contain operators when using Dataspy filters to search.	Creating users on page 88
GDPR Administration	Administration	Review and maintain records in compliance with Global Data Protection Regulations (GDPR).	Managing GDPR records on page 101 Viewing GDPR record errors on page 102
Notebook	Equipment	Enter notes and details about defects for equipment.	Entering notes in the notebook on page 502 Adding emails to the notebook on page 504 Adding references for the notebook on page 504

Screen/Tab	Module	Feature	Help topic(s)
Archived Transactions tab of the Stores form Archived Transactions tab of the Parts form	Materials	View archived transactions for stores and parts.	Viewing archived transactions for parts on page 541 Viewing archived transactions for stores on page 524
Perform Linear Search popup on the Work Orders form	Work	Search for work orders along linear equipment records.	Performing a linear equipment search for work orders on page 904

Using this help

This online help system provides instructions on how to operate the application. The sections below outline the organization and conventions of the online help system.

Note: It may be necessary to update internet settings to properly run Infor EAM on Internet Explorer, Google Chrome, or Safari.

See Configuring your internet browser to work with the application on page 1415.

Procedural help topics

Access procedural help topics by clicking the drop-down arrow on the left-hand side of the screen, and select **Help**. A new browser window is opened, and a table of contents and a help topic are shown. Navigate to procedural help topics by expanding the table of contents or by performing a keyword search on the **Search** tab.

Page help

Access help for each page in the system by clicking **Help** on the toolbar. A separate browser window is opened that contains a description of the page and a list of links to procedural help topics related to the page.

Default navigation screen menus

To find the default, out-of-the-box location of a screen in Infor EAM consult the tables in the Appendix.

See Navigating default screen locations on page 254

Top help topics

Using a Dataspy on page 328

Viewing the Start Center on page 334

Creating reports on page 1189

Using the toolbar on page 306

Using the keyboard shortcuts on page 308

Creating users on page 88

Personalizing the inbox on page 102

Setting up inbox entries on page 102

Defining custom tabs for screens on page 16

Related documentation

In addition to this online Help system, the following PDF documentation and more is available in the Infor Xtreme Support portal:

- *Infor EAM Product Release Notes*
- *Infor EAM Product Family Software Requirements*
- *Infor EAM Product Overview*
- *Infor EAM User Guide*
- *Infor EAM System Administrator Guide*
- *Infor EAM Reports User Guide*

System Administrator

System configuration

Defining installation parameters

Define new installation parameters to tailor the system to your working environment. Set up system-wide defaults to determine settings such as whether department security is on or off or the number of days before a password expires for users. Infor EAM installation sets up default values, also known as "installation codes" or "installation parameters." You can also edit existing installation parameters.

Note: Only qualified Infor EAM system administrators should create installation parameters, with specific guidance and approval from your Infor consultant. Contact your Infor consultant to create installation parameters.

To define installation parameters:

1 Select **Administration > Security > Install Parameters**.
2 Click **New Record**.
3 Specify this information:

   Install Parameter
   Enter a unique code identifying the installation parameter, and then enter a description of the installation parameter in the adjacent field.
   Note: You cannot define fixed install parameters or assign new install parameters to a module.

   Value
   Enter the default value for the parameter.

4 Click **Save Record**.

Setting up installation parameters

Update installation parameters as required to perform normal operations.

To set up installation parameters:

1 Select **Administration > Security > Install Parameter Setup**.
2 Installation parameter values are displayed in update mode. Update the installation parameter value, and then click **Save Record**.

Understanding entities

Entities are the fundamental core of the system. Configuration of entities and their respective codes determines what functions of the system are available and to which users. An entity is a table of related data pertaining to specific system functions.

There are three kinds of entities in the system: **`Status Entities`**, **`Type Entities`**, and **`Code Entities`**. The system identifies entities as **`Extended Codes`**, but they are identified to users as **`User Codes`**. When you install Infor EAM, all **`Extended Codes`** and **`User Codes`** are identical. Tailor the system to an organization by adding new user codes on the **System Codes** form.

`Classes` divide entities into groups that share certain characteristics. For example, you can subdivide an entity into classes to define a separate list of custom attributes for each class.

Defining system codes

Define system codes to tailor the system to the entity. You can also edit existing user codes.

Note: Infor strongly recommends creating new classes, rather than system codes, to subdivide Type entities when possible.

To define system codes:

1 Select **Administration > Setup > System Codes**.
2 Select the type of setup for which to define system codes.
3 Specify the **For Entity** for which to define system codes.
4 Click **Add User Code**.
5 Specify this information:

User Code
Specify a new user code to represent one of the system codes.

System Code
Specify the system code representing the user code.

Description
Specify a description of the user code.

Icon
Select the color of the icon to indicate the importance of the user code.
Note: This functionality is currently only available for the PWRS (Risk) and JBPR (WO Priority) entities on the screen.

Icon Path
Specify the URL path to the image you would like to use for the icon. Accepted icon paths begin with **http://**, **//**, or ****, or **https://**.
Note: The recommended size of the image is 16 x 16 pixels and file type extension should be .gif, .jpg, or .png.

System Default
Select one of the user codes as the system code if there are multiple user codes for one system code. This code is used as the default value for the Type or Status entity.

Out of Service
Select to designate system codes as out of service.

6 Click **Submit**.

Note: To update the translations by language, click **Translations**.

See the *Infor EAM User Guide*.

Creating and modifying screens

Create new screens or modify existing screens by associating icons with screens and setting background-printing parameters for reports.

Note: To view a list of current screens in the system, run the Function List Report.

To create or modify screens:

1 Select **Administration > Screen Configuration > Screens**.
2 Click **New Record**.
3 Specify this information:

Screen
Specify a unique six-character mnemonic code for the new screen, and then enter a brief description of the screen in the adjacent field.

Class
Specify the class of the screen.

Form Type
Select the form type for this screen.

Parent
Specify the screen on which this new screen is based.

Last Value
Specify the entity used by the system to "remember" the primary key field in this screen.

Icon
Specify the name of an existing icon file to associate an icon with the screen.

Report
Specify a report that prints (in the background) using the selected data on a screen. Also, specify background report parameters to use with this functionality.

Employee Filter
Specify the employee type to apply to the screen.

URL Path
Specify the URL location of the screen.
Note: Specify up to three parameters (:user, :password, or :org) in the URL Path to pass values to the new screen. These values must be entered in lowercase.

Example: `http://yourapp.yourserver.com?USERID=:user&PWD=:password`

Open URL in New Window
Select to display the URL in a new browser window.

Invoke Dataspy
Select to allow users to utilize dataspy filters on this screen.

Startup Action
Select the stage of the query process in which the screen opens:

No Action
Select to open the form without running a Dataspy or displaying records.

Enter Insert Mode
Select to open the form on the **Record View** tab and in Insert Mode.

Run Dataspy
Select to open the form with the default Dataspy and to highlight the first record in the list.

Remember Dataspy
Select to open the form with the last remembered Dataspy (within the current session) with quick filter and quick sort for the form and to highlight the first record in the list.

Remember Last Value
Select to open the form with the last remembered value for the screen.

Startup View
Select the view in which the screen will display when initially accessed, e.g., select **Split View** to indicate the screen will open in split view format, select **List View** to indicate the screen will open in list view format, or select **Record View** to indicate the screen will open in record view format.

Split View Display
Select how the fields are displayed on the screen in the summary grid:

Standard
Fields are displayed in the standard format, including the code and description fields, and icons.

Grid Fields
Fields are displayed based on the dataspy settings. The code and description fields are not displayed

Mixed
Fields are displayed in a combination of standard and grid field settings, including the code and description fields, and three fields from the dataspy settings.

Auto Refresh Timer (seconds)
Specify the time frequency in seconds in which the screen will automatically refresh, e.g., enter 15 to indicate the screen will refresh every 15 seconds.
Note: This feature only works in full list view mode for List View and Record View screens and user-defined grids.

4 Click **Save Record**.

Note: After defining a new screen, you must authorize users to use the new screen.

See Granting screen-level permissions to user groups on page 78.

Changing text on a specific screen

Change text on a specific screen if the text usage is in the wrong context for your local language.

Note: The changes you make might be overwritten during system upgrades or by global substitutions.

To change text on a specific screen:

1 Select **Administration > Screen Configuration > Screens**.
2 Select the screen for which to change text, and then click the **Text** tab.
3 Select the record for which to change text.
4 Specify this information:

Text
Change the text as necessary.

5 Click **Submit**.

Defining URL parameters for custom screens

Define how parameter values are passed to custom screens and tabs.

URL parameters designate locations and directories for schemas, servlets, documents, etc. that must be set for many Infor EAM (Oracle Forms) and Infor EAM add-ons and features to work properly.

To define URL parameters for custom screens:

1 Select **Administration > Screen Configuration > Screens**.
2 Select the screen for which to define URL parameters, and then click the **Record View** tab.
3 Click **Add URL Parameter**.
4 Specify this information:

Parameter Name
Specify a unique code identifying the parameter. The system automatically populates **Sequence** and selects **System**.

Parameter Value
Specify a URL for the parameter.

Active
Select if the URL parameter is active for the screen or tab.

5 Click **Submit**.
6 Click **Close**.

Defining custom tabs for screens

Define custom tabs for existing screens. Specify an external URL to transfer values from the current screen. The URL information displays inside the tab in the Infor EAM system.

To define custom tabs for a screen:

1 Select **Administration > Screen Configuration > Screens**.
2 Select the screen for which to define custom tabs, and then click the **Custom Tabs** tab.
3 Click **Insert Custom Tab**.
4 Specify a description for the new custom tab. A **Tab Code** is automatically generated.
5 Specify this information:

Type
Specify the custom tab type. URL is the recommended setting because it is the only supported value.

Trusted Site
Select to allow access to the parent frame.

URL
Specify the URL for the custom tab.

6 Click **Submit**.

Note: The key values are automatically passed from the header of the current form to the URL. This feature displays only information related to the selected record.

To define URL parameters for custom screens or tabs, click **Define URL Parameters**.

See Defining URL parameters for custom screens on page 16.

Remembering fields for forms

Determine which fields will have their values remembered when a user navigates away from the form. Selected fields to remember may consist of **Work Order**, **Equipment**, etc. When the user selects a **Work Order** and navigates away from the **Work Orders** form to another form such as Assets form, the system remembers the **Equipment** value and displays it on the **Assets** form.

Note: The Fields to Remember feature is only supported for forms that have a Last Value Entity populated on the **Record View** page of the **Screens** form.

To remember fields for forms:

1 Select **Administration > Screen Configuration > Screens**.
2 Select the screen for which to remember fields, and then click the **Fields to Remember** tab.
3 Click **Add Field**.
4 Specify this information:

Field
Specify the field of the value for the system to remember.

Entity
Specify the entity of the value for the system to remember.

5 Click **Submit**.

Associating Dataspies to users by screens

Add users to associate Dataspies to additional users on selected screens. Once a Dataspy is associated with a user on a specific screen, the Dataspy is available to the user whenever they open and view the screen.

To associate a Dataspy to users on a screen:

1 Select **Administration > Screen Configuration > Screens**.
2 Select the screen for which to associate users to a Dataspy, and then click the **Dataspies** tab.

3 Select the non-global Dataspy record to which to add user associations on this screen, and then click **Add Users**. The Add Users popup is opened.
4 Select one or more users to receive a copy of this Dataspy for the selected screen.
5 Optionally, select the **Set as Default** check box to set the Dataspy as the default for the selected user(s) on this screen.

   Note: If the selected Dataspy is marked as a global Dataspy, select one or more users to receive the Dataspy as their default Dataspy on this screen.

6 Click **Submit**. The Add Users popup is closed.

   Note: If the amount of time it takes to run a Dataspy exceeds the value (time) set for install parameter DSSLTIME, the**Slow** check box is automatically checked. If a Dataspy has been flagged as slow, when that Dataspy is run, the columns from the Dataspy are loaded however the data is not loaded. You have the option to click **Run** to load the data, or to modify the Dataspy to improve performance. Contact your system administrator for more information.

Viewing Dataspies associated to screens

View all Dataspies and their associated users on selected screens.

Note: You cannot create a new Dataspy record, nor delete an existing Dataspy record on this screen. You can only associate users to the Dataspies on the screens.

To view a Dataspy associated to a screen:

1 Select **Administration > Screen Configuration > Screens**.
2 Select the screen for which to view Dataspy records, and then click the **Dataspies** tab.
3 View the Dataspy details including owners of the Dataspy on the selected screen.
4 Optionally, select the **Default** check box to make this the default Dataspy for all users on this particular screen.
5 Click **Submit**.

   To display the selected Dataspy details on the selected screen for other users, click the **Add Users** button. The Add Users popup is opened. See Associating Dataspies to users by screens on page 17.

Creating user defined screens

Create, modify, delete, and view user defined screens.

To create user defined screens:

1 Select **Administration > Setup > User Defined Screens**.
2 Click **New Record**.
3 Specify a unique six-character mnemonic code for the new user defined screen in the **Screen Name** field, and then enter a brief description of the screen in the adjacent field.

Note: For user defined screens, the second letter of the screen name must be a **U**, the length of the screen name cannot exceed six characters, and the screen name cannot contain special characters.

4 Specify this Screen Details information:

Table Name
Specify a unique code identifying the table to which the user defined screen belongs. The table name cannot contain special characters.
Note: For tables that are generated a *U5* prefix is automatically added to the table name. For example, if you create a table called "MyTable", the generated table name will be "U5MYTABLE".

Entity
Specify a unique code identifying the entity to which the user defined screen belongs. The entity name cannot contain special characters.

5 Optionaly, select the **Tab** check box to indicate this user defined screen is a tab on another screen. If selected, you must specify the **Parent Screen** to which the tab belongs.

6 Optionally, select the **Out of Service** check box to prevent the new user defined screen from being displayed in user defined screen lookups or in the grids for the **Menus** and **Scanner Menus** tabs on the **User Groups** form.

7 Click **Save Record**.

Note: Add fields to the new user defined screen on the **Fields** tab. Once you add fields, click the **Generate** link button to generate the new user defined screen. The screen is compiled, and it is added to the list of screens you can make available on the menu.

Defining fields for user defined screens

Create, modify, or delete fields for user defined screens.

To define fields for user defined screens:

1 Select **Administration > Screen Configuration > User Defined Screens**.

2 Select the user defined screen for which to define fields, and then click the **Fields** tab.

3 Click **Add Field**.

4 Specify this information:

Field Name
Specify the name for the field. The field name must be unique and cannot be a database reserved word or contain special characters.

Description
Specify a description of the field.

Field Label
Specify the boiler text for the field. The default **Field Label** is equivalent to the **Field**.

Sequence
Specify a numeric value for the sequence. Fields are displayed in ascending order by their sequence.

Field Type
Specify the field type. The default **Field Type** is **Alphabetic**. Specify the default **Field Type** as one of the following options:

- Alphabetic
- Numeric
- Date
- Date Time
- Time
- Free Format Text
- Checkbox

Field Length
Specify the maximum character length if the field type is **Alphabetic**.

Total Digits
Specify the total number of digits allowed including decimal places for the field if the **Field Type** is **Numeric**.

Decimal Places
Specify the number of digits allowed after the decimal for the field if the **Field Type** is **Numeric**.

Computed Data
Specify the computed data statement for the field when **Field Type** is **Computed Value**.

Source Field
Specify the source field if the value will be retrieved from another database table.

Query Code
Specify the query code to define the list of values available for selection from the LOV. When a query code is specified for a field, the field behaves as an LOV.

Parent Screen Key Field
Specify the key field of the parent screen of this field if the user defined screen for which you are defining this field is the tab on a parent screen.

5 Optionally, select the **Is Primary Key** check box to indicate that there cannot be another record with the same value in that field. Field types of **Free Format Text**, **Checkbox**, **Date**, **Date Time**, and **Time** cannot be selected as primary key fields.

Note: If **Auto Generate Key** is selected on the header record for this user defined screen, **Is Primary Key** is protected because the primary key is auto-generated.

6 Optionally, select the **Is Nullable** check box to allow users to leave the field blank.

Note: **Is Nullable** is a protected check box that cannot be edited when a field is selected as a primary key.

7 Optionally, select the **Uppercase** check box to enforce uppercase characters for the field value when the field type is **Alphabetic**.

8 Optionally, select the **Computed Value** check box to indicate the defined field will use the valued entered in the **Computed Data** field to calculate the field value.

9 Optionally, select the **Retrieved Value** check box to indicate the value for this field will be populated from a database table or other screen using the **Retrieved Value Query**. If selected, the **Source Field** and **Retrieved Value Query** are required as well.

   Note: **Retrieved Value Query** must return one record and one column only.

10 Optionally, select the **Out of Service** check box to prevent the field from being displayed in user defined screen lookups.

11 Click **Submit**.

Defining custom fields information

Tailor the system for the working environment by adding custom fields to forms.

Defining custom fields

Define an unlimited number of new fields, and attach a selection of these fields to any class of an entity, such as an equipment class or a purchase order class, or to an entity, such as all equipment or all purchase orders.

Specify valid lookup values for a custom field using the **Associate Custom Fields** form.

See Associating custom fields with an entity or class on page 23.

To define custom fields:

1 Select **Administration > Custom Fields > Custom Fields**.

2 Click **Add Custom Field**.

3 Specify this information:

   Custom Field
   Enter a unique code identifying the field, and then enter a description of the field in the adjacent field. The description is the text that the user will see for the custom field.

   Type
   Select one of the following field types:

   - **Character**
     Any alphanumeric characters.

   - **Numeric**
     Numeric values.

   - **Date Field**
     Date values in DD-MON-YYYY format.

   - **Date/Time**
     Date and time values in DD-MON-YYYY HH24:MI format.

Code+Description
Unique code and a description of the code.

See Defining lookup values for custom fields on page 22.

System Entity
Code description of an Infor EAM entity. The system enables the System Entity field.

System Entity
Enter the code description of the entity for which to define custom fields.

Minimum Value
Maximum Value
Specify the range of values users can enter.

4 Click **Submit**.

Note: To view translations information, select the custom field for which to view translations, and then click **Translations**.

See the *Infor EAM User Guide*.

Defining lookup values for custom fields

Define lookup values for custom fields of the "Code+Description" type.

To define lookup values for custom fields:

1 Select **Administration > Associate Custom Fields > Associate Custom Fields**.
2 Specify this information:

Entity
Enter the entity for which to define a lookup value.

Select the custom field **Line** for which to define lookup values.

Click **Define Lookup Values**.

Click **Add Value**.

Value
Enter the value for the lookup.

Description
Enter a description of the value.
Note: **Description** field is only enabled if the Lookup Type is Code+Description.

Out of Service
Select if the lookup value is out of service.

3 Click **Submit**.

Associating custom fields with an entity or class

Fields associated with a class appear only when the class has been specified in the regular class field. Fields associated with an entity (class is *) always appear on screens based on that entity, whether or not a class has been specified.

To associate custom fields with an entity or class:

1. Select **Administration > Custom Fields > Associate Custom Fields**.
2. Enter the entity to which to associate the custom field. The system automatically populates the entity description. The system automatically populates **Class** and **Class Org.**
3. Click **Add Custom Field**.
4. Specify this information:

   Line
   Enter the desired order for displaying the custom fields. The system displays fields associated with the entity (i.e., to class *) first and then displays the fields associated with the particular class of the data.

   Custom Field
   Enter the code of the custom field. The system automatically populates the description.

   UOM
   Enter the unit of measure.

   Lookup Type
   Select one of the following lookup types for the custom field:

   - **None**
     Enter any value for this field.

   - **Property**
     The lookup is valid for the field without restriction to which entity or class it is attached. This lookup applies system-wide. You must define the list on the same level. If the custom field is of Type Code+Description, the default **Lookup Type** is Property. Refer to Defining Custom Fields.

   - **Entity**
     The lookup displays values specific to the field and entity. Therefore, the lookup may have different values for items such as equipment or parts.

   - **Class**
     The lookup displays values specific to the field, entity, and class. Therefore, the lookup may have different values within items such as entity parts.

   Not Updateable
   Select when the system retrieves values from the category of data instead of from the data itself.

   Print Custom Fields
   Select to enable the system to print the custom field on work order cards.
   Note: Print Custom Fields is only enabled for custom fields associated with the OBJ and EVNT entities.

Use for Validation
Select to allow users to enter only values that are in the lookups for the field. If unselected, users can also enter values that are not in the lookups.

5 Click **Submit**.

Defining global text changes

Access the **Global Text Changes** form to change boiler text (field labels) throughout the system rather than using screen designer on each separate screen where the boiler text appears. Making global text changes creates system-wide terminology changes. Any changes made on the **Global Text Changes** form are applied to all Infor EAM forms where the specified text appears.

Note: Error messages, function titles, and code descriptions cannot be changed using the **Global Text Changes** form.

It is possible to have duplicate texts within the system. Changing one will not affect the other.

To define global text changes:

1 Select **Administration > Setup > Global Text Changes**.
2 Specify the search criteria in the Dataspy, and then select the record to update.
3 Specify this information:

   Alternate Text
   Specify the text for the new boiler text.

4 Click **Submit**.

   Note: To reverse the text change for the selected record, click **Undo**. The **Original Text** becomes the **Current Text** for the selected record.

   To reverse all of the system boiler text changes, click **Undo All**.

   To update all of the system boiler text changes, click **Redo All**.

Displaying boiler text where used

To display boiler text where used:

1 Select **Administration > Setup > Global Text Changes**.
2 Enter the search criteria in the Dataspy, and then select the record to update. The system automatically populates **Current Text**, **Original Text**, **Language**, **Code**, and**Last Updated**.
3 Click **Where Used**.
4 The system displays all screens where the selected record appears.

Defining cost codes

Define cost codes for the organization, and then reference them along with any data involving costs, such as work orders, purchases, material issues, etc. Charge maintenance costs to the correct area by specifying cost codes. The cost for repairing a unit air conditioner, for example, might come out of a particular department's budget.

Note: Cost codes simplify tracking costs; however, they might hinder data entry because you must specify cost codes along with the data.

To define cost codes:

1. Select **Administration > Setup > Cost Codes**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the cost code belongs if you use multi-organization security.

   Cost Code
   Specify a unique code identifying the cost, and then specify a description of the cost code in the adjacent field.

   Class
   Specify the class of the cost code.

   Non-billable
   Select to prevent the cost code from being included when bills are generated.

   Out of Service
   Select to prevent the cost code from being displayed in lookups.

   Transactions associated with non-billable cost codes will not be included in fleet bills.

   Account Segment Value
   Specify the general ledger account code segment that represents the organization in your accounting structure. See your chart of accounts for more information.

4. Click **Save Record**.

Selecting languages

Configure the system to operate in more than one language. This feature is especially useful for multinational organizations and for companies in bilingual countries, such as Belgium (French and Flemish) and Canada (English and French).

When the system is configured with two or more languages, these languages will be predefined in the system. It is possible to define extra languages. Defining other languages is useful when creating purchase orders, quotation requests, etc., for suppliers in other languages.

To accommodate multilingual transactions, add free-format text in both your own language and in the supplier's language. While you can inspect the text in your own language using the corresponding features, the text in the supplier's language will be printed on the form that will be sent to the supplier.

Adding a new language

Infor EAM is delivered with support for nine language translations. Any of these languages that are not initially installed are classified as **Available**. Use **Install Available Language** to install any of these languages at a later date.

To add a non-supported language, languages not delivered in Infor EAM: first add the language, next make the language available, install the language, and then designate the language as **Active** to use the language.

To add a new language:

1. Select **Administration > Setup > Languages**.
2. Click **New Record**.
3. Specify this information:

   Language
   Enter a unique code identifying the language, and then enter a description of the language in the adjacent field. The system automatically populates **Available** and **Installed**.
   Note: Language must be less than or equal to two letters.

   Out of Service
   Select to indicate the language is out of service.

4. Click **Save Record**.

   Note: To make a language **Available**, click **Make Language Available**.

   To install an available language, click **Install Available Language**.

   To refresh an installed language, click **Refresh Installed Language**.

Making a language available

Designate an installed language as **Available** to use in Infor EAM.

To make a language available:

1. Select **Administration > Setup > Languages**.
2. Select a language to make available, and then click the **Record View** tab.
3. Click **Make Language Available**.
4. Specify this information:

   Language
   Select the language from which to copy the available language.

5. Click **Submit**.

Installing an available language

Install a language after it has been made **Available**.

Note: The system will not install the language until it has first been made **Available**.

To install an available language:

1. Select **Administration > Setup > Languages**.
2. Select a language to install, and then click the **Record View** tab.
3. Click **Install Available Language**. The system automatically populates **Install/Upload Started**, **Processing Status**, and **Install Upload Completed** on the **Record View** page.

Refreshing an installed language

Prior to refreshing a language, the language must be added, made available, and installed.

See Adding a new language on page 26.

To refresh an installed language:

1. Select **Administration > Setup > Languages**.
2. Select a language to refresh, and then click the **Record View** tab.
3. Click **Refresh Installed Language**.
4. Choose one of the following options:

   Refresh All Dates
   Select to refresh all translated text.

   Refresh Since
   Select to refresh translated text beginning with the selected **Date**.

5. Specify this information:

   Boiler Text
   Select to refresh boiler text.

   Code Description Text
   Select to refresh code description text.

   Error Text
   Select to refresh error text.

   Menu Text
   Select to refresh menu text.

6. Click **Submit**.

Viewing the current status of boiler text records for new languages

View the current status of boiler text records in the system. Use the export to MS Excel functionality to initiate the first or next round of language translation.

To view the current status of boiler text records for new languages:

1. Select **Administration > Setup > Languages**.
2. Select the language for which to view current status of boiler text records, and then click the **Boiler Text** tab.
3. Specify this information:

   Comparison Language
   Enter the language for which to compare the boiler text.

4. View the translated and untranslated boiler text.

   Note: To download all selected records to MS Excel, click **Save Grid to Excel**.

Viewing the current status of code description text records for new languages

View the current status of code description text records in the system. Use the export to MS Excel functionality to initiate the first or next round of language translation.

To view the current status of code description text records for new languages:

1. Select **Administration > Setup > Languages**.
2. Select the language for which to view current status of code description text records, and then click the **Code Description Text** tab.
3. Specify this information:

   Comparison Language
   Enter the language for which to compare the code description text.

4. View the translated and untranslated code description text.

   Note: To download all selected records to MS Excel, click **Save Grid to Excel**.

Viewing the current status of error text records for new languages

View the current status of error text records in the system. Use the export to MS Excel functionality to initiate the first or next round of language translation.

To view the current status of error text records for new languages:

1. Select **Administration > Setup > Languages**.
2. Select the language for which to view current status of error text records, and then click the **Error Text** tab.
3. Specify this information:

Comparison Language
Enter the language for which to compare the error text.

4 View the translated and untranslated error text.

Note: To download all selected records to MS Excel, click **Save Grid to Excel**.

Viewing the current status of menu text tab for new languages

View the current status of menu text records in the system. Use the export to MS Excel functionality to initiate the first or next round of language translation.

To view the current status of menu text tab records for new languages:

1 Select **Administration > Setup > Languages**.
2 Select the language for which to view current status of menu text tab records, and then click the **Menu Text** tab.
3 Specify this information:

Comparison Language
Enter the language for which to compare the menu text tab.

4 View the translated and untranslated menu text tab.

Note: To download all selected records to MS Excel, click **Save Grid to Excel**.

Defining closing periods

The system gathers maintenance costs on an ongoing basis. When you are ready to process those costs, define closing periods. Typically, closing periods occur at the end of every month, although some companies process transactions on a quarterly basis. When the specified date arrives, the system freezes all of the relevant data, and a new costing period begins.

Note: Define closing periods just before transferring transaction data to another system for account processing (general ledger, accounts payable, accounts receivable, etc.).

To define closing periods:

1 Select **Administration > Security > Closing Periods**.
2 Click **Add Closing Period**. The system automatically populates **Date Entered** with the current server system date.
3 Specify this information:

Closing Date
Enter the closing date for the period.
Note: Closing Date must be in the past because changes to time sheets, issues and receipts, purchases, and other transactions cannot occur before the date established by the **Closing Period**.

4 Click **Submit**.

Note: You cannot delete closing periods.

Creating and modifying locales

Create or modify locale settings for users. The system supports the locale at the user level, organization level, and global level (installation parameter). The system automatically employs the locale of the user. If this locale is not valid, then the system uses the locale of the default organization of the user. Finally, if that locale is not valid, then the system employs the locale of the global setting.

To create or modify locales:

1. Select **Administration > Setup > Locales**.
2. Click **New Record**.
3. Specify this information:

   Locale
   Enter a unique code identifying the locale, and then enter a description of the locale in the adjacent field.

   Monetary Decimal Separator
   Enter the symbol used as the monetary decimal separator of the locale.

   Monetary Group Separator
   Enter the symbol used to separate monetary groupings in the locale.

   Monetary Group Digits
   Enter the number of digits needed to separate monetary groups in the locale.

   Monetary Decimal Places
   Enter the number of digits to appear after a monetary decimal in the locale.

   Negative Symbol
   Enter the symbol used to indicate a negative number in the locale.

   Date Format
   Select the date format of the locale.

   Numeric Decimal Separator
   Enter the symbol used as the numeric decimal separator of the locale.

   Numeric Group Separator
   Enter the symbol used to separate numeric groupings in the locale.

   Numeric Group Digits
   Enter the number of digits needed to separate numeric groups in the locale.

   Numeric Decimal Places
   Enter the number of digits to appear after a numeric decimal in the locale.

   Positive Symbol
   Enter the symbol used to indicate a positive number in the locale.

   First Day of Week
   Select the first day of the week in the locale.

4 Click **Save Record**.

Defining documents

Organizations involved with maintenance have much supporting documentation, including schematics and drawings, reference guides and user manuals, warranties, manufacturer claims, and delivery notes.

In addition, organizations can store information electronically on computer diskettes, CAD drawings, CDs, videos, or audiotapes. Infor EAM makes it easier to manage this information by allowing organizations to store entire libraries of documents.

Assign a code to documents, specify track revision information, and identify the location of the document.

When setting up electronic document files, consult your system administrator before defining documents to determine if directories have already been set up.

To define documents:

1 Select **Administration > Setup > Documents**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the document belongs if you use multi-organization security.

Document
Specify a unique code identifying the document, and then enter a description of the document in the adjacent field.

Revision Number
Specify the revision number of the document, e.g., if you have updated the document since the document was entered in the system, enter 1.

Original Code
Specify the original code of the document.

File Location
Specify the location of the file.

File Type
Specify the type of file, such as word document (DOC), spreadsheet (XLS), etc.

IDM Document Type
Specify the document type if you are uploading it from the Infor Document Manager system.

Effective Date
Specify the date to make the document available in the system to users of this organization.

Expiration Date
Specify the date the document at which the document is no longer available to those users in the system.

Title
Specify the title of the document.

Class
Specify the class of the document.

Revision Date
Specify the date of the latest document revision.

Pages
Specify the number of pages in the document.

File Path
Specify the file path of the document, such as URL (www.infor.net), filename (infor.doc), etc.

4 Optionally, select the **Out of Service** check box to prevent the document from displaying in lookups across the system.
5 Click **Save Record**.

Note: Click **Upload Document** to upload an existing document record to the server. A document record must already exist and cannot have unsaved changes to upload it from the **Documents** form. After uploading a document, **File Type** is automatically populated with **`Uploaded Document`** and **File Path** with the file name.

See the *Infor EAM User Guide*.

Click **View Document** to view the document.

To view or remove a document association, click the **Where Used** tab.

See Removing document associations on page 32.

Removing document associations

View entity associations for documents, and then remove entity associations as necessary.

To remove a document association:

1 Select **Administration > Setup > Documents**.
2 Select the document for which to remove an entity association, and then click the **Where Used** tab.
3 Select the entity to disassociate from the document, and then click **Remove Document Association**.

Setting up access to external documents

Set up access to external documents by defining a URL or file path installation parameter for files. When accessing an external document, the system looks for the URL or file path you have defined as an installation parameter for a particular file type or category to display the document.

Define the URL or file path as URLxxx where xxx is the value of **File Type** on the **Documents** form. For example, you might enter the code URLPDF to access a .PDF file. Then you would enter the URL or file path indicating the location where all .PDF files are stored on the web or network, e.g.,

\\mycompany\myserver.com\documents\PDFs. When you access an external document after setting up access to external documents, the system identifies the document type or category and then opens the file using the URL indicating where documents of the specified type or category are stored and the specific **File Path** you entered on the **Documents** form. Thus, the full path to the specific document you wish to access might be \\mycompany\myserver.com\documents\PDFs\PDFattachment.pdf.

Note: The URL can be a path to the web or a directory. You can separate URLs by type, e.g., .DOC or .PDF or by a chosen category, e.g., Safety (URLSAF) or Vendors (URLVEN).

To set up access to external documents:

1. Select **Administration > Security > Install Parameters**.
2. Click **New Record**.
3. Specify this information:

   Install Parameter
   Enter a unique code identifying the URL installation parameter, e.g., URLPDF, and then enter a description of the URL installation parameter in the adjacent field.
   Note: You cannot define fixed install parameters or assign new install parameters to a module.

   Value
   Enter the full path to the URL that contains files of the specified type or category, e.g., \\mycompany\myserver.com\documents\PDFs.

4. Click **Save Record**.

Setting up printers

To set up printers:

1. Select **Administration > Setup > Printers**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Enter the organization to which the printer belongs if you use multi-organization security.

   Printer
   Enter a printer code to link the printer to a specific device, and then enter a description of the printer in the adjacent field.
   Note: **Printer** is case sensitive; it accepts mixed-case records.

   Destination
   Enter a unique destination identifying the path to the printer.

   Special
   Select to prevent the printer from being displayed in the **Printer** lookup when printing reports.

4. Click **Save Record**.

Defining classes

Define classes for most entities. You can separate a single entity into groups, most often for cost analysis. For example, you can assign classes to equipment, and then give all air conditioning units a class of "HVAC." With this information, an analysis that compares the cost of maintaining all HVAC units is provided.

To define classes:

1. Select **Administration > Setup > Classes**.
2. Specify the entity for which to create classes.
3. Click **Add Class**.
4. Specify this information:

   Class
   Specify a unique code identifying the class.

   Description
   Specify a description of the class.
   Note: When editing a class, you can only edit the **Description**.

   Organization
   Specify the organization of the class if you use multi-organization security.

   Coding Entity
   Select the coding entity with which to associate the class.

   Level
   Specify the level of the class.

   Out of Service
   Select to prevent the class from being displayed in lookups.

   Note: **Coding Entity**, **Level**, and **Out of Service** apply only to the CLVL entity.

   Property Definition
   Select the property definition with which to associate the class.

   Notebook Definition
   Select the notebook definition with which to associate the class.

   Note: **Property Definition** and **Notebook Definition** apply only to the OBJ entity.
5. Click **Submit**.

   Note: To update the translations by language, click **Translations**.

   See the *Infor EAM User Guide*.

Defining classes and custom fields

Define class records for entities. Classes allow you to segment a single screen into groups for cost analysis or other comparisons.

To define classes and custom fields:

1 Open the **Classes and Custom Fields** form.
2 Click **New Record**.
3 Specify this information:

   Class
   Enter a code for the class, and then enter a description in the adjacent field.

   Organization
   Enter the organization if you use multi-organization security.

   Screen
   Select the form for which to create the class.

   Out of Service
   Select to indicate the class is out of service.

4 Click **Save Record**.

Associating custom fields with classes

Define custom field records or select existing custom fields and associate them with a selected class.

To define associate custom fields with classes:

1 Select **Administration > Setup > Classes**.
2 Select the class for which to associate custom fields, and then click the **Custom Fields** tab.
3 Choose one of the following options:

   To add a new custom field
   Click **Add Custom Field** to add a new custom field to associate with a selected class. Specify the information below.

   To add an existing custom field
   Specify the custom field to associate with the selected class. The system automatically displays a list of values for the custom field. Select a value, and the system displays the **Custom Fields** page and automatically populates **Custom Field**, custom field description, and **Type**.

4 Specify this information:

   Custom Field
   Enter a code for the new custom field, and then enter a description in the adjacent field.

   Line
   Enter a value for the line.

   Type
   Select a type for the custom field.

Print on Work Order Report
Select to print the custom field on the work order report.

Enforce Lookup Validation
Select to require lookup validation for the custom field.

Minimum Value
Enter the minimum value required for the custom field.

Maximum Value
Enter the maximum value allowed for the custom field.

Enable Lookup
Select to enable lookup for the custom field.

5 Click **Submit**.

Setting up field filters for screens

The **Screen Setup** form allows administrators to configure the options available in lookup fields for users on specific screens.

Set up field filters for equipment and work order types on specific screens by specifying which equipment and work order types are available for selection by a user on the screens.

Using the following check boxes the administrator can set the following filters for fields on selected screens:

- **Type**

  If selected, on the record view of the selected screen, the system displays the types listed on the **Types** tab in the **Types** lookup.

  Only equipment/work orders that belong to **Types** listed in **Field Filter** setup will be displayed in the **List View** of the selected screen.

  Note: An equipment type can be linked to more than one screen; however, only one type can be flagged as the default screen type for the selected screen.

  The list of screens for which the administrator can filter the types and classes is predefined. Users cannot insert or delete records.

- **Class**

  Enable the class filter for selected screens. If selected, on the **record view** of the selected screen, the **Class** lookup will only display the classes listed on the **Class** tab. Only equipment or work orders that belong to **Classes** listed in **Field Filter** setup will be displayed in the **List View** of the selected screen.

- **WO Equipment Type**

  On the selected **Work Order** screen, the **Equipment** lookup field displays the equipment types that are also listed on the **WO Equipment Type** tab.

- Select the **Filter WO Equipment Type** checkbox to enable the **WO Equipment Type** filter for the selected screen.

Note: This check box must be selected only for work order screens.

- **Operator Checklist**

  Specify task plans and equipment classes that will display in the Task Plan and Equipment Class lookups for users on the Operator Checklists screens.

- **Reservation Calendar**

  If the selected record is a **Reservation Calendar** screen, the **Filter WO Equipment Type** checkbox is protected as are the specific **Organization** and **Class**.

Setting up classes for screens

Select classes for equipment or work orders. Administrators can specify which class must be displayed for a user on the related screens.

To set up classes:

1. Select **Administration > Screen Configuration > Screen Setup**.
2. Select the screen for which to set up classes for equipment or work orders, and then click the **Record View** tab.
3. Select the **Filter Class** check box to filter the class records in the class lookup for the selected screen.
4. Select the **Classes** tab.
5. Click **Add Class** to add classes to the class lookup on the selected screen.
6. Specify this information:

   Class
   Select the class to display in the class lookup on the selected screen, and then click **OK**.

   Note: To select multiple classes to display in the class lookup on the selected screen, click **Select Class**. Select the classes, and then click **Submit**.

7. Click **Submit**.

Setting up types for screens

Select types for equipment or work orders. Specify which equipment or work order types must be displayed for a user on the related screens.

Note: The user can select a type, only if the **Filter Type** checkbox is selected in the **Record View**screen.

To set up types:

1. Select **Administration > Setup > Screen Setup**.
2. Select the screen for which to set up the types for equipment or work orders, and then click the **Record View** tab.
3. Select the **Filter Type** check box to filter types for equipment or work orders on the selected screen.
4. Select the **Types** tab.
5. Click **Add Type** to add the equipment or work order type to the selected screen.

6 Specify this information:

Type
Select the type of equipment or work order.
Note: To select multiple types for the selected screen, click **Select Types**. Select the types, and then click **OK**.

Default Screen Type
If this checkbox is selected, the system defaults the equipment type or work order type to the type defined as the **Default Screen Type**.

7 Click **Submit**.

Setting up work order equipment types for screens

Set up work order equipment types. Specify which work order equipment types will display for a user on the related screens.

To set up work order equipment types for screens:

1 Select **Administration > Setup > Screen Setup**.
2 Select the screen for which to set up the types for work order equipment, and then click the **Record View** tab.
3 Select the **Filter WO Equipment Type** check box to filter work order equipment types for the selected screen.

Note: The user can select a work order equipment type, only if the **Filter WO Equipment Type** checkbox is selected on the **Record View** screen.

4 Click the **WO Equipment Types** tab.

Note: **Filter WO Equipment Type** can only be selected for work order screens.

5 Select the **Add WO Equipment Type** check box to add the equipment type to the selected screen.

Note: To add multiple work order equipment types, click **Select WO Equipment Type**. Select the work order equipment types, and then click **Submit**.

6 Specify this information:

WO Equipment Type
Select the work order equipment type.

7 Click **Submit**.

Specifying operator checklists for screen setup

Specify which task plans and equipment classes will display in the task plan and equipment class lookups on the **Operator Checklist** screens.

To specify operator checklists for screen setup:

1 Select **Administration > Screen Configuration > Screen Setup**.

2 Select the screen for which to specify operator checklists, and then click the **Operator Checklist** tab.
3 Click **Add Record**.
4 Specify this information:

Equipment Class
Specify the equipment classes to be filtered in the equipment lookups on the **Operator Checklist** screens. **Equipment Class Org.** is automatically populated.

Task Plan
Specify the task plan to display in task plan lookups on the **Operator Checklist** screens. The task plan description and **Task Plan Org.** are automatically populated.

Complete Status
Specify the operator checklist complete status.

Cancel Status
Specify the operator checklist cancel status.

Default
Select this check box to indicate no more than two **Operator Checklist** screens will be flagged as the default screen type for the same equipment class-task combination specified here.

5 Click **Submit**.

Creating part hierarchy codes

Create part hierarchy codes to create a coding structure that enables you to further define parts by classifying them into specific levels.

Before creating part hierarchy codes, you must first define the code levels for the part code hierarchy entity (CLVL) on the **Classes** form.

See Defining classes on page 34.

After defining the code levels for the Part code hierarchy entity, you can then create part hierarchy codes to define a structured hierarchy between part code combinations. You can define a maximum of eight coding levels for parts.

To create part hierarchy codes:

1 Select **Materials > Setup > Part Hierarchy Codes**.
2 Click **Add Hierarchy Code**.
3 Specify this information:

Description
Enter a description of the part code hierarchy.

Enter the different levels of the part code hierarchy beginning with [Level 1] through [Level 8].

Note: You cannot enter a code for a level until you have entered a code for the previous level, e.g., you cannot enter a code for [Level 2] if you have not defined [Level 1].

The system displays the number of code structure levels based on the number of classes you have defined for the Part code hierarchy entity. For example, if you have defined four code levels for the Part code hierarchy entity on the **Classes** form, the system displays four levels for the code hierarchy [Level 1] – [Level 4].

To update the translations by language, click **Translations**.

See the *Infor EAM User Guide*.

4 Click **Save Record**.

Defining account details

Access account detail code information on different forms within the system for which the **Account Details** page is available.

Note: Account detail codes are defined for use with Databridge and external accounting systems.

The system displays the account detail codes associated with the entity of the form from which you access the **Account Details** page. The fields displayed on the Account Details are based on the entity of the form. For example, the fields for the REQL entity (Requisition Lines) are the Requisition Number, Organization, and the Requisition Line. You can view detailed account code segment information, copy an existing account detail record, modify an existing account detail record, or insert a new account detail record. You can also create account detail records for any entity records for which there are no existing account details.

To define account details:

1 From any form for which account details is activated, click the **Account Details** tab.

2 Select the entity for which to access account details. The fields for the selected entity are displayed for information only and are protected. Only the account detail fields are editable.

3 Specify this information:

Accounted
Select whether the account details should be accounted for as a debit or a credit.
Note: If the ACCOUNT installation parameter is set to YES, **Accounted** is required. If ACCCOUNT is set to NO, the system automatically populates **Accounted** with an asterisk (*).

Segment 01
Segment 30
Enter the account code segment(s) for the account detail record as you have defined the account code segment codes on the **Account Detail Setup** form.
Note: The system displays only the account code segments that you defined, up to 30 total segments. For example, if you defined segments 01 through 10, the system displays fields for **Segment 01** through **Segment 10**.

If a segment code is defined with a query code on the **Account Detail Setup** form, then the system displays a list of values for the segment code enabling you to view the results of the SQL statement for the code.

If a specific segment code is designated as **Required** on the **Account Detail Setup** form, then the segment field is required for the account detail record on the **Account Details** tab.

4 Click **Submit**.

Note: You can change the name of a segment to something specific to your accounting needs as necessary using screen designer.

To create additional account detail records based on an existing record, click **Copy Record**.

If the ACCOUNT installation parameter is set to YES, the system sets **Accounted** to the opposite value of the record from which you are copying the account details. For example, if the value of **Accounted** is **`Credit`** for the existing record, the system sets **Accounted** to **`Debit`** for the copied record.

Defining capital request categorization codes

Define capital request categorization codes for use on the **Capital Planning Request** form.

See the *Infor EAM User Guide*.

Note: The system will be pre-populated with data from the ASTM UNIFORMAT II Classification for Building Elements (E1557-97).

To define capital request categorization codes:

1 Select **Administration > Setup > Capital Request Categorization Codes**.
2 Click **Add Categorization Code**.
3 Specify this information:

Description
Enter the description of the capital request categorization code.

Major Group Element
Enter the major group element.

Note: **Major Group Element**, **Group Element**, and **Individual Element** cannot contain periods (.).

Group Element
Enter the group element.
Note: In order to create a new **Group Element**, you must first create a new **Major Group Element**.

Individual Element
Enter the individual element.
Note: In order to create a new **Individual Element**, you must first create a new **Major Group Element** and a new **Group Element** combination.

4 Click **Submit**.

Auditing attributes

The system provides a flexible way to track changes of every attribute for almost every table. When a user enters, updates, or deletes an attribute, the system records the old value, new value, user code,

function used, and date/time stamp. To activate this auditing, you must know the field and the technical name of the table to track. The system cannot track tables that do not appear in lookups or have no primary key.

Note: The number of audits might grow very fast; purge data frequently to aid system performance.

See Purging audit records on page 43.

Setting up audit triggers

Set up audit triggers to monitor attribute changes to records. Create audit trail triggers to define what changes to which attributes you should audit. Once you know the field and the technical name of the table to track, set up audit triggers.

To set up audit triggers:

1. Select **Administration > Security > Audit Setup**.
2. Enter the table for which to set up audit triggers.
3. Click **Add Trigger**.
4. Specify this information:

   Field
   Specify the field to audit, and then enter a description in the adjacent field.

   Update
   Select to track updates.

   Insert
   Select to track insertions.

   Delete
   Select to track deletions.

5. Enter additional comments concerning the trigger.
6. Click **Submit**.

Viewing trigger status values

To view trigger status values:

1. Select **Administration > Security > Audit Setup**.
2. Enter the table for which to view the audit.
3. Select the field for which to view the trigger status, and then click the **View Trigger Status**.
4. Specify one of the following options:

   Refresh Audit Triggers
   All audit triggers are dropped from the table, audit triggers are recreated for each of the fields selected, and then the Audit Setup list is updated.

   Drop Audit Triggers
   All audit triggers are dropped.

5 View the audit information.
6 Click **Close**.

Purging audit records

Purge audit records. Purge data frequently to aid system performance.

To purge audit records:

1 Select **Administration > Security > Audit Setup**.
2 Enter the table for which to purge audit records, and then click **Purge Audit Records**.
3 Specify this information:

   From Date
   Enter the date from which the audit records will be purged.

   To Date
   Enter the date up to which the audit records will be purged.

   Note: To purge the current date's audit records, enter tomorrow's date in **To Date**.
4 Click **Submit**.
5 Click **Close**.

Administering comments and custom fields audit flags

Administer comments and custom fields audit flags. Select the entities for which the system tracks audit flags, ensuring that the system records all changes to comment and custom field records for the particular entity.

To administer comments and custom fields audit flags:

1 Select **Administration > Security > Audit Setup**.
2 Click the **Comments and Custom Fields** tab.
3 Select the checkbox next to the entity for which to maintain an audit trail of comments and/or custom fields.

Viewing audits

After setting up the auditing features in the system, you can view audits for fields or view audit records for status changes.

Viewing audits for fields

After setting up the auditing features in the system, you can view audits for fields or view audit records for status changes. View audits in order to monitor changes in attributes.

To view audits for fields:

1 Open any entity record.

2 Select the record for which to view the audit.

Note: You can only view audits on **Record View** or list detail pages.

3 Right-click within any field on the record, and then choose **Audit Trail**.

4 View the audit information.

Note: You can only view audit information if you have established audit control and changes have been made to the fields under audit.

Recorded in Mobile indicates when comments are updated or deleted in Mobile. The date and time reflect updates in Mobile.

5 Click **Close**.

Defining Flex business rules

Define Flex business rules or SQL statements to define validation rules that are specific to your organization. You can set up one or more statements to be processed for post-insert or post-update events.

Flex SQL processing supports data query (select) and data manipulation (insert, update, delete) statements. Use select statements to perform a check condition.

Uppercase and lowercase characters are allowed in the SQL statement. The row identifier token, however, must be either all uppercase or all lowercase (i.e., :ROWID or :rowid).

Every Flex SQL statement requires the use of a predefined :ROWID token. This token refers to the database row identifier for the record being processed in the specified table. The statement is executed for each record in the table affected by the insert or update operation.

The maximum statement length is 4000 characters. No statement termination character (;) is required.

Data manipulation statements are allowed, but make sure you do not begin an infinite cascading of trigger steps. For example, generally it is not recommended to create a Flex SQL statement that updates the base table identified in **Table**.

Note: Infor EAM recommends that you define Flex SQL procedures in close cooperation with your Infor EAM consultant.

To define Flex business rules:

1 Select **Administration > Setup > Flex Business Rules** form.

2 Click **New Record**.

3 Specify this information:

Table
Specify the database table.

Sequence Number
Specify the sequence number for the Flex SQL statement.

Trigger
Select one of the following options:

- **Post Insert**

- **Post Update**

SQL Statement
Specify the SQL statement for the selected database table.

Failure Message
Specify the failure message.

Comments
Specify comments regarding the Flex SQL statement.

4 Optionally, select the **Must Exist** checkbox if the Flex SQL statement must exist in the database table. If **Must Exist** is selected, SQL statements are run in order of Sequence Number. If one statement fails, the remainder do not run. If **Must Exist** is not selected, each statement runs separately.
5 Optionally, select the **Abort on Failure** to abort the statement upon failure. If **Abort on Failure** is checked, the **Failure Message** field value is returned, any remaining SQL statements are not processed, and the save that triggered the flex SQL is cancelled.
6 Optionally, select the **Reverse Return Code** checkbox to automatically reverse the returned value upon statement completion, i.e., Null becomes Not Null.

   Reverse Return Code is used only with **Abort on Failure**.
7 Optionally, select the **Active** checkbox to set this Flex SQL statement record to active.
8 Click **Save Record**.

   Note: Records flagged as **Mobile Only** cannot be deleted on this screen. You must delete them on the mobile device.

   Click **Test Flex SQL** to check the validity of the SQL statement.

Setting up Messenger

Set up Messenger for Infor EAM. Utilize Messenger to notify users via e-mail of specific changes in database tables. First, define the installation parameters, and then create e-mail templates. Next, create e-mail notifications to alert users when certain events occur in the system database. Set up the system to send e-mails when certain conditions are met and to include specific parameters. Finally, view e-mails to ensure proper delivery.

Defining installation parameters for Messenger

To define installation parameters for Messenger:

1 Select **Administration > Security > Install Parameters**.
2 Specify this information:

   Install Parameter
   Query for the following installation parameters, and then define them according to the following examples and descriptions:

Installation Code	Example	Description
SMTPSEND	mailid@yourcompany.com	Enter the e-mail sender.
SMTPSERV	mail.yourcompany.com	Enter the e-mail server.

3 Click **Save Record**.

Creating e-mail templates for Messenger

Create and modify e-mail messages using e-mail templates. The **E-mail Templates** tab also shows records synced from the mobile device.

To create e-mail templates for Messenger:

1 Select **Administration > E-mail Messenger > E-mail Templates**.
2 Click **New Record**.
3 Specify this information:

E-mail Template
Enter a unique code identifying the e-mail template, and then enter a description of the template in the adjacent field.

E-mail
Select this check box to send the notification to the email address in the recipients field.

Push Notification
Select this check box to send the notification to both the email address and the push notification ID.

Note: If **E-mail** is unselected and **Push Notification** is selected, the notification will send the push notification but not an email.

Notebook E-mails
Select this check box to indicate that the the template is created for sending notebook emails.

From E-Mail
Specify the from e-mail address.

E-mail Recipients
Select the recipients of the e-mail message. Separate e-mail addresses with a space or a ;.

See Selecting multiple recipients for e-mail notification on page 47.

Note: Parameters can be used in **E-mail Recipients** as well. If a parameter is associated with a user or employee record, the system replaces it with the corresponding e-mail address when the e-mail is sent.

E-mail Subject
Enter the subject of the e-mail message.

E-mail Body
Compose the e-mail message. Identify the parameter number(s) that corresponds to the column of the system table to be displayed with this e-mail. Enter %1 - %15 for each parameter.

4 Click **Save Record**.

Selecting multiple recipients for e-mail notification

To select multiple recipients for e-mail notification:

1 Select **Administration > E-mail Messenger > E-mail Templates**.
2 Click **New Record**.
3 Specify this information:

E-mail Recipients
Select recipients from the list.

4 Click **OK**.

Creating e-mail notifications for Messenger

Set up e-mail notifications when certain events occur in the Infor EAM database. Create e-mail notifications for a defined table based on the e-mail template. Define the parameters and constraints of each e-mail notification.

To create e-mail notifications for Messenger:

1 Select **Administration > E-mail Messenger > E-mail Notification Setup**.
2 Enter the table for which to create the e-mail notification.
3 Click **Add E-mail Notification**.
4 Specify this information:

E-mail Template
Enter the e-mail template to send when this e-mail notification is activated. The system automatically populates the E-mail Template description and **Created By**.

Select one or more of the following events:

Update
Select to send e-mail when the record is updated.

Insert
Select to send e-mail when a record is inserted.

Delete
Select to send e-mail when a record is deleted.

From Status
Enter any status for which to send an e-mail.

To Status
Enter the updated status for which to send an e-mail.

Active
Select to make the selected record active. The system may clear this checkbox if you add, modify, or delete parameters or conditions.

Include URL
Select to include the URL in the notification.

This check box is available only for the following tables:

Table Name	Description
R5ACTIVITIES	Work Order Activities
R5BLANKETORDERS	Blanket Orders
R5BLANKETORDLINES	Blanket Order Lines
R5BOOKEDHOURS	Booked Hours
R5CONTACTRECORDS	Customer Requests (Call Center)
R5EVENTS	Work Orders
R5INVOICEALLOCATIONS	Invoice Allocations
R5INVOICELINES	Invoice Voucher Lines
R5INVOICES	Invoice Vouchers
R5ORDERLINES	Purchase Order Lines
R5ORDERS	Purchase Orders
R5REQUISITIONS	Requisitions
R5REQUISLINES	Requisition Lines
R5SERVICEREQUESTS	Service Requests
R5WARCLAIMS	Warranty Claims

Include Documents as Attachments
Select to include documents as attachments in the email.

This check box is available only for the following tables:

Table 2:

MAM_TABLE	MAM_RENTITY	MAM_ENTITY	MAM_DOCPK
R5EVENTS	EV	EVNT	evt_code

MAM_TABLE	MAM_RENTITY	MAM_ENTITY	MAM_DOCPK
R5MOBILENOTE-BOOKS	MNBK	MNBK	mnb_code
R5ORDERS	PORD	CF	ord_code#ord_org
R5OBJECTS	OBJ	O	obj_code#obj_org
R5PARTS	PART	PC	par_code#par_org

.

Comments
Enter any comments to include in the body of the e-mail notification.

5 Click **Submit**. The system automatically selects **Update** if either **From Status** or **To Status** is entered.

Purging e-mail records

To purge e-mail records:

1 Select **Administration > E-mail Messenger > E-mail Notification Setup**.
2 Enter the table for which to purge e-mail records, and then click **Purge E-mail Records**.
3 Specify this information:

From Date
Enter the date from which the e-mail records will be purged.

To Date
Enter the date up to which the e-mail records will be purged.

4 Click **Submit**.

Note: You can also purge e-mail records on the **E-mail Viewer** form.

5 Click **Close**.

Setting up e-mail notification parameters

Set up parameters to include in the body of the Messenger e-mail, e.g., a work order # %1[Work Order Number] was created on %2[Date Created] by %3[Entered by] for %4[Equipment Code/Name]. Create parameters for each of the data-specific items (items in brackets). The system retrieves the data based on the parameters and inserts it into the e-mail.

Parameters must also be set up in the template e-mail body.

See Creating e-mail templates for Messenger on page 46.

To set up e-mail notification parameters:

1 Select **Administration > E-mail Messenger > E-mail Notification Setup**.

2 Enter the table for which to set up e-mail notification parameters.
3 Select the record for which to set up parameters, and then click **Create Parameters**.
4 Click **Add Parameter**.
5 Specify this information:

Parameter
Enter the parameter number for the e-mail notification.
Note: The parameter must be in a range of 1 to 15.

Column
Enter the name of the column of the system table to be used when creating the e-mail content for the e-mail body.

6 Click **Submit**.
Note: The system clears **Active** on the associated E-mail Notification record.
7 Click **Close**.

Setting up e-mail notification conditions

Set up e-mail notifications to send e-mail whenever a specific condition is met.

To set up e-mail notification conditions:

1 Select **Administration > E-mail Messenger > E-mail Notification Setup**.
2 Enter the table for which to setup e-mail notification conditions.
3 Select the record for which to set up conditions, and then click **Create Conditions**.
4 Click **Add Condition**.
5 Specify this information:

Column
Enter the name of the column on the system table that applies to the e-mail notification.

Condition
Select the criteria for the e-mail notification.
See the following table when entering conditions for e-mail notifications:

Condition	Definition
Is equal to	Set this Condition if Column is equal to the value of Value 1.
Is not equal to	Set this Condition if Column is not equal to the value of Value 1.
Is greater than	Set this Condition if Column is greater than the value of Value 1.
Is less than	Set this Condition if Column is less than the value of Value 1.

Condition	Definition
Is greater than or equal to	Set this Condition if Column is greater than or equal to the value of Value 1.
Is less than or equal to	Set this Condition if Column is less than or equal to the value of Value 1.
Is blank	Set this Condition if Column is blank.
Is not blank	Set this Condition if Column is not blank.
Is between	Set this Condition if Column is between the values of Value 1 and Value 2.
Is not between	Set this Condition if Column is not between the values of Value 1 and Value 2.
Contains	Set this Condition if Column contains the value of Value 1.
Does not contain	Set this Condition if Column does not contain the value of Value 1.

Value 1
Value 2
Enter the value of the e-mail notification condition.

Enter values according to the following formats:

Date
To_date ('23-OCT-2003','DD-MON-YYYY'). For example, if you are entering a date value for a condition that is equal to a specific date, enter the value according to this exact format:

Column	Condition	Value 1
Name of column	Is equal to	To_date ('23-OCT-2003','DD-MON-YYYY')

Numbers
To_Number (10). For example, if you are entering a number value for a condition that is greater than a specific number, enter the value according to this exact format:

Column	Condition	Value 1
Name of column	Is greater than	To_number (10)

Characters
'engine'

Contains
'%pump%'

Note: You must enter a **Value 1**. The system protects both **Value 1** and **Value 2** if you enter "is blank" or "is not blank" in Condition. **Value 2** is required if you enter "is between" or "is not between" in Condition.

If you update Column or Condition after you enter Value 1 or Value 2, the system clears both of the value fields.

6 Click **Submit**.

Note: The system clears Active on the associated E-mail Notification record.

7 Click **Close**.

Viewing initiated e-mails for Messenger

View records of all e-mails that have been initiated from database events to ensure proper delivery and to troubleshoot problems with Messenger. The system displays all sent messages including those that encountered error messages.

To view initiated e-mails for Messenger:

1 Select **Administration > E-mail Messenger > E-mail Viewer**.

2 Select the record for which to view the initiated e-mail.

3 View the following information regarding the e-mail record:

Date
The system displays the date the e-mail was initiated.

E-mail Record
The system displays a code identifying the e-mail record.

E-mail Template
The system displays the e-mail template.

E-mail Recipients
The system displays the list of e-mail recipients.

Error
Indicates that an error occurred while sending the e-mail.

Sent
Indicates that the system successfully sent the e-mail.

E-mail Body
The system displays the composed message.

Error Message
The system displays the error that the e-mail message encountered.

Managing alerts

Create e-mail and work order alerts to notify users when data in Infor EAM (e.g. equipment) does not meet a specified criteria. First, create a grid to query data in the system and then use alert management to determine if the results need to be measured against a min/max setting or if the results alone will trigger an email and/or work order.

An alert management record can be created to monitor readings that are being imported into Infor EAM for chillers. The alert record may monitor to see if the difference between supply air temperature and the return air temperature is >22 degrees when chilled water temperature is <46 degrees and chilled water valve is open >50%. If all this criteria is met for a chiller then a work order would be created indicating that a belt could be slipping or the filters may be plugged.

Note: Use the new R5ALERTDATAOBJ table to import records into Infor EAM. Then use alert management to analyze the records and create alerts when deviations occur. R5ALERTDATAOBJ was specifically designed for analyzing data imported from another system related to Infor EAM equipment records. This table can be accessed through web services or using the Infor EAM Import Utility. Once records are created in R5ALERTDATAOBJ, use this table in Grid Designer when creating the alert management grid query.

Create an active alert management grid on the **Grid Designer** page before setting up an alert on the **Alerts** page.

See Defining grids on page 124.

Creating alerts

To create e-mail and work order alerts for specific equipment:

1. Select **Administration > Setup > Alert Management**.
2. Click **New Record**.
3. Enter a description for the alert.

   Active
   Select to set this alert to active.

4. Specify this Alert Definition Details information:

   Grid Name
   Enter the grid name defined for the **Alerts** form on the **Grid Designer** form.

   The system automatically populates the grid description and **Grid Active**.

   Dataspy
   Select the Dataspy for the grid.

   Exception Entity
   Enter the exception entity.

   Grid Key Field 1
   Enter the mapping to the corresponding grid column that should be used as a key field in the grid, e.g., if analyzing equipment this would map to the equipment column in the grid. The system automatically populates the grid key field 1 description.

Grid Key Field 2
Enter the mapping to the corresponding grid column that should be used as a key field in the grid, e.g., if analyzing equipment this would map to the equipment column in the grid. The system automatically populates the grid key field 2 description.
Note: Grid key fields are populated on the History page, and used for reviewing data when a delay period is entered for an alert on the Work Order Alerts, Exceptions, or E-mail Alerts pages.

5 Specify this Min/Max Definition information:

Use Min/Max
Select to use a minimum and maximum range for this alert.

Min/Max Value Field
Enter the mapping to the corresponding grid column. During the alert process the system analyzes the result of the field for each row in the grid and compares it to the min/max selections on the form.

Min Value
Enter the minimum value for the alert. The system produces alerts when the result of **Min/Max Value Field** is less than or equal to the minimum value.

Max Value
Enter the maximum value for the alert. The system produces alerts when the result of **Min/Max Value Field** is greater than or equal to the maximum value.

Trigger within Min/Max Values
Select to trigger alerts when the result value is within the **Min Value** and **Max Value**.
Note: Triggering within min/max will generate alerts when the result has values equal to or greater than the **Min Value** and less than or equal to the **Max Value**.

Enter the user-defined fields.

6 Specify this Scheduling information:

Frequency
Enter the frequency of the analysis in a numerical amount, and then select the frequency UOM, e.g., enter 10 and then select **`Days`** to enable the system to perform an analysis every 10 days.
Note: Although the analysis may process every 10 days, the system does not generate alerts unless the analysis meets the specified criteria.

Next Evaluation Date
Enter the next date to evaluate the alert. The system automatically populates **Last Evaluation Date** and **Last Alert Date**.

7 Specify this Active Alert Types information:

Work Order
Select to create a work order alert based on specific parameters.

See Creating e-mail alerts on page 58.

E-mail
Select to create an e-mail alert based on specific parameters.

See Creating e-mail alerts on page 58.

8 Click **Save Record**. The system automatically populates **Alert**, **Created By**, and **Date Created**.

Note: To preview the grid query results, click **Preview Grid**.

To activate alert management, enable the ALRT driver on the **Job Setup** form.

Defining before SQL statements for alerts

Define SQL statements that the system will execute prior to executing the defined grid for an alert. Before SQL statements can be used to prepare data or structures being used by the grid, e.g., purge records.

To define before SQL statements for alerts:

1 Select **Administration > Setup > Alert Management**.

2 Select the alert for which to define the before SQL statement, and then click the **Before SQL** tab.

3 Specify this information:

SQL Statement
Enter the SQL statement that will be executed before the grid query will produce a result set. The system automatically populates **Abort on Failure**.

Note: Unselect **Abort on Failure** to enable the system to continue executing the grid query if the SQL statement fails.

Comments
Enter comments regarding the SQL statement.

Execute when Previewing Grid
Select to execute the SQL statement when **Grid Preview** is selected.

Active
Select to set this SQL statement record to active.
Note: To process the before SQL statement when the alert job is run or **Grid Preview** is selected on the **Record View** page of the **Alerts** form, you must select **Active**.

4 Click **Save Record**.

Note: Click **Test SQL** to check the validity of the SQL statement.

Previewing grids for alerts

Preview the grid for alerts. The system does not always display the number of alerts the system creates once the alert management process is run. The system must consider if the alert is using min/max evaluation and delays in order to get the correct number of alerts to generate. For example, previewing the grid may show temperature records for many pieces of equipment, but some may not meet the criteria set up in **Min Value** or **Max Value**. Also, some equipment may have a delay period in which you do not want to create additional work orders or e-mails for equipment continuing to meet a threshold.

To preview grids for alerts:

1 Select **Administration > Setup > Alert Management**.

2 Select the alert for which to preview the grid, and then click the **Record View** tab.
3 Click **Preview Grid**.
4 View the results.
5 Click **Close**.
Note: To set the **Next Evaluation Date** for the alert, click **Schedule Now**.

Defining after SQL statements for alerts

Define SQL statements for system to execute after executing the defined grid query and after creating e-mail and work order alerts.

To define after SQL statement for alerts:

1 Select **Administration > Setup > Alert Management**.
2 Select the alert for which to define the after SQL statement, and then click the **After SQL** tab.
3 Specify this information:

SQL Statement
Enter the SQL statement that will be executed after the grid query and alerts.

Comments
Enter comments regarding the SQL statement.

Execute when Previewing Grid
Select to execute the SQL statement when **Grid Preview** is selected.

Active
Select to set this SQL statement record to active. The system processes the after SQL statement after the grid query is processed.
Note: To process the after SQL statement when the alert job is run or **Grid Preview** is selected on the **Record View** page of the **Alerts** form, you must select **Active**.

4 Click **Save**.
Note: Click **Test SQL** to check the validity of the SQL statement.

Creating work order alerts

Define a work order alert to create work orders systematically based on a grid query.

Note: **Work Order** must be selected on the **Record View** tab of the **Alerts** page for an alert before the system will examine the **Work Order Alerts** page during the alert management process.
Note: The alert management process uses R5 User ID to create work orders. R5 must have rights to all organizations required to create work orders from alert management.

To create work order alerts:

1 Select **Administration > System Configuration > Alert Management**.
2 Select the alert for which to create a work order alert, and then click the **Work Order Alerts** tab.

3 Specify this information:

Delay Between Alerts
Specify the numerical amount of time between work order alerts for a specific grid key, and then select the delay UOM, or unit of time to delay between alerts, e.g., enter 2 and then select Hours to allow 2 hour delays between the work order alerts.
Note: When the system analyzes delay periods, it uses **Grid Key Field 1** and **Grid Key Field 2** on the **Record View** and **History** tabs of the **Alerts** page to determine if a grid result will get the delay specified. If it is determined that a grid result will get the delay, then the system does not produce the alert if the time between the last alert and the current time is within the delay criteria.

Standard WO
Specify the standard work order to associate to the work order alert. The system uses the standard work order as a template when creating the work order.

Work Order Org.
Specify the organization to which the work order created will belong.

Equipment Field
Specify the grid column that represents the equipment field.

Equipment Org. Field
Specify the grid column that represents the equipment organization.

Description
Specify the description that will be on the work order when the work order is generated. If no value is entered the system uses the standard work order value.

Due Nonconformities Only
Select to include only new observations created for nonconformities that are due for inspection.
Note: The inspector will not see nonconformities on the work order that are present but not due for inspection. The inspector may be confused if he finds such nonconformities during the inspection that were not on the list, which may lead to duplicate nonconformities

Include Nonconformities
Select to include new observations for re-inspection for existing nonconformities.

4 Specify comments to display on the work order when the work order is generated.

5 Click **Save Record**.

Note: To create parameters for work order alerts, click **Create Parameters**. These parameters can be used to help build a user-friendly description and/or comment when the work order is generated by setting parameters that represent actual values in the grid results.

See Creating parameters for alerts on page 59.

To sssociate additional work order fields to grid fields, click **Additional Field Mapping**.

See Mapping additional fields for work order alerts on page 57.

Mapping additional fields for work order alerts

Associate work order fields to grid fields to create mappings used by the alert for creating work orders.

To map additional fields for work order alerts:

1 Select **Administration > System Configuration > Alert Management**.
2 Select the alert for which to map additional fields for a work order alert, and then click the **Work Order Alerts** tab.
3 Click **Additional Field Mapping**.
4 Click **Add Mapping**.
5 Specify this information:

   Work Order Field
   Specify the work order field to populate, e.g., Standard WO, Department, or Warranty.

   Grid Field
   Specify the grid field to map to the work order field.

6 Click **Submit**.
7 Click **Close**.

Creating e-mail alerts

Define alerts to trigger e-mails when records are identified that cause an alert.

To create e-mail alerts:

1 Select **Administration > Setup > Alert Management**.
2 Select the alert for which to create an e-mail alert, and then click the **E-mail Alerts** tab.
3 Click **Add Record**.
4 Specify this information:

   E-mail Template
   Enter the e-mail template to send.

   Delay Between Alerts
   Enter the numerical amount of time between e-mail alerts for a specific grid key, and then select the delay UOM, or unit of time to delay between alerts, e.g., enter 2 and then select Hours to allow 2 hour delays between the e-mail alerts.
   Note: When the system analyzes delay periods, it uses **Grid Key Field 1** and **Grid Key Field 2** on the **Record View and History** pages of the **Alerts** form to determine if a grid result will get the delay specified. If it is determined that a grid result will get the delay, then the system does not produce the alert if the time between the last alert and the current time is within the delay criteria.

5 Click **Submit**.

   Note: See Creating parameters for alerts on page 59.

   Users may create multiple e-mail alerts for a single alert management record. The system sends multiple e-mails for each grid result meeting the specified alert criteria.

   To activate e-mail alerts, enable the MAIL driver on the **Job Setup** form, and then enter the correct values for the e-mail install parameters.

   See Setting up Messenger on page 45.

Creating parameters for alerts

Create parameters or standard messages for use in substituting values in large text areas such as in the e-mail message, work order descriptions, and work order comments. By creating standard messages, the system defaults these messages in the body of the e-mail message, description, or comments. Example: For an e-mail alert notification the text may read: "HVAC-ROOFTOP-01 has a temperature of 250 degrees. Please check this equipment by 01/15/2008." To prevent the necessity of entering the same information repeatedly, create parameters that allow the system to default the same message for the data-specific items to be pulled from the grid. For the example above, you would enter for the body of the e-mail: "%1 has a temperature of %2 degrees. Please check this equipment by %3."

To create parameters for alerts:

1. Select **Administration > Setup > Alert Management**.
2. Create an alert.

   See Creating alerts on page 53 on the **Work Order Alerts** or **E-mail Alerts** page, and then click **Create Parameters**.

   Note: You may also access this popup by clicking **Create Parameter**.
3. Click **Add Parameter**.
4. Specify this information:

   Parameter
   Specify the text to be displayed in the text areas of the e-mail message or comments. Enter % for parameters and the number of the parameter that is to be used.

   Recipient
   Select to include the recipient.
   Note: Recipient is not displayed when the Create Parameters popup is invoked from the **Work Order Alerts** page.

   Grid Field
   Specify the grid column that represents the value you wish to substitute into the field.

   Value
   Specify the hard-coded value to substitute into the field.
5. Click **Submit**.

   Note: When you select **Recipient**, the system takes the resulting grid field value or hard-coded value and lookup to the Infor EAM user table and then the personnel table and searches for a corresponding record. The system then takes the e-mail addresses associated with that record and uses it where the parameter is located in the e-mail template. The system assumes you will enter the actual % parameter in the recipient line of the e-mail template.

Defining exceptions for alerts

Define exceptions to the alert criteria. Enter the specific records that will have different alert criteria than all of the other records to be analyzed by the grid query.

To define exceptions for alerts:

1 Select **Administration > Setup > Alert Management**.
2 Select the alert for which to create an exception, and then click the **Exceptions** tab.
3 Click **Add Record**.
4 Specify this information:

Grid Key 1
Enter the actual value expected in the grid result for which to define exceptions.
Note: This LOV is defined by Exception Entity on the Record View page.

You may make your own key fields without using system entity values.

Grid Key 2
Enter the actual values expected in the grid result for which to define exceptions.
Note: The actual values from the grid result for **Grid Key 1** and **Grid Key 2** should be used in the columns that are mapped to Grid Key Field 1 and Grid Key Field 2 on the Record View page, e.g., equipment and equipment organization would be mapped on the Record View page, and then on the Exceptions page the values of HVAC-ROOFTOP-01 and ATLANTA would display for the actual values for which to set up exceptions.

Delay Between Alerts
Enter the numerical amount of time between alerts for a specific grid key value, and then select the delay UOM, or unit of time to delay between alerts, e.g., enter 2 and then select **`Hours`** to allow 2 hour delays between the alerts.
Note: This delay overrides both delays for work order alerts and e-mail alerts for the **Grid Key 1** value specified.

Trigger within Min/Max Values
Select to trigger alerts when the result value is within the **Min Value** and **Max Value**.

Min Value
Enter the minimum value for **Grid Key Field 1**. The system produces alerts when the result of Min/Max Value is less than or equal to the minimum value.

Max Value
Enter the maximum value for **Max Value**. The system produces alerts when the result of Min/Max Value is greater than or equal to the maximum value.

5 Click **Submit**.

Note: The system overrides any data in **Min Value** or **Max Value** specified on the **Record View** page of the **Alerts** form for the **Grid Key 1** value specified.

If **Use Min/Max** is not selected on the **Record View** page, the system ignores the min/max data specified on the **Exceptions** page.

Viewing alert history

View the failure and success records for an alert.

To view alert history:

1 Open the **Administration > Setup > Alert Management**.

2 Select the alert for which to view history, and then click the **History** tab.

3 View the history.

Note: For work order type history records, double-click the history record to hyperlink to the **Work Orders** form. View the information, and then click **Close** or **Return** to close the **Work Orders** form and return to the **History** page.

Creating region codes

Create and update region codes for tracking degree days.

To create and edit region codes:

1 Select **Administration > Setup > Regions**.

2 Click **New Record**.

3 Specify this information:

Region Description
Enter a unique description for the region.

Postal Code
Enter the postal code for the specific region.

Region
Enter a name for the new region.

Organization
Select an organization for the region.

Class
Select a class for the region.

Out of Service
Select to designate this region as out of service.

Degree Day Reference Point
Enter a value for the degree day reference point.

Actual Temperatures Source
Select the source which supplies the actual temperature data, e.g., **National Climatic Data Center** or **World Weather Online**.

Actual Temperatures URL
Enter the URL for the **Actual Temperature Source**.

Fahrenheit
Select to designate Fahrenheit as the default unit of measure for degree day data.

Celsius
Select to designate Celsius as the default unit of measure for degree day data.

4 Click **Save Record**.

Recording actual temperatures for regions

Record actual temperature data for heating degree days and cooling degree days for each day of the year.

To record actual temperatures:

1 Select **Administration > Setup > Regions**.
2 Select the region for which to record actual temperatures, and then click the **Actual Temperatures** tab.
3 Click **Add Actual Temperature**.
4 Specify this information:

   Date
   Enter the date for which to record actual temperatures. The system automatically populates **Day of Year**, **Month**, **Day**, and **Year**.

   Temperature Minimum
   Enter the minimum temperature for which to record actual temperature data.

   Temperature Maximum
   Enter the maximum temperature for which to record actual temperature data.

   Note: The system re-calculates and automatically populates **Temperature Average**, **Heating Degree Days**, and **Cooling Degree Days**.
5 Click **Submit**.

   Note: To delete actual temperature data for a specific date, select the actual temperature record for which to delete, and then click **Delete Actual Temperature**.

   To purge actual temperature records to a specific date, click **Purge Actual Temperature Records**.

   To get actual temperature for specific dates, click **Get Actual Temperatures**.

Updating historical temperatures for regions

Update historical data for heating degree days and cooling degree days for each day of the year.

To update historical temperatures for regions:

1 Select **Administration > Setup > Regions**.
2 Select a region code for which to update historical temperatures, and then click the **Historical Temperatures** tab. The system automatically populates **Temperature Average**, **Day of Year**, **Month**, and **Day**.
3 Specify this information:

   Temperature Minimum
   Enter the new minimum temperature.

Temperature Maximum
Enter the new maximum temperature. The system re-calculates and automatically populates **Temperature Average**, **Heating Degree Days**, and **Cooling Degree Days**.

4 Click **Submit**.

Getting actual temperatures for regions

Get actual temperatures for regions from a weather source such as the National Climatic Data Center or World Weather Online.

Note: To get actual temperatures, **Actual Temperatures Source** and **Actual Temperatures URL** both must be entered on the **Record View** of the region.

To get actual temperatures for regions:

1 Select **Administration > Setup > Regions**.
2 Select the region for which to get actual temperatures, and then click the **Actual Temperatures** tab.
3 Click **Get Actual Temperatures**.
4 Specify this information:

Get Temperatures From
Enter the first date for which to get actual temperatures.

Get Temperatures To
Enter the last date for which to get actual temperatures.

5 Click **Submit**.
6 Click **Close**.

Purging actual temperature records for regions

Purge actual temperature records to a specific date.

To purge actual temperature records for regions:

1 Select **Administration > Setup > Regions**.
2 Select the region for which to purge actual temperatures, and then click the **Actual Temperatures** tab.
3 Click **Purge Actual Temperature Records**.
4 Specify this information:

Up To Date
Enter the date for which to purge the system of all records up to and including this date.

5 Click **Submit**.

Printing temperature analysis chart

Before you can set the parameters to generate the temperature analysis chart, you must enter **Temperature Minimum** and **Temperature Maximum** on the **Actual Temperatures** and **Historical Temperatures** tabs.

To print temperature analysis chart:

1. Select **Administration > Setup > Regions**.
2. Select the region for which to generate the temperature analysis chart, and then click the **Temperature Analysis Chart** tab.
3. Specify this information:

   Start Date
   Specify the starting date for which to retrieve data.

   End Date
   Specify the ending date for which to retrieve data.

4. Click **Submit**.
5. Click **Print**.

Configuring Infor EAM to generate Oracle Forms reports

Configure Infor EAM to run reports that are in the Oracle Forms version of the product, e.g., the Print work order cards report (WRJOBF). See Chapter 15 Module Reports of the *Infor EAM Oracle Forms Installation & Upgrade Guide* for more information about the reports that are available in the Oracle Forms version of the product.

Note: You can only configure Infor EAM to generate Oracle Forms reports if you have installed, configured, and are running both Infor EAM and the Oracle Forms version of the product.

Creating report organization structures

Create an organizational tree-structure to roll up reporting on performance statistics, energy consumption, and resource utilization. Define an organizational structure by which you control the roll-up of energy consumption. For example, the reporting structure might roll up like this:

Operational Area > Facility > Campus > State > Country > Continent > Worldwide

To create a report organization structure:

1. Select **Administration > Setup > Report Organization Structure**.
2. Click **Add Top Level Organization**.
3. Specify this information:

   Organization
   Enter the organization to designate as the top level organization of the structure. Available Organizations are shown in the right-hand pane.

4 Drag and drop desired organizations to the Report Organization Structure on the left-hand pane under the Top Level Organization previously selected.

Creating the Oracle Forms report configuration for Infor EAM

To create the Oracle Forms report configuration for Infor EAM:

1 Locate the [ORACLEHOME]\forms\server directory.

Note: The directory path follows Windows style notation; however, if you are using UNIX, the file path follows the same directory structure with UNIX style notation.

2 Open the formsweb.cfg file in a text editor.

3 Create a baseHTMLjinitiator parameter that includes the value of the base Java Initiator page according to the following example:

```
[d7irep]
envfile=D7i.env
baseHTMLjinitiator=7irep.htm
```

4 Save and exit the file.

Setting up enterprise searches

An enterprise search allows the capability to search across an entire system of database table records or repositories. Define the search criteria for the enterprise search lookup capability across the system by first creating interest centers.

Interest Centers are categories by which to group the search results of the repositories in the Enterprise Search popup or on the **Repositories** tab.

To set up an enterprise search:

1 Select **Administration > Enterprise Search Setup**.

2 Specify a description of the interest center.

3 Specify this information:

Interest Center Category
Specify a category for the interest center, e.g., if you specify **`Work Module`** as a category, the search results on the **Repositories** tab will include work order activities, work order parts, service requests, work orders, employees, employee availability, and other records associated with the work module.

4 Click **Save Record**.

An **Interest Center Code** is assigned.

Setting up repositories for enterprise searches

A repository is a structured location for system data storage. It is used to map a table, user function, or tab records from which to search during an enterprise system search. Repositories are grouped by interest centers on the **Record View** tab.

To set up a repository for an enterprise search:

1. Select **Administration > Enterprise Search Setup**.
2. Select the interest center for which to set up a repository, and then click the **Repositories** tab.
3. Click **Add Repository**.
4. Specify this information:

   Repository
   Specify a name for the repository, and then enter a description of the repository.

   Table Name
   Specify the table name for the repository.

   User Function
   Specify the user function for the repository.

   Tab
   Specify the tab for the repository.

   Thumbnail
   Specify a URL location for the thumbnail.

5. Select the **Out of Service** check box to exclude the repository records from the enterprise search.
6. Click **Submit**.

Defining repository columns for enterprise searches

A repository column contains the fields, layout, and sort order of the repository to be used in an enterprise search.

To define a repository column for an enterprise search:

1. Select **Administration > Enterprise Search Setup**.
2. Select the interest center for which to define repository columns, and then click the **Repository Columns** tab.
3. Select the repository for which to define columns, and then click **Add Column**.
4. Specify this information:

   Column Name
   Specify the column name.

   Display Order
   Specify the order in which the column will display in the repository table.

   Alias
   Specify an alias for the column.

Facet
Specify a facet to categorize the column name. Multiple column names can have the same facet.

5 Click **Submit**.

Generating enterprise search definitions

Use this screen to generate repositories and their associated interest centers. Export the repositories and interest centers that you set up on the **Enterprise Search Setup** screen. Once you export the items, upload the zip file to the Infor Enterprise Search.

1 Select **Administration > Enterprise Search Setup > Generate Enterprise Search Definitions**.
2 Select the repository records to export, and then click **Download**.
3 Use the Infor IES tool to upload the definitions.zip file to EAM. Browse to https://<ies_install_server>.infor.com:21000/ies/admin.

Customizing extensible framework

Add business-specific functionality to existing screens/tabs in the product by creating custom JavaScript files.

To customize extensible framework:

1 Select **Administration > Screen Configuration > Extensible Framework**.
2 Specify this information:

Name
Specify a unique name to identify the screen customization.

Screen
Specify the user function mnemonic code of the screen to customize.

3 Specify the **Source** code to customize the screen.
4 Select the **Active** check box to execute the JavaScript changes to the screen in EAM.
5 Click **Save Record**. Navigate to the screen to view the changes.

Generating QR codes

Generate QR codes for multiple uses.

To generate a QR code:

1 Select **Administration > QR Codes Setup**.
2 Specify this information:

Server URL
Specify the URL to open once the QR code is scanned.

Tenant
Specify the tenant ID, or logical name given to the DB schema to which the application is connecting.

For example, typically the tenant is part of the URL and is mentioned within the URL as follows:

If the URL is

http://ittyyyvwqeamvw1.infor.com:5555/web/base/logindisp?tenant=QAORA0409

then **Server URL** is

`http://ittyyyvwqeamvw1.infor.com:5555/`

and **Tenant ID** is

`QAORA0409`.

Organization
Specify the organization to which the QR code belongs.

3 Click **Generate QR Code** to display the image.

System security

Implementing multi-organization security (MOS)

Multi-organization security (MOS) is a feature that allows the system administrator to set up separate, secured, logical databases within the organization. There is one logical database for each organization; however, there is still one physical system database. To activate MOS, you must set the MULTIORG installation parameter to YES.

See Defining Installation Parameters on page 11.

After activating MOS, you cannot deactivate it. Depending on the type of security set up, the system does not allow users to view or influence data from organizations to which they do not belong.

With MOS, the system becomes more user-driven, rather than user-group driven, making it possible for users to have different roles. Associate users with more than one organization and establish a default organization for that user. The system automatically displays the user's default organization at login, which can be changed to any organization to which the user has access. To switch organizations after login, simply log out and log back in as the new organization. After logging in to a specific organization, users can view and influence data specific to all the organizations to which they have access and all information defined as "common," which is information accessible across all organizations and users.

When inserting new records, the system automatically associates the record to the organization of the current login session; however, users can change the organization to any organization to which they have access.

MOS replaces facility security. Therefore, if you do not use MOS, the system does not display**Organization** on any forms.

Note: MOS affects many system functions, and some sections in the user documentation apply only to MOS.

Defining organizations

Define organizations within your enterprise. You can also edit organizations as necessary.

To define organizations:

1 Select **Administration > Security > Organizations**.

2 Click **New Record**.

Note: You cannot insert a new organization record if you have multi-organization security set to NO.

3 Specify this information:

Organization
Specify a code identifying the organization, and then enter a description of the organization in the adjacent field.

Currency
Specify the currency to attach to the organization.

DUNS Number
Specify your organization's DUNS number. A DUNS number is a unique nine-digit sequence used as the universal standard for identifying and tracking businesses worldwide.

Set of Books Name
Specify the name for your general ledger books.

Choose one of the following options for invoice matching:

- **Match Tolerance Absolute**

  Specify the absolute amount allowed as the difference between the purchase order line cost and the invoice line cost when matching line costs. If no value is specified, the system automatically sets the value to 0.

- **Match Tolerance %**

  Specify the percentage allowed as the difference between the purchase order line cost and the invoice line cost when matching cost lines. If no value is specified, the system automatically sets the value to 0.

- **Match Quantity Tolerance %**

  Specify the percentage allowed as the difference between the purchase order line quantity and the invoice line quantity when matching line quantities. If no value is specified, the system automatically sets the value to 0.

Locale
Select the number format to use based on the geographic location of your organization/enterprise. Selecting a locale determines the manner in which commas and decimals are used in numeric

data. The setting of the LOCALE installation parameter determines the default locale for all users. However, selecting a locale at the organization level overrides the setting of the LOCALE installation parameter of the logged in user.

Code Reference
Specify the code identifying the code reference for the organization.

Server Time Offset
Specify the number of hours difference between the system server and your local time if the system server is in a different time zone.

Account Segment Value
Specify the general ledger account code segment that represents the organization in your accounting structure. See your chart of accounts for more information.

Accounting Entity
Specify an accounting entity for the organization.

Depreciation Type
Select the depreciation type for assets within the organization. **Depreciation Type** is automatically based on the setting of the ASDEPTYP installation parameter. However, selecting a depreciation method at the organization level overrides the setting of the ASDEPTYP installation parameter.

Common
Select to indicate that the organization is common, that is the system shares information defined for this organization among all organizations.
Note: After defining an organization as common, you cannot change it to be a specific organization. You cannot delete common organizations.

Calendar Group
Specify the calendar group of the organization to determine periods of availability for associated equipment.

4 Click **Save Record**.

Adding enterprise locations to organizations

Add, change, or delete enterprise locations on the organizations screen.

To add enterprise locations:

1 Select **Administration > Security > Organizations**.
2 Select an organization to which to add an enterprise location, and then click the **Enterprise Locations** tab.
3 Click **Add Enterprise Location**.
4 Specify this information:

BOD Group
Select a BOD Group from the list.

Enterprise Location
Enter a unique name identifying the enterprise location.

5 Click **Submit**.

Adding options for organizations

Enter, update, and delete parameter option values at the organization level.

For a comprehensive list of organization options, see Organization options on page 241.

To add options to organizations:

1 Select **Administration > Security > Organizations**.
2 Select the organization for which to add options, and then click the **Options** tab.
3 Click **Add Option**.
4 Specify this information:

Option
Specify the option to specify for the organization.

Description
Specify a description of the option.

Value
Specify the value of the option, e.g., **S**.

5 Click **Submit**.

Defining fiscal years for asset depreciation

Create fiscal years to indicate the fiscal periods on which to base asset depreciation. When defining fiscal years for an organization, you cannot create any gaps or overlaps between fiscal year periods.

After defining fiscal years, you can update them as necessary. However, updating an existing fiscal year can invalidate records associated with equipment for which unit of output is the depreciation method.

See the *Infor EAM User Guide*.

To define fiscal years for asset depreciation:

1 Select **Administration > Security > Organizations**.
2 Select the record for which to define fiscal years, and then click the **Fiscal Years** tab.
3 Click **Add Fiscal Year**.
4 Specify this information:

Start Date
Enter the date on which the fiscal year begins.

End Date
Enter the date on which the fiscal year ends.

5 Click **Submit**.

Note: To delete a fiscal year, select the fiscal year to delete, and then click **Delete Fiscal Year**.

Deleting an existing fiscal year deletes records associated with equipment for which unit of output is the depreciation method.

To recalculate depreciation details for the equipment, click **Recalculate Depreciation Details**.

Activating multi-organization security

Using multi-organization security (MOS), establish record-level security for system forms depending on the organization of the record. To utilize record-level security for a form, first activate MOS capability for the entity associated with each function.

Example:

The system user "John" is associated with Infor EAM user group 1 and Infor EAM user group 2. User group 1 is associated with Organization 1 and User group 2 is associated with Organization 2. User group 1 has full access rights to the Equipment form; User group 2 has query-only rights to the Equipment form. When the system user "John" opens the Equipment form and queries for an equipment record, the system displays only records having organizations to which John has access, and each record retains the permissions of the organization associated with the equipment. Therefore, if the organization of the equipment is Organization 1, John will have full access rights to the record. However, if the organization is Organization 2, John can only view the record.

Note: You cannot establish record-level security for the equipment unless the MULTIORG installation parameter is set to YES.

See Defining installation parameters on page 11.

To activate multi-organization security:

1 Select **Administration > Security > Multi-org Security**.

2 Select the entity for which to activate multi-organization security, and then click the Multi-org check box.

Note: After activating an entity for MOS, it cannot be deactivated.

You can select additional Multi-org check boxes to activate multi-organization security for multiple entities.

3 Click **Save Record**.

Setting up user groups

Set up user groups so that people who perform similar tasks within the organization have the same privileges. In the system, you can copy the header and child information from one user group to another. You can also edit user groups as necessary.

The system is automatically configured with the R5 user group, which contains one user. The R5 user group has full access to all functions, including data setups, system setups, and system administration setups. After installing Infor EAM, change the user password immediately. Only the system administrator should have access to this user.

Note: After setting up users within a user group, the system administrator cannot delete the group. To delete a group, all associated records must be deleted first. Infor strongly discourages using the predefined R5 user group as a default user group because menus and authorizations of this group might be replaced during system upgrades.

Creating user groups

To create user groups:

1. Select **Administration > Security > User Groups**.
2. Click **New Record**.
3. Specify this information:

   User Group
   Enter a unique code identifying the user group, and then enter a brief description of the user group in the adjacent field.

   Class
   Enter a class code for the user group. The system automatically populates **Class Org.**

   Infor EAM Requestor
   Select to indicate that this user group performs Infor EAM Requestor functions.
   Note: The Requestor user group may only submit work requests and/or purchase requests.

   When you change the value of the Requestor checkbox, the system clears **Copy From**.

   Copy From
   Enter, from the list of previously defined groups, the ID of the group from which to copy menus, permissions, and status authorizations to the user group.
   Note: For user groups that need extensive system privileges, enter the R5 user group, and then turn off the unnecessary permissions.

   If you do not enter a user group, the system automatically copies menus, permissions, and status authorizations from the R5 user group.

   Default WO Type
   Enter the default work order type for the user group. The system automatically assigns the selected type as the default work order type for the user group on various forms within the system.

   Department
   Enter a default department for the user group.

   Session Timeout (minutes)
   Enter the amount of time in minutes in which the system will timeout.

   Corrections Allowed
   Select to allow users to make corrective hour bookings in the work management module.

4 Click **Save Record**.

Viewing users

After setting up new system user groups, view the users that are associated with user groups on the **User Groups** form.

To view users:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to view users, and then click the **Users** tab.
3 View the user information.

Granting interface permissions to user groups

Specify the functions to which user groups have access and specify the permission levels for each function.

To grant interface permissions to user groups:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to grant interface permissions, and then click the **Interface Permissions** tab.
3 Click **Add Permission**.
4 Specify this information:

   Function
   Enter the function to set up for this user group. The system automatically populates the function description.

   Select one or more of the following options to determine the level of interface permissions for the user group:

   - **Query**
     Select to allow users to retrieve records.
   - **Update**
     Select to allow users to update records. Users must have query permission to update records.
   - **Insert**
     Select to allow users to insert new records.
   - **Delete**
     Select to allow users to delete records. Users must have query permission to delete records.

   Note: When you unselect **Query**, the system automatically unselects **Update** and **Delete**.
   When you select either **Update** or **Delete**, the system automatically selects **Query**.

5 Click **Submit**.

Adding inboxes to user groups

To add inboxes to a user group:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to add an inbox, and then click the **Inbox** tab.
3. Click **Add Inbox**.
4. Specify this information:

   Inbox
   Enter the inbox name. The system automatically populates the inbox description.

5. Click **Submit**.

Adding KPIs to user groups

To add KPIs to user groups:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to add a KPI, and then click the **KPI** tab.
3. Click **Add KPI**.
4. Specify this information:

   KPI
   Enter the KPI name. The system automatically populates the KPI description.

5. Click **Submit**.

Adding charts to user groups

To add charts to user groups:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to add a chart, and then click the **Charts** tab.
3. Click **Add Chart**.
4. Specify this information:

   Chart
   Enter the chart to add to the user group. The system automatically populates the chart description.

5. Click **Submit**.

Granting work order authorization permissions to user groups

Specify the web services to which user groups have access and specify the permission levels for each web service.

Note: You only need to grant work order authorization permission to user groups if the JTAUTH installation parameter is set to YES.

To grant work order authorization permissions to user groups:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to grant work order permissions, and then click the **WO Authorizations** tab.
3. Click **Add Authorization**.
4. Specify this information:

   WO Type
   Select the work order type for which to grant permissions.

   Select one or more of the following options to determine the level of work order permissions for the user group:

   - **Insert**

     Select to allow users to insert new work order records of this type.
   - **Update**

     Select to allow users to update work order records of this type. Users must have query permission to update records.
   - **Delete**

     Select to allow users to delete work order records of this type. Users must have query permission to delete records.
5. Click **Submit**.

Granting store transaction permissions to user groups

Grant permissions for user groups to perform store transactions such as issuing and returning parts, transferring parts to stores, inserting physical inventory transactions, and updating stock records for parts.

To grant store transaction permissions to user groups:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to grant store transaction permissions, and then click the **Store Security** tab.
3. Click **Add Store**.
4. Specify this information:

   Store
   Enter the store for which to grant security rights. The system automatically populates the store description and **Store Org.**

   Issues/Returns
   Select to allow users to issue parts from this store and to return parts to this store.

Store-to-Store Issues (From Store)
Select to allow users to transfer parts from this store on the **Quick Store-to-Store Transfer** form and the **Store-to-Store Issues** form.

Store-to-Store Receipts (To Store)
Select to allow users to transfer parts to this store on the **Quick Store-to-Store Transfer** form and on the **Store-to-Store Receipts** form.

PO Receipts/Supplier Returns
Select to allow users to insert, update, or delete PO receipts for this store on the **PO Receipts** form and on the **Supplier Returns** form.

Physical Inventory
Select to allow users to insert or update physical inventory transactions for this store on the **Physical Inventory** form.

Non-PO Receipts
Select to allow users to insert, update, or delete non-PO receipts for this store on the **Non-PO Receipts** form.

Create Stock Records with Qty > 0
Select to allow users to add a new record to the **Stock** page of the **Parts** form with **Qty.** > 0 or **Qty. for Repair** > 0.

Update Stock Records
Select to allow users to update **Qty. on Hand** on the **Stock** page of the **Parts** form.

Scrap Parts from Stock
Select to allow users to scrap parts directly on the Scrap popup.

5 Click **Submit**.

Creating security filters

The system includes the ability for system administrators to create a security filter using the Dataspy. A security filter enables you to filter which records users can see.

For example, you can create a security filter on the **Work Orders** form and then assign the security filter to a user group. The result is that members of the user group cannot see records that are not included in the security filter. So if the Security Filter is set to display all work orders with a **Status** of **Released**, then when the user opens the **Work Orders** form, no matter what personal Dataspy or quick filter they run, they will never be able to see records that have a **Status**other than **Released**. Users cannot disable a security filter.

To create a security filter, select **Security Filter** on the Dataspy Filter view. **Security Filter** is only displayed for users who are in the R5 user group, and it is disabled for system-delivered Dataspies.

For information about basic Dataspy functions, see the *Infor EAM User Guide*.

After creating a security filter, assign the security filter to a user group.

See Granting Screen-Level Permissions to User Groups on page 78.

Granting screen-level permissions to user groups

Grant screen-level permissions for data manipulation. Screen authorization for user groups is critical to database security and data integrity.

Note: Because even the system administrator can be locked out of Infor EAM, it is important to allow at least one other person, in addition to the system administrator, permission to the **Users** form.

To grant screen-level permissions to user groups:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to grant screen-level permissions, and then click the **Screen Permissions** tab.
3. Click the plus sign (+) beside the menu and/or submenu you wish to view. The system expands the menu and/or submenu and displays the folders and screens that reside at various levels below the main menu and/or submenu structure.

   See Setting up menus for user groups on page 79 for more information about the user group security hierarchy.

   Note: Click the minus sign (-) to collapse the menu.
4. Select the screen to which to apply screen-level permissions. Screen Permissions becomes unprotected.

   Note: If a screen has tabs in addition to a **List View** page and **Record View** page, select the tab to which you want to apply screen-level permissions.

   Tab Available and **Tab Always Displayed** become unprotected if the tab is available at the screen level.

   If you select a screen or tab that has system-defined security, certain fields will remain protected. For example, the **Issue/Return Parts** deletes are not allowed.
5. Select one or more of the following attribute options to determine the level of permissions authorized for the user group:

Check box	Description
Query	Select to allow users to retrieve data from the database.
Insert	Select to allow users to insert new data into the database.
Update	Select to allow users to update data previously retrieved from existing records in the database. Users must have query permission to update database information.
Delete	Select to allow users to delete data from the database. Users must have query permission to delete data from the database.
Tab Available	Select to make a tab available to the user group.
Tab Always Displayed	Select to display the tab to the user group at all times.

Note: If the user group has Insert or Update permissions to a screen, the user group must also have Query permissions to that screen.

Note: When you unselect Query, the Update and Delete check boxes are unselected.

When you select **Tab Always Displayed**, **Tab Available** is selected.

6 In **Security Filter**, specify the necessary Dataspy to prevent the user group from accessing specific records.

See Creating security filters on page 77.

7 Click **Submit**.

Setting up menus for user groups

Set up menus on the **Menus** tab of the **User Groups** page. Creating a menu structure for user groups is critical to database security and data integrity. The menu structure is displayed in a tree structure that extends to four levels: one Main Menu level, two Sub-Menu levels, and one Screen level. The Main Menu level may contain up to seven items. The Sub-Menu level may contain up to 30 items, and the items may be a mix of folders and screens. Finally, the Screen level may contain up to 30 items, but the items must be screens.

To set up menus for user groups:

1 Select **Administration > Security > User Groups**.

2 Select the user group for which to set up menus, and then click the **Menus** tab.

3 View the tree structure, and then click the plus sign (+) beside the menu and/or sub-menu you wish to view. The menu and/or sub-menu are expanded, and then the folders and screens that reside at various levels below the main menu and/or sub-menu are displayed.

Note: Click the minus sign (-) to collapse the menu.

4 In **Available Screens**, select the screen to add to the menu structure.

5 Drag and drop the screen name into the desired menu structure location on the tree structure. The number of screens applied to the menu structure are verified. If less than 30 screens exist, the screen is added to the tree structure and expanded to illustrate the level of the screen as necessary. Also the screen is inserted into the Screen Permissions table and the Tab Permissions table as necessary.

Note: If you drop a screen into a sub-menu folder, the screen is added as the last child of the sub-menu folder. If you drop a screen to another screen, the screen is added directly below the existing screen.

You may also drag and drop main menu folders, sub-menu folders, and screens within the tree structure. You cannot make a higher-level item subordinate to a lower-level item, i.e., you cannot move a main menu folder to the Screen level.

When you delete a menu item, the screen is also deleted from the Screen Permissions table and the Tab Permissions table as necessary.

Showing menu items

Show a folder, screen, or tab that is hidden in the tree structure.

To show menu items:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to show menu items, and then click the **Menus** tab.
3 Select the folder, screen, or tab to show, and then click **Show Menu Item**.
4 Click **Save Record**.

Hiding menu items

Hide a folder, screen, or tab that is displayed in the tree structure.

To hide menu items:

1 Open the **User Groups** form.
2 Select the user group for which to hide menu items, and then click the **Menus** tab.
3 Select the folder, screen, or tab to hide, and then click **Hide Menu Item**.
4 Click **Save Record**.

Adding main menu folders

To add main menu folders:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to add main menu folders, and then click the **Menus** tab.
3 Select the main menu-level menu structure to which to add a folder, and then click **Add Main Menu Folder**. The system checks to determine if a main menu-level menu structure is selected on the tree structure and displays the Add Main Menu Folder popup.

   Note: You cannot add a main-menu folder to the Sub-Menu or Screen level.

4 Specify this information:

   Label
   Enter the name of the new folder.

5 Click **Submit**.

   Note: The system adds the main-menu folder directly below the existing main-menu item.

Adding sub-menu folders

To add sub-menu folders:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to add sub-menu folders, and then click the **Menus** tab.
3 Select the main menu folder or sub-menu folder menu structure to which to add a folder, and then click **Add Sub-Menu Folder**. The system checks to determine if a main menu folder or sub-menu folder menu structure is selected on the tree structure and displays the Add Sub-Menu Folder popup.

   Note: You cannot add a sub-menu folder to the Screen level.

4 Specify this information:

Label
Enter the name of the new folder.

5 Click **Submit**.

Note: If you add a sub-menu folder to a main-menu folder, the system adds the sub-menu folder as the last child of the main-menu folder. If you add a sub-menu folder to another sub-menu folder, the system adds the screen directly below the existing sub-menu folder.

Changing label names

Change the label name of any menu item in the tree structure.

To change label names;

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to change label names, and then click the **Menus** tab.
3 Select the menu item for which to change the label name, and then click **Change Label**.
4 Specify this information:

New Label
Enter the new label of the menu item.

5 Click **Submit**.

Changing screen tab orders

Change screen tab orders to change the order that the tabs appear on the screen.

To change screen tab orders:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to change screen tab orders, and then click the **Menus** tab.
3 Select the screen for which to change the tab order, and then click **Change Tab Order**.
4 Specify this information:

Error Message
Any error messages associated with the tab are displayed.

5 Click **Submit**.

Copying menus

Copy menus from one user group to another user group.

To copy menus:

1 Select **Administration > Security > User Groups**.
2 Select the user group to which to copy menus, and then click the **Menus** tab.
3 Click **Copy Menu**. **To Group** is automatically populated with the current user group.
4 Specify this information:

From Group
Specify the user group from which to copy the menu.

5 Click **Submit**.

Viewing page-level help

View page-level help. Learn more information about the page, i.e., what the page is, how it is used, etc.

To view page-level help:

1 Browse to the screen for which to view help.
2 On the toolbar, click **Help**.
3 View the help information.

Setting up scanner menus for user groups

Set up scanner menus on the **Scanner Menus** page of the **User Groups** form to associate prompts to a menu structure. In the system, the menu structure is displayed in a tree structure that extends to three levels: the Main Menu level, Sub-Menu level and DC Prompt, and Web Service Prompt level.

In order to create folders of the menu structure, you must first create a screen for each folder.

See Creating and Modifying Screens on page 13.

To set up scanner menus for user groups:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to set up scanner menus, and then click the **Scanner Menus** tab.
3 View the tree structure, and then click the plus sign (+) beside the menu and/or sub-menu you wish to view. The system expands the menu and/or sub-menu and then displays DC Prompts and Web Service Prompts that reside at various levels below the main menu and sub-menu.

   Note: Click the minus sign (-) to collapse the menu.
4 Specify a **Dataspy** or **Filter** as necessary.
5 Under **All Available Prompts** select the prompt to add to the menu structure.
6 Drag and drop the prompt into the desired menu structure location on the tree structure. The system also inserts the prompt into the **Screen Permissions** table.

   Note: If you drop a prompt into a sub-menu folder, the system adds the prompt as the last child of the sub-menu folder. If you drop a prompt to another prompt, the system adds the prompt directly below the existing prompt.

   You may also drag and drop main menu folders, sub-menu folders, DC prompts, and Web Service prompts within the tree structure. You cannot make a higher-level item subordinate to a lower-level item, i.e., you cannot move a main menu folder to the DC Prompt or Web Service Prompt level.

   To delete a menu item, select the menu item to delete, and then click **Delete Menu Item**. The system deletes the record and updates the tree structure. The system also deletes the prompt from the **Screen Permissions** table as necessary.

Adding scanner main menu folders

To add scanner main menu folders:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to add scanner main menu folders, and then click the **Scanner Menus** tab.
3. Select the main menu-level menu structure to which to add a folder, and then click **Add Main Menu Folder**. The system checks to determine if a main menu-level menu structure is selected on the tree structure and displays the Add Main Menu Folder popup.

   Note: You cannot add a main-menu folder to the Sub-Menu, DC Prompt, or Web Service Prompt level.
4. Specify this information:

   Menu Code
   Enter the name of the new folder. The system automatically populates **Description**.
5. Click **Submit**.

   Note: The system adds the scanner main-menu folder directly below the existing scanner main-menu item.

Adding scanner sub-menu folders

To add scanner sub-menu folders:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to add scanner sub-menu folders, and then click the **Scanner Menus** tab.
3. Select the main menu folder or sub-menu folder menu structure to which to add a folder, and then click **Add Sub-Menu Folder**. The system checks to determine if a main menu folder or sub-menu folder menu structure is selected on the tree structure and displays the Add Sub-Menu Folder popup.

   Note: You cannot add a scanner sub-menu folder to the DC Prompt or Web Service Prompt level.
4. Specify this information:

   Menu Code
   Enter the name of the new folder. The system automatically populates **Description**.
5. Click **Submit**.

   Note: If you add a scanner sub-menu folder to a scanner main-menu folder, the system adds the scanner sub-menu folder as the last child of the scanner main-menu folder. If you add a scanner sub-menu folder to another scanner sub-menu folder, the system adds the scanner sub-menu folder directly below the existing scanner sub-menu folder.

Defining status authorizations for user groups

System administrators define status change authorizations for user groups for activities such as approving work requests, completing work orders, approving purchase requisitions, and approving production requests.

To define status authorizations for user groups:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to grant status change authorizations, and then click the **Status Authorizations** tab.
3. Click **Add Authorization**.
4. Specify this information:

   Screen
   Select the screen for which to define status authorizations.

   From Status
   Enter the status from which to change authorizations. The system automatically populates the description.

   To Status
   Enter the status to which to change authorizations. The system automatically populates the description.

5. Click **Save Record**.

Administering iProcure security for user groups

Administer iProcure security for user groups by specifying which iProcure buttons the system enables security.

To administer iProcure security for user groups:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to administer iProcure security, and then click the **iProcure Security** tab.
3. Specify this information:

   Active
   Select to administer iProcure security per button. By selecting **Active** for a user group, the system denies the user group access to the specified button functionality.
   Note: Unselect **Active** to turn off security per button. By unselecting **Active** for a user group, the system grants the user group access to the specified button functionality.

4. Click **Save Record**.

Viewing menu structure and permissions for user groups

View user group permissions such as which user groups have access to specific screens, reports, or tabs. Verify security filters assigned to applicable user groups, or find screens and/or report locations in menu structures.

To view menu structure and permissions for user groups:

1. Select **Administration > Overview > Menu Structure and Permissions**.
2. View the menu structure and permissions information for user groups.

Setting up Mobile menus in Infor EAM

Infor EAM Mobile menus can be configured in Infor EAM based on user group. The following Infor EAM Mobile screens can be configured: Regular Mobile screen, Data Collection Prompt screen, Web Service Prompt screen, user Defined Mobile Grid screen.

To set up Mobile menus in Infor EAM:

1. Start Infor EAM.
2. Open the **User Groups** form.
3. Select the user group for which to set up Mobile menus, and then click the **Mobile Menus** tab.
4. Click **Add Main Menu Folder**. A system check determines if a main menu-level menu structure is selected on the tree structure, and the Add Main Menu Folder popup is displayed.
5. Specify this information:

   Label
   Type in the label for the Main Menu Folder.

6. Click **Submit**. The record is saved and **Menu Details** is updated.
7. Highlight a **Main Menu Folder** and click **Add Sub-Menu Folder**. The Add Sub-Menu Folder popup is displayed.
8. Specify this information:

   Label
   Type in the label for the Sub-Menu Folder.

9. Click **Submit**. The record is saved and **Menu Details** is updated.
10. Drag Mobile screen from the **Available Screens** list, and then drop it in the Main Menu Folder or Sub-Menu Folder. The record is saved and **Menu Details** is updated.
11. Repeat above steps to configure all menu items.
12. To show or hide a menu item, select a menu item and click **Show Menu Item** or **Hide Menu Item**.
13. To delete a menu item, select a menu item and click **Delete Menu Item**.
14. To change the label of an existing menu item, select a menu item and click **Change Label**.
15. To change the icon of the Main Menu item, select a menu item and click **Change Icon**. The Change Icon popup is displayed. Type in the name of **New Icon** without file name extension.

Note: Main Menu icon configuration is only available on Quarter VGA version. Only .gif and .jpg image file types are acceptable. The image file must be available in the same folder as Mobile executables on the Mobile device.

16 To copy a menu item, select the menu item, and then click **Copy Menu**.

Setting default values for user groups in Mobile

Configure the default value settings for user groups on the Infor EAM Mobile application or mobile devices.

To set default values for user groups in Mobile:

1 Select **Administration > Security > User Groups**.

2 Select the user group for which to set default values in Mobile, and then click the Mobile Settings tab.

3 Specify this Work information:

Download Work Orders
Select the checkbox to download work orders by default for the user group.
Specify the dataspy for which to download work orders in **For Dataspy**.

Download Employees
Select the checkbox to download employees by default for the user group.
Specify the trade, department, or employee for which to download employees for the user group in **For Trade**, **For Department**, or **For Employee**.

Download Standard WOs
Select the checkbox to download standard work orders by default for the user group.

Download Inspection Results
Select the checkbox to download inspection results by default for the user group.

Download Task
Select the checkbox to download tasks by default for the user group.

4 Specify this Equipment information:

Download Equipment
Select the checkbox to download equipment by default for the user group.
Specify the department, location, class, category, equipment, or type for which to download equipment for the user group in **For Department**, **For Location**, **For Class**, **For Category**, **For Equipment**, or **For Type**.

Download Equipment Comments
Select the checkbox to download equipment comments by default for the user group.
Specify whether to download the equipment comments for work orders only in **For Downloaded WO only**.

Download Equipment History
Select the checkbox to download equipment history by default for the user group.

Specify whether to download equipment history for work orders only, or for the latest days in **For Downloaded WO only**, or **For Latest (Days)**.

Download Equipment Custom Fields
Select the checkbox to download equipment custom fields by default for the user group.
Specify whether to download equipment custom fields for only work orders in **For Downloaded WO only**.

Download Cost Codes
Select the checkbox to download equipment cost codes by default for the user group.
Specify the class or cost code for which to download equipment cost codes in **For Class** or **For Cost Code**.

Download Equipment History Comments
Select the checkbox to download equipment history comments by default for the user group.

5 Specify this Materials information:

Download Stores
Select the checkbox to download stores by default for the user group.

Download Parts
Select the checkbox to download parts by default for the user group.
Specify the store or part for which to downloard for parts for the user group in **For Store** or **For Part**

In Stock and Quantity
Specify the required number of parts in stock at the default store. The number you specify here becomes the default stock number the part must meet before the part will be download for the user group. For example, specify 4, and only those parts with a quantity of 4 or more in stock (in the store) will be downloaded.

Download Bins
Select the checkbox to download bins by default for the user group.
Specify the store or bin to download for bins for the user group in **For Store** or **For Bin**.

Download Physical Inventory
Select the checkbox to download physical inventory by default for the user group.
Specify the store or line to download physical inventory for the user group in **For Store** or **For Line**.

Download Supplier
Select this checkbox to download the list of suppliers by default for the user group.

Download Asset Inventory
Select the checkbox to download asset inventory by default for the user group.

Download Stock
Select the checkbox to download stock by default for the user group.

6 Specify this Other information:

Download eSignature Settings
Select the checkbox to download the eSignature settings by default for the user group. This checkbox determines the records displayed on the eRecords Setup screen.

Setting up users

Set up users with access to the system as members of user groups. You can also edit users as necessary. After setting up new system users, associate them with specific organizations. When the user logs in to the system, the default organization determines to what user group the user belongs for that system session.

Creating users

Note: Only a certain number of users can be active for each product. This number is determined by the CDKEY installation parameter (Infor EAM), CDKEYREQ installation parameter (Infor EAM Requestor), 7IMCDKEY installation parameter (Infor EAM Mobile), 7IWCDKEY installation parameter (Infor EAM Connector), and/or the 7IBCDKEY installation parameter (Infor EAM Barcoding).

To create users:

1. Select **Administration > Security > User Setup**.
2. Click **New Record**.
3. Specify this User Details information:

   User ID
   Specify a unique code identifying the user, and then enter a description of the user in the adjacent field. The description is usually the user's full name.

   Language
   Select the default language for the user.

   User Group
   Specify the user group to which the user is assigned.

   User ID Expiration Date
   Specify the date on which the User ID expires.

   Password
   Specify a six to twelve character password for the user. The password is masked with asterisks as you type.
   Note: After a set amount of unsuccessful attempts to log in, **User ID** and **Password** are locked. At this point, the system administrator or another authorized user must unlock the user record.

   To unlock the user record, open the **User Setup** page, which will display the **Unlock User** button (under normal circumstances, the **Unlock User** button is hidden). Click the **Unlock User** button. The user is unlocked and the **Unlock User** button is hidden.

   Password Expiration Date
   Specify the date on which the password expires.

E-mail Address
Specify the user's e-mail address.

External User ID
Specify an external User ID to provide an alternate method of identifying the user. The external user ID provides the method to identify the user based on an identifier from an external system such as Active Directory or some alternate identify provider.
Note: External User ID must be unique for each user ID and external user ID in the system except it can be the same as the user's **User ID**.

Associated Supplier
Specify the supplier to associate with the user when ordering parts.

Default Store
Specify the default store for the user from which parts will be issued or returned for work orders, equipment, or requisitions.

Buyer
Select if the user can generate requisitions and purchase orders to buy materials/services.
Note: Buyer must be selected for a user for the system to display the user as a potential purchaser of materials and services in the lookups for **Buyer**.

Allow Dataspy Edits
Select if the user can edit Dataspies. If unselected the **Edit Dataspy** button is hidden throughout the system on every form for this specified user.

Mobile Administrator
Select if the user is an administrator for Infor EAM Mobile.

Allow Dataspy Advanced Filters
Select if the user can specify advanced filters for Dataspies.

Allow Global Dataspy Configuration
Select if the user can configure global Dataspy settings for all users.

Allow Editing of Other's Comments
Select if the user can edit comments made by others.

Allow Editing of Own Comments
Select if the user can edit their own comments.

Allow Cancelling of WO Daily Scheduling Sessions
Select if the user can cancel work order daily scheduling sessions on the **WO Daily Scheduling** page.

Class
Specify the class code for the user.

Locale
Select the locale of the user.

Department
Specify the default department for the user.

Session Timeout (minutes)
Specify the amount of time in minutes in which the system will timeout.

Success Msg. Timeout
Select the amount of time in which success messages will timeout.

First Screen
Specify the code identifying the function to which the system defaults when the user logs in to the system.

Screener
Select if the user can screen work requests.

Screen Designer
Select if the user can set up the appearance of screens.

Accessibility Mode
Select to indicate that for the user the system will operate in accessibility mode when they next log in to Infor EAM. In **Accessibility Mode** the Infor EAM application is entirely keyboard-navigable wherein the user will be required to navigate and access features via keyboard shortcuts only. Additionally those fields with special formatting or validation will display a popup tool tip.
Note: Accessibility Mode is designed for use with a screen reader program such as JAWS.

Allow Screen Cache Setup
Select to enable the **Add to Screen Cache** and **Remove from Screen Cache** options for the user on available screens.

Allow Creating Import Utility Template
Select to enable the **Create Import Utility Template** option for the user.

Allow Viewing Audit Trail
Select to enable the **Audit Trail** option for the user.

Enable Screen Cache Deck
Select to enable the user to view and access the screen cache tabs at the bottom of all screens.

Enable Transition Animations
Select to enable screen transitions for the user if the user changes screens via the Screen Cache tabs at the bottom of a screen.

Allow Viewing Private Notebook
Select to enable the user to view private Notebook screen records.

Allow Contains Search
Select to enable the user to access the "Contains" and "Does Not Contain" operators when using Dataspy filters to search.

Allow Changes to Mobile Settings
Select to enable the user to make changes to settings in mobile devices.

4 Specify this Infor EAM Products information:

Infor EAM
Select to indicate that the user is an Infor EAM user.

Connector
Select to indicate that this user is an Infor EAM Connector user.

Analytics
Select to indicate that the user is an Infor EAM Analytics user.
Note: If the Analytics user will create variables within Infor EAM, you must also select Infor EAM.

Requestor
Select to indicate that this user is an Infor EAM Requestor user.
Note: Specify the Requestor user group in **User Group** to associate the Requestor user with the Requestor user group.

The Requestor user may only submit work requests and/or purchase requests.

Barcoding
Select to indicate that this user is an Infor EAM Barcoding user.

Mobile
Select to indicate that this user is an Infor EAM Mobile user.

5 Specify this Advanced Reporting Options information:

Consumer
Select to indicate that the user is a reporting consumer. The consumer license allows users to access the consumer and basic report features.

Author
Select to indicate that the user is a reporting author. The author license allows users to access the Report Author functionality in Infor EAM to create reports as well as access to the consumer and basic report features.

6 Specify this User Limits information:

Requisition
Specify the maximum amount the user can enter on a requisition or requisition line.

Requisition Approval
Specify the maximum amount the user can approve for a requisition.

Invoice Approval
Specify the maximum amount the user can approve on invoices and invoice lines.

Non-PO Inv. Approval
Specify the maximum amount the user can approve on non-purchase order invoices.

Purchase Order
Specify the maximum amount the user can enter on a purchase order or purchase order line.

PO Approval
Specify the maximum amount the user can approve for a purchase order or purchase order line.
Note: Set **Requisition**, **Purchase Order** , **Requisition Approval**, and **PO Approval** at either the header level or the line-item level in Installation Parameters. You do not need to define them for every user.

If you are setting up a new user in a multi-organization environment the fields are set on the **Organizations** tab of the **User Groups** page and the **Roles** page.

Pick Ticket Approval
Specify the maximum amount of parts that the user can approve for pick tickets.
Note: If multi-organization security is activated, you must define purchase order and requisition limits on the **Organization** tab of the **User** page.

7 Click **Save Record**.

Note: Click **Unlock User** to unlock locked users and make them active in the system.

The following fields are editable on the **List View** tab of the **User ID** page: **User ID**, and Infor EAM.

Optionally, click **Revoke** to remove the user's record and all references to the record for GDPR compliance.

Note: This process is not reversible.

Changing passwords

Change passwords for individual users. Passwords are encrypted in the .xml configuration files and are preceded by '{ENCR}' in the .xml file. The following types of passwords will be encrypted: database schema passwords, Websphere/Weblogic administrator passwords, and LDAP access-user passwords.

To change passwords:

1 Open the appropriate .xml file, and then delete the encrypted password and the ‘{ENCR}’ prefix.
2 Enter the new (unencrypted) password.
3 Redeploy the application.

Associating users with organizations

After setting up new system users, associate them with specific organizations. When the user logs in to the system, the default organization determines to what user group the user belongs for that system session.

To associate users with organizations:

1 Select **Administration > Security > User Setup**.
2 Open the form.
3 Select the user with whom to associate the organization, and then click the **Organizations** tab.
4 Click **Add Organization**.
5 Specify this information:

Organization
Enter the organization to associate with the user. The system automatically populates the organization's description in the adjacent field and selects **Common** if the organization is a common organization.

User Group
Enter the user group to which the user belongs.

Default
Select to indicate that this organization is the default organization for this user, i.e., the system automatically displays this organization when the user logs in to Infor EAM and on most forms that have an **Organization** lookup.
Note: The system allows only one default organization.

Requisition
Enter the user's requisition limit.

Requisition Approval
Enter the user's requisition approval limit.

Invoice Approval
Enter the user's invoice approval limit.

Non-PO Inv. Approval
Enter the user's non-purchase order invoice approval limit.

Purchase Order
Enter the user's purchase order limit.

PO Approval
Enter the user's purchase order approval limit.

Pick Ticket Approval
Enter the user's pick ticket approval limit.

6 Click **Submit**.

Associating users with KPIs

KPIs associated with a specific user are displayed in the KPI section of the user's **Start Center**. Review, add, and remove KPIs associated with a specific user on this screen.

To associate users with KPIs:

1 Select **Administration > Security > User Setup**.
2 Select the user for which to associate a KPI, and then click the **KPIs** tab.
3 Click **Insert KPI Entry**.
4 Specify this information:

Sequence Number
Specify the sequence in which the KPI will be displayed in the **Start Center** for the user.

KPI Code
Specify the KPI to add to the **Start Center** for the user. Select one or more KPI codes if desired for the specific user.
Note: If you select more than one KPI code for the user, a new sequence number is assigned to each KPI code and these sequence numbers are generated based on the *INCRLINO* installation parameter.

5 Select the **Auto Refresh** check box to automatically refresh the KPI every time the **Start Center** is invoked for the user.
6 Click **Submit**.

Associating users with inboxes

Associate users with inbox entries to display entries in the inbox of the **Start Center** for that specific user. Inbox entries associated with a user on this tab with display on that user's Start Center inbox.

To associate users with inboxes:

1 Select **Administration > Security > User Setup**.
2 Select the user for which to associate an inbox entry, and then click the **Inboxes** tab.
3 Click **Insert Inbox Entry**.
4 Specify this information:

Sequence Number
Specify a numeric value for the sequential order for the inbox entry to display.
Note: Sequential order is determined by the incremental value set by the *INCRLINO* installation parameter.

Inbox Code
Specify the unique code that identifies the inbox entry. Select one or more inbox codes if desired for the specific user.
Note: If you select more than one inbox code for the user, a new sequence number is assigned to each inbox code and these sequence numbers are generated based on the *INCRLINO* installation parameter.

Folder
Specify the folder in which to keep the inbox based on the category.

5 Select the **Auto Refresh** check box to automatically refresh the inbox every time the **Start Center** is invoked.
6 Click **Submit**.

Associating users with responsibilities

Associate users with specific responsibilities to indicate the person should perform that particular work. An example of a user responsibility is reviewing a completed work order checklist.

To associate users with responsibilities:

1 Select **Administration > Security > User Setup**.
2 Select the user for which to associate responsibilities, and then click the **Responsibilities** tab.
3 Click **Add Responsibility**.
4 Specify this information:

   Responsibility
   Specify the task the user will be responsible for completing.

5 Click **Submit**.

Creating LDAP roles

Lightweight Directory Access Protocols (LDAP) can store hierarchical data definitions across platforms. LDAP is most often used to store user credentials across many applications. Create LDAP roles for automatic user creation.

Note: If LDAP authentication is enabled, Call Center module log ins are authenticated by Infor EAM and LDAP settings are ignored.

To create LDAP roles:

1 Select **Administration > Security > Role Setup**.
2 Click **New Record**.
3 Specify this information:

   Role
   Enter a unique code identifying the role, and then enter a description of the role in the adjacent field.

   User Group
   Enter the user group to which users of the role are assigned.
   Note: If you enter a Requestor user group in **User Group**, the system automatically selects Infor EAM Requestor and automatically unselects Infor EAM.

   Default Org.
   Enter the default organization of the role.

   Language
   Select a default language for the role.

   Success Msg. Timeout
   Select the amount of time in which success messages will timeout.

   Infor EAM Mobile Administrator
   Select if users of the role are administrators of Infor EAM Mobile.

   Locale
   Select the default locale for the role.

   Department
   Enter a default department for the role.

First Screen
Enter the code identifying the screen to which the system defaults when users of the role log in.

Buyer
Select if the user of the role can buy materials or services.

Screener
Select if the users of the role can screen work requests.

Infor EAM
Select if the user of the role is an Infor EAM user.

Infor EAM Requestor
Select if the user of the role is a Requestor user.
Note: Enter the Requestor user group for **User Group** to associate the Requestor user with the Requestor user group.

The Requestor user may only submit work requests and/or purchase requests.

You cannot select Infor EAM and Infor EAM Requestor for the same user; however, you must select either Infor EAM or Infor EAM Requestor.

Infor EAM Connector
Select if the user of the role is a Connector user.

Infor EAM Barcoding
Select if the user of the role is an Infor EAM Barcoding user.

Infor EAM Mobile
Select if the user of the role is an Infor EAM Mobile user.

Infor EAM Analytics
Select if the user of the role is an Infor EAM Analytics user.

Consumer
Select if the users of the role are Advanced Reporting consumers.

Author
Select if the users of the role are Advanced Reporting authors.

Requisition
Enter the maximum amount users of the role can enter on a requisition or requisition line.

Requisition Approval
Enter the maximum amount users of the role can approve for a requisition or requisition line.

Invoice Approval
Enter the maximum amount users of the role can approve on invoices and invoice lines.

Non-PO Inv. Approval
Enter the maximum amount users of the role can approve on non-purchase order invoices.

Purchase Order
Enter the maximum amount users of the role can enter on a purchase order or purchase order line.

PO Approval
Enter the maximum amount users of the role can approve for a purchase order or purchase order line.

Pick Ticket Approval
Enter the maximum amount users of the role can approve for pick tickets.

4 Click **Save Record**.

Creating electronic records and signatures

The system allows you to create electronic records, or "snapshots," of events that occur in the database. A snapshot preserves the entire record, including information related to other database tables, to provide historical information related to the progress of your operation. For example, a snapshot of a work order header will include all information on the header as well as the associated activities. The system also provides the ability to print and export snapshots to external formats such as Adobe Acrobat Portable Document Format (.PDF).

In addition to creating electronic records of information in the database, you can set up the system to require an electronic signature to authorize status changes to specific records. The electronic signature is attached to an entity, and when a system user changes the status of a record based on specific criteria, the system prompts the user for an ID, password, and a reason for the signature (e.g., review, approval, responsibility, etc.).

You can also select to associate certifications with electronic signatures to facilitate the proper authorization of status changes by requiring authorized users to enter a certification number and certification type when entering their signature, which is required by the Federal Aviation Administration (FAA) for electronic signatures. The FAAMOD installation parameter determines whether you are required to enter a certification number and certification type for electronic signatures. If FAAMOD is set to ON, the system displays **Certification Number** and **Certification Type** on the Electronic Signature dialog box and you must enter a valid certification number and type to sign the record.

See Signing Records on page 98.

Defining entities for electronic records and signatures

Define entities to take a snapshot of the record or require an electronic signature when you change the status of the record attached to the entity. For example, if your organization requires electronic records of the specific stages of a purchase order, you can define the snapshot for the PORD entity. Or, if your organization requires electronic signatures of status changes to work orders, you can define the electronic signature for the EVNT entity. The system takes the snapshot of the record and/or prompts you (or any user) for an ID, password, and reason when you save the change to the database.

The following table lists the entities for which you can create electronic records and signatures:

Entity	Description	Information Recorded
EVNT	Event	Work order, activities, repairable parts, permits
OBJ	Equipment	Equipment and warranties
RECV	Receipts	Receipt and receipt lines
RETN	Returns	Return and return lines
STOS	Store-to-Store	Store-to-store transaction and lines
PROJ	Project	Project and budget
PICK	Pick Ticket	Pick tickets and lines
PORD	Purchase Order	Purchase order and lines
REQ	Requisition	Requisition and lines
INV	Invoice	Invoice and lines

To define entities for electronic records and signatures:

1 Select **Administration > Security > eRecords Setup**.
2 Click **New Record**.
3 Specify this information:

Entity
Select the entity for which to define electronic records and/or signatures. The system automatically populates the entity description.

Signature Required
Select to indicate that the status change requires a signature.

From Status
Enter the old status of the entity.

To Status
Enter the new status of the entity.

4 Click **Save Record**.

Signing records

Upon changing the status of a record that has been defined as requiring an electronic signature, the system prompts you to enter a user ID, password, and reason for the signature. The user ID and password are the same ID and password used to enter the system; however, any person with a valid user ID and password can sign electronic records, even if they are not physically logged in to the system. After verification of the user information, the system takes a snapshot of the record and stores it in the database. If you update multiple records at one time, the system prompts you for a signature for every record.

To sign records:

1. Open any form requiring electronic signatures for status changes.
2. Query for the record for which to change the status. Status changes can include record insertion, deletions, or any specific change as defined on the **eRecords Setup** form.

   See Defining Entities for Electronic Records and Signatures on page 97.
3. Change the status of the selected record, and then click **Save Record**.
4. Specify this information:

   User ID
   Enter the user ID.

   Password
   Enter the password associated with the user ID.

   Signature Type
   Enter the reason for the electronic signature, e.g., review, approval, etc. Define signature types for the ESTP entity on the **System Codes** form.

   See Defining System Codes on page 12.

   Certification Number
   Enter the unique certification number for the eSignature. The system automatically populates **Certification Type**.

   Certification Type
   Modify the certification type as necessary.
   Note: The FAAMOD installation parameter determines whether you are required to enter a certification number and certification type for electronic signatures. If FAAMOD is set to ON, the system displays **Certification Number** and **Certification Type** on the eSignature popup, and you must enter a valid certification number and type to sign the record. The system automatically populates **Certification Type** based on the selected **Certification Number**. Certification numbers and types are associated with employee records on the **Qualifications** tab of the **Employees** form. The **Qualifications** tab is not available in Infor EAM for SQL Server.

   The system only displays certification numbers and types that are associated with training records for which the employee is currently qualified in the lookups for **Certification Number** and **Certification Type**.

   Additionally, the system associates certification numbers and types with employees based on the user group of the employee on the **Employees** form. Therefore, if FAAMOD is set to ON, you must select a **User** for each employee who is required to enter a certification number and type when signing electronic records.

5. Click **OK**.

   Note: If you click **Cancel**, the system closes the form and does not record changes.

   The system does not allow changes to the record without entering an electronic signature. Further, if you enter an invalid or expired ID and password, or if you do not enter a valid certification number and type if applicable, or if you do not have status change authorization, the system records an access violation and the electronic signature will not be recorded. If the number of unsuccessful signature attempts exceeds the number specified in the SECUVIOL installation parameter, the system locks the user. Contact your System Administrator to unlock users.

Configuring electronic records and signatures for cGMP equipment

Create electronic records and/or require electronic signatures for work performed on cGMP equipment. Current Good Manufacturing Practices (cGMP) are a set of standards established by the United States Food and Drug Administration (FDA) to regulate the manufacturing processes of the food, pharmaceutical, and medical equipment industries.

Many companies have a combination of equipment regulated by cGMP standards as well as equipment not regulated by cGMP standards. Configure the system to take a snapshot of a record or require an electronic signature only when the work is performed on cGMP equipment.

Note: To indicate that a piece of equipment is subject to cGMP standards, select **cGMP** on the **Record View** page of the Assets, Positions, or Systems form.

To configure the system to create electronic records and/or require signatures for only cGMP equipment, set the CGMPONLY installation parameter to YES.

See the *Infor EAM User Guide*.

You must also define the electronic records/signatures for the EVNT entity on the eRecords Setup form.

See Defining Entities for Electronic Records and Signatures on page 97.

If CGMPONLY is set to YES and you have configured electronic records/signatures for the EVNT entity, the system creates an electronic record and/or requires a signature for work orders created/generated only for cGMP equipment.

Note: If you create a PM route that is associated with a work order containing cGMP equipment, the system creates an electronic record and/or requires a signature for the work order associated with the cGMP equipment in the PM route. The system does not create a separate electronic record or require a signature for each child work order on the PM route.

The electronic signatures for cGMP equipment configuration apply to work orders created/generated for cGMP equipment using the following forms:

- **Work Orders** form
- **Work Orders Quick Close** form
- **Service Requests** form
- **Generate/Release Work Orders** form

Granting status change authorization permissions

Users have different levels of authority within the system. For example, a manager might have authority to approve purchase requisitions. A planner might have authority to cancel a work order. A project manager might have authority to freeze a project.

Set up authorization levels for entity status values when records for the entity are created or when their status is modified. Set authorization levels for user groups or individual users.

To grant status change authorization permissions:

1 Open the **Status Change Authorizations** form.

2 Click **Add Authorization**.

3 Specify this information:

User Group
Enter the user group for which to define the status change authorization. Enter * if the authorization applies to all groups. The system automatically populates the user group description.
Note: **User Group** and **User** cannot both have a value of *.

User
Enter the user for whom to define the status change authorization. Enter * if the authorization applies to all users in the user group. The system automatically populates the user description.

Entity
Enter the entity over which the user has authority. The system automatically populates the entity description.

From Status
Enter the status code the user can change. The system automatically populates the from status description.

To Status
Enter the status code to which the user can change the old status code. The system automatically populates the to status description.
Note: If you want the group to have authorization over all aspects of a particular process, enter all of the available status changes for that process. Enter * for any status and - for "No status yet" (i.e., to indicate a new record).

User Specific Auth.
Select to indicate that the authorization is for this user only.

4 Click **Submit**.

Managing GDPR records

Review and maintain records in compliance with Global Data Protection Regulations (GDPR). GDPR-related records will be processed nightly. Maintain the status of these records or delete them on this screen. Deleting the records on this screen, removes the record and prevents it from being processed permanently.

To manage a GDRP record:

1 Select **Administration > Security > GDPR Administration**.

2 View the records.

3 To modify the status of a record so that the record can be reprocessed, specify the new **Status**.

Note: Only records with a status of E (Error) can be modified, and these records can only be modified to S (Scheduled) status.

4 Click **Delete** to remove a record. Records deleted on this screen will be omitted from the nightly processing event.

Note: Records with a status of P (In Progress) cannot be deleted. Records with a status of S (Scheduled) or E (Error) that are deleted will not be processed. Records with a status of C (Completed) have already been processed.

Viewing GDPR record errors

View errors generated during the GDPR administration revocation process. Only GDPR records with status E (Error) will display on this tab.

To view a GDPR record errors:

1. Select **Administration > GDPR Administration**.
2. Select the GDPR record for which to view errors, and then click the **Errors** tab.
3. View the errors.

Interface configuration

Personalizing the Start Center

Personalize the **Start Center** to display inbox entries and KPIs. Inbox entries notify you of changes in the database, and KPIs measure productivity or efficiency with processes or work-related activities.

Personalizing the inbox

The inbox displays notifications (inbox entries) of changes in the system database on the **Start Center**. An example of inbox entries is the number of work orders with associated warranties for which there have been no claims submitted.

Users can open screens necessary to complete actions or activities associated with inbox entries by double-clicking the inbox entry. For example, launch the **Work Orders** form directly from the inbox entry to approve the work orders requiring approval. A Dataspy entered for inbox entries automatically searches for and retrieves the records associated with an inbox entry to the called screen.

Inbox entries can be assigned to specific user groups, specific users, or defined as public entries that are displayed for all users. After personalizing the inbox, set system privileges for users to modify their inbox by adding and/or deleting entries and modifying the order and sequence in which entries are displayed.

Setting up inbox entries

Set up inbox entries by identifying the notifications that you wish to be displayed in the inbox. Select a SQL statement for the entry to query the database for the appropriate information to retrieve to the inbox. Select an appropriate screen to associate with the entry, e.g., the **Work Orders** form for an

inbox entry for work orders that currently require approval. Specify a Dataspy to enable the system to automatically query for the records associated with the inbox entry to the called screen. You can also designate whether the entry is accessible to all users (public), or specify the user groups for which to enable the entry.

To set up inbox entries:

1 Select **Administration > Start Center Setup > Inbox Setup**.
2 Click **New Record**.
3 Specify this information:

   Inbox Code
   Specify a unique code identifying the the inbox entry, and then enter a description of the activity to complete for the inbox entry in the adjacent field. The description will be displayed in the Inbox on the **Start Center**.

   SQL Statement
   Specify the SQL statement to calculate the number of applicable records for the inbox entry. **SQL Statement Text** is automatically populated.
   Note: SQL Statement cannot exceed the performance score limit defined in the **`INBXSCOR`** installation parameter.

   Public
   Select to give all user groups access to the inbox entry.
   Note: Inbox entries for which user groups have been associated cannot be public.

   Screen
   Specify the system screen for which to enable a hyperlink to call the screen for the inbox entry.
   Note: If you update **Screen**, **Dataspy** is cleared.

   Forms Screen
   Specify the Infor EAM Oracle Forms screen for which to enable a hyperlink to call the screen for the inbox entry.

   Dataspy
   Select the Dataspy used to retrieve records for the called system screen.

   Filter
   Specify the where clause with which to associate the inbox entry.

4 Click **Save Record**.

Defining inbox ranges

Define inbox ranges to specify a **High Value** and a **Low Value** for each of the scoring ranges defined for an inbox.

To define inbox ranges:

1 Select **Administration > Start Center Setup > Inbox Setup**.
2 Select the inbox for which to define ranges, and then click the **Ranges** tab.
3 Click **Add Range**.

4 Specify this information:

Low Value
Specify the value for the low threshold of the inbox range.

High Value
Specify the value for the high threshold of the inbox range.

Color
Select the color to use to display the inbox field box.

Description
Specify a description of the icon to be displayed for the inbox range on the **Start Center**.

5 Click **Submit**.

Associating inbox entries with user groups

Associate inbox entries with user groups to display entries in the inbox for only specific user groups.

Note: Inbox entries for which **Public** has been selected cannot be assigned to specific user groups.

To associate inbox entries with user groups:

1 Select **Administration > Start Center Setup > Inbox Setup**.
2 Select the inbox entry with which to associate user groups, and then click the **User Groups** tab.
3 Click **Add User Group**.
4 Specify this information:

User Group
Specify the user group to which to associate the inbox entry.

5 Click **Submit**.

Associating inbox entries with users

Associate inbox entries with specific users to display the entries in the inbox of the user's **Start Center**. Alternately, you can review or remove a user's associated inbox entries.

To associate inbox entries with users:

1 Select **Administration > Start Center Setup > Inbox Setup**.
2 Select the inbox entry with which to associate an user, and then click the **Users** tab.
3 Click **Add User**.
4 Specify this information:

User ID
Specify the user's unique ID to which to associate the inbox entry.
Note: User ID is a multi-select lookup which allows you to select more than one user to associate to an inbox entry. If you select more than one user to associate to the inbox entry, a new sequence number is assigned to each user, and these sequence numbers are generated based on the `INCRLINO` installation parameter.

Folder
Specify the folder in which to keep the inbox based on the category.

5 Select the **Auto Refresh** check box to automatically refresh the inbox every time the **Start Center** is invoked for this specific user.
6 Click **Submit**.

Personalizing KPIs

The **Start Center** displays key performance indicators (KPIs) and their scores for users. KPIs are user-defined parameters that measure productivity or efficiency associated with processes and/or work order-related activities. An icon is displayed on the **Start Center** for each KPI that enables users to view the status of their work environment with respect to the KPIs specific to their job, as well as the current score for each KPI.

After defining KPIs, grant users access to the KPIs. KPIs can either be user-group specific, user-specific, or public. Public KPIs can be displayed for all users. Define system privileges for users to personalize their **Start Center** to display KPIs based on their preferences.

Note: After personalizing the KPIs, the system administrator must start the KPI driver to enable the system to recalculate KPI scores based on the specified interval for each KPI.

See Setting up jobs on page 145.

To personalize your company's KPI images, replace the default images provided by the system. KPI images are stored in the following location on the application server:

- For Jboss installations: APP_HOME/jboss/shared/deploy/web.war/images/default
- For Websphere installations: IBMHttpServer_HOME/web.war/images/default
- For Weblogic installations: APP_HOME/apache/web.war/images/default

Setting up KPIs

Set up key performance indicators (KPIs) for the **Start Center**. For example, define a KPI to measure the number of maintenance dollars spent for a production line during a month.

Select a SQL select statement for the KPI to calculate the current value for the KPI. Select a screen for which to enable a hyperlink for the KPI, and then enter a Dataspy to enable the system to automatically query for the records associated with the KPI to the called screen. You can also designate whether the KPI is accessible to all users.

To set up KPIs:

1 Select **Administration > Start Center Setup > KPI Setup**.
2 Click **New Record**.
3 Specify this information:

KPI Code
Specify a unique code identifying the KPI, and then enter a description of the KPI in the adjacent field. The description will be displayed for the KPI on the **Start Center**.

Out of Service
Select to indicate the KPI should not display in KPI lookups.

Frequency
Specify the frequency in days with which the KPI will be recalculated.

SQL Statement
Specify the SQL statement to calculate the current value for the KPI. The system automatically populates **SQL Statement Text**.
Note: **SQL Statement** cannot exceed the performance score limit defined in the KPISCOR installation parameter.

Type
Select the KPI display type to represent the data in the **Start Center**, e.g., select **Donut** to represent the key performance indicators in a gauge graph.

UOM
Specify the unit of measure for the KPI.

Maintain History
Select to record the history of the KPI.

See Viewing KPI history on page 109.

Public
Select to give all user groups access to the KPI.
Note: KPIs for which user groups have been associated cannot be **Public**.

Parent
Select to indicate that the KPI is a parent KPI.

Donut Radius %
If you selected **Donut** as the KPI type, enter the radius percentage to represent the donut.

Gauge Min.
If you selected **Donut** as the KPI type, enter the minimum gauge value.

Gauge Max.
If you selected **Donut** as the KPI type, enter the maximum gauge value.

Screen
Specify the system screen for which to enable a hyperlink to call the screen for the KPI.
Note: If you update **Screen**, the system clears **Dataspy**.

Forms Screen
Specify the Infor EAM Forms screen for which to enable a hyperlink to call the screen for the KPI.

Dataspy
Select the Dataspy used to retrieve records for the called system screen.

Filter
Specify the where clause with which to associate the KPI.

KPI Display Options
Select either Normalized Values (Weighted Average), Actual Values (Weighted Average), or Actual Values (Summed).
Note: **Parent** must be selected to enable **KPI Display Options**.

4 Click **Save Record**.

Defining KPI ranges

Define KPI ranges to specify a **High Value** and a **Low Value** for each of the scoring ranges defined for a KPI.

Specify a **Normal Score** that corresponds with each high and low value for a KPI range. The normal score for a child KPI is rolled up to any parent KPIs when calculating the **Current Value** and **Normal Score** for the parent KPIs.

For example, a child KPI measures the productivity of a production line during a month. The target goal for the KPI is 200,000 units per month. If the production line produces between 200,000 to 133,333 units per month, the normal score for the KPI is 3, which indicates an excellent score. 133,332 to 66,666 units is 2, which indicates an average score. 66,665 units or less is 1, which indicates a poor score.

Note: You should maintain consistency when defining normalized scores for KPI ranges. For example, if you define a normalized score based on a scale of 1 to 3 for one KPI, use that same scale for other KPIs.
Note: You cannot enter a **Normal Score** if the KPI is a parent KPI.

To define KPI ranges:

1 Select **Administration > Start Center Setup > KPI Setup**.
2 Select the KPI for which to define KPI ranges, and then click the **Ranges** tab.
3 Click **Add Range**.
4 Specify this information:

Low Value
Specify the value for the low threshold of the KPI range.

High Value
Specify the value for the high threshold of the KPI range.

Normal Score
Specify the numeric value that represents the score based on the values entered for **Low Value** and **High Value**.

Image Path
Specify the URL file path to the image the system will use to display the KPI range on the **Start Center**. To enter the path to the image, **Type** must be **Image** on the **KPI Setup** screen.

Color
Select the color to use to display the KPI range on the **Start Center**. To specify the color, **Type** cannot be **Image** on the **KPI Setup** screen.

Description
Specify a description of the displayed KPI range on the **Start Center**.

5 Click **Submit**.

Associating KPIs with user groups

Associate KPIs with user groups to enable them to display only the KPIs that are associated with their user group in the KPI list.

Note: You can only assign KPIs to user groups for which **Public** has not been selected.

To associate KPIs with user groups:

1 Select **Administration > Start Center Setup > KPI Setup**.
2 Select the KPI with which to associate user groups, and then click the **User Groups** tab.
3 Click **Add User Group**.
4 Specify this information:

User Group
Enter the user group to which to associate the KPI. The system automatically populates the user group description.

5 Click **Submit**.

Associating KPIs with users

Associate KPIs with specific users to display the KPIs in the KPI list of the user's **Start Center**. Alternately, you can review or remove a user's associated KPI.

To associate KPIs with users:

1 Select **Administration > Start Center Setup > KPI Setup**.
2 Select the KPI with which to associate users, and then click the **Users** tab.
3 Click **Add User**.
4 Specify this information:

User ID
Specify the user's unique ID to which to associate the KPI.
Note: User ID is a multi-select lookup which allows you to select more than one user to associate to a KPI. If you select more than one user to associate to the KPI, a new sequence number is assigned to each user, and these sequence numbers are generated based on the `INCRLINO` installation parameter.

5 Select the **Auto Refresh** check box to automatically refresh the KPI every time the **Start Center** is invoked for the specific user(s).
6 Click **Submit**.

Defining KPI structures

Define KPI structures to create parent/child relationships between KPIs. The scores for child KPIs roll up to all of the children's parents. For example, you create a parent KPI to measure the overall efficiency of a production department during a month. You associate the parent KPI with child KPIs whose scores will roll up to the score for the parent KPI. One child KPI measures the number of units that the production line produces during a month. A second child KPI measures the maintenance costs for a production line during a month.

Each of the child KPIs must be assigned a weight based on their importance, and the sum of all child KPIs assigned for a parent KPI must be equal to 100. The system uses the value assigned for the weight of a child KPI to translate the normal score for a child KPI when rolling the score up to a parent KPI. For example, when calculating the score for the parent KPI, you consider the number of units produced to be more important than the number of maintenance dollars spent. Therefore, you assign a weight of 70 for the number of units produced and a weight of 30 to the maintenance dollars spent.

To define KPI structures:

1. Select **Administration > Start Center Setup > KPI Setup**.
2. Select the KPI for which to define structures, and then click the **Children** tab. **Total Weight (Must equal 100%)** is automatically populated with the total weight of all child KPIs. If no child KPIs are currently associated with the parent KPI, then **Total Weight (Must equal 100%)** is populated with `0`.

   Note: You can only associate child KPIs to parent KPIs. You must select **Parent** on the **KPI Codes** form to indicate that a KPI is a parent KPI.

   See Setting up KPIs on page 105.
3. Click **Add Child KPI**.
4. Specify this information:

   Child KPI
   Specify the child KPI component for the parent KPI.

   Weight (%)
   Specify the weight for the child KPI component to use when calculating the **Current Value** and **Normal Score** for the parent KPI.
   Note: The sum of the weight of all child KPI components defined for a parent KPI must be 100%.
5. Click **Submit**.

Viewing KPI history

View KPI history to review the results of KPI calculations. A record in KPI history is generated when the score for a KPI is calculated. Updating the KPI is optional.

Note: KPI drivers must be running to populate the **History** page.

You can only view the history of a KPI if you selected **Maintain History** on the **KPI Codes** form.

See Setting up KPIs on page 105.

To view KPI History:

1 Select **Administration > Start Center Setup > KPI Setup**.
2 Select the KPI for which to view history, and then click the **History** tab.
3 View the KPI history.

Personalizing charts

In addition to KPIs and inbox entries, the **Start Center** displays charts based on user-defined SQL statements. A chart is a graphical representation of data such as work orders assigned to specific departments.

After defining charts, grant users access to the charts. Charts can either be user-group specific or public. Public charts are displayed for all users. Define system privileges for users to personalize their **Start Center** to display charts based on their preferences.

Setting up charts

Set up and update charts to display in the **Start Center** using SQL statements to define chart data.

To set up charts:

1 Select **Administration > Start Center Setup > Chart Setup**.
2 Click **New Record**.
3 Specify this information:

   Chart Code
   Enter a unique code identifying the chart, and then enter a description in the adjacent field.

   Out of Service
   Select to indicate the chart should not display in the **Start Center**.

   SQL Statement
   Enter the SQL statement which will define the chart data displayed.

   Group By Text
   Enter the type by which to group the chart data, e.g., for a chart displaying open work orders, enter **Department** to display the open work orders by specific department.

   Value Type
   Select the value type for which the chart will display data, e.g., select **Number** to display numerical representations of data in the chart.

   Public
   Select to indicate the chart should be available to all users in the **Start Center**.

4 Right-click on the form, and then select **Group By Translations** to view and edit the translations for **Group By Text**.
5 Click **Save Record**.

Associating charts with user groups

Associate charts with user groups to enable them to display only the charts that are associated with their user group in the chart list in the **Start Center**.

Note: You can only assign charts to user groups for which **Public** has not been selected on the **Chart Setup** form.

To associate charts with user groups:

1. Select **Administration > Start Center Setup > Chart Setup**.
2. Select the chart with which to associate user groups, and then click the **User Groups** tab.
3. Click **Add User Group**.
4. Specify this information:

   User Group
   Enter the user group to which to associate to the chart. The system automatically populates the user group description.

5. Click **Submit**.

Modifying the Overview screen

Modify the layout of the Overview screen. Create, view, and modify widgets for use on the Overview screen. Layout options include selecting the number of columns displayed on the screen. Drop and drag widgets to move them around on the Overview screen.

To modify the Overview screen:

1. Select **Operations > Overview**.
2. Click **Edit Mode**.
3. Click **Add Widget**.
4. Specify the type of widget to add in **Type**, and then click **Submit**.
5. Click **Options** to configure the widget to show data after adding the widget.

Option	Description
Edit	Select options based on the type of widget specified in Type.
Personalize	Select the color of your preference to personalize the widget.
Refresh	Click to refresh the widget with the new options.
Delete	Click to delete the widget.

6. Drag and drop widgets to move them around on the screen.
7. Optionally, click **Edit Layout** to modify the layout of the screen. In the Edit Layout popup, specify the **Layout Type**.
8. Click **Submit**.
9. Click **Exit Edit Mode**.

Configuring exports and imports

Create an export file for KPIs, inbox items, custom fields, copied screens, task plans, job plans, and custom reports using the export configuration feature. Import the files created into another Infor EAM implementation.

Exporting KPIs

Export a set of KPIs to an export file.

To export a set of KPIS to an export file:

1. Select **Administration > System Configuration > Export Configuration**.
2. Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the equipment, and then click **Run**. KPI records that are not **Out of Service** or **Withdrawn** are displayed.

3. Select the KPI to export, and then click **Export**.
4. Select the folder in which to save the file, and then click **Save**.

Exporting inbox items

Export a set of inbox items to an export file.

To export a set of inbox items:

1. Select **Administration > System Configuration > Export Configuration**.
2. Click the **Export Inbox Items** tab.
3. Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the equipment, and then click **Run**. Inbox records that are not **Out of Service** or **Withdrawn** are displayed.

4. Select the inbox item to export, and then click **Export**.
5. Select a folder to save the file, and then click **Save**.

Exporting custom fields

Export a set of custom fields to an export file.

To export a set of custom fields:

1. Select **Administration > System Configuration > Export Configuration**.
2. Click the **Export Custom Fields** tab. No records are displayed until you conduct a search.
3. Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the equipment, and then click **Run**. Only custom field records that are not **Out of Service** or **Withdrawn** are displayed.

4. Select the custom field to export, and then click **Export**.
5. Select a folder in which to save the file, and then press **Save**.

Exporting Flex SQL statements

Export a set of Flex SQL statements to an export file.

To export Flex SQL statements:

1. Select **Administration > System Configuration > Export Configuration**.
2. Click the **Export Flex SQL** tab.
3. Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the equipment, and then click **Run**.

4. Select the Flex SQL statement to export, and then click **Export**.
5. Select a folder in which to save the file, and then press **Save**.

Exporting web service prompts

Export a set of web service prompts to an export file.

To export a set of web service prompts:

1. Select **Administration > System Configuration > Export Configuration**.
2. Click the **Export Web Service Prompts** tab. Records are not displayed until you conduct a search.

3 Choose one of the following options:

Dataspy
Select an existing Dataspy or edit an existing Dataspy.

Quick Filter
Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes, and then click **Run**.

4 Select the web service prompt to export, and then click **Export**.
5 Select a folder to save the file, and then click **Save**.

Exporting custom reports

Export a set of custom reports to an export file.

To export a set of custom reports:

1 Select **Administration > System Configuration > Export Configuration**.
2 Click the **Export Custom Reports** tab.
3 Choose one of the following options:

Dataspy
Select an existing Dataspy or edit an existing Dataspy.

Quick Filter
Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the report, and then click **Run**.

4 Select the custom report to export, and then click **Export**.
5 Select a folder in which to save the file, and then press **Save**.

Exporting user defined grids

Export a set of user defined grids to an export file.

To export a set of user defined grids:

1 Select **Administration > System Configuration > Export Configuration**.
2 Click the **Export User Defined Grids** tab. Records are not displayed until you conduct a search.
3 Choose one of the following options:

Dataspy
Select an existing Dataspy or edit an existing Dataspy.

Quick Filter
Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes, and then click **Run**.

4 Select the user defined grid to export, and then click **Export**.
5 Select a folder to save the file, and then click **Save**.

Exporting alerts

Export a set of alerts to an export file.

To export a set of alerts:

1 Select **Administration > System Configuration > Export Configuration**.
2 Click the **Export Alerts** tab. Records are not displayed until you conduct a search.
3 Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes, and then click **Run**.

4 Select the alert to export, and then click **Export**.
5 Select a folder to save the file, and then click **Save**.

Exporting screens

Export a set of copied screens and the associated configuration details such as screen designer changes to an export file.

To export screens:

1 Select **Administration > System Configuration > Export Configuration**.
2 Click the **Export Copied Screens** tab.
3 Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the report, and then click **Run**.

4 Select the copied screens to export.
5 Specify the **Screen Designer User Group**. This will determine the screen designer options available to export.
6 Click **Export**.
7 Select a folder in which to save the file, and then press **Save**.

Exporting task plans and job plans

Export a set of task plans and job plans including the associated jobs and other details to an export file.

To export task plans and job plans:

1. Select **Administration > System Configuration > Export Configuration**.
2. Click the **Task Plans** tab.
3. Choose one of the following options:

   - **Dataspy**
     Select an existing Dataspy or edit an existing Dataspy.

   - **Quick Filter**
     Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the report, and then click **Run**.

4. Select the task plans to export.
5. Click **Export**.
6. Select a folder in which to save the file, and then press **Save**.

Importing files

Import KPIs, custom fields, inbox item files, Flex SQL statements, copied screens, task plans, job plans, and custom reports created using the Export Configuration feature.

To import files:

1. Select **Administration > System Configuration > Import Configuration**.
2. On the **Import** tab, click **Browse**, and then select the file to import from the file location.
   Note: Click **View File Contents** to view the file details.
3. Click **Import**.

Uploading documents in a batch for import configuration

Upload multiple documents that belong to a specific organization.

To upload documents in a batch for import configuration:

1. Select **Administration > System Configuration > Import Configuration**.
2. Click the **Batch Document Upload** tab.
3. Specify the **Organization** to which the uploaded documents will belong.
4. Click **Add**.
5. Select the files to upload, and then click **Upload**.
6. Click **Refresh**. All records are removed from the grid.

Exporting base configuration

Export a large number of configuration items to specially formatted files.

To export base configuration:

1 Select **Administration > System Configuration > Configuration Manager**.

2 Select one of the following options:

Save on Client
Select to save the files on the client's machine. **Path** is automatically populated on the server where the file will be initially saved.

> **Note:** The export process may take a while to successfully process and the system could timeout during the process. If this happens, click the **Status** tab to check the results of the import.

Save on Server
Select to save the files on the server.

Email Address
Specify the email address to which to have email notifications sent when the configuration process is complete.

Include file in Email
Select to receive a second email with the file attached. **Path** is automatically populated on the server where the file will be initially saved.

> **Note:** Click **Select All** to select all of the export options.

3 Specify this information:

User Groups and Permissions
Select to export user groups and their permissions, including hyperlinks, screen designer changes, and menus.

Export Single User Group
Specify a single user group to export. Only permissions for this user group will be included in the export file.

Status Authorizations
Select to export status authorizations.

Users
Select to export users and their related organizations, including personal Dataspies and report filters.

Organizations
Select to export organizations.

Multi-org Security
Select to export multi-org security.

Install Parameters
Select to export install parameters.

Closing Codes
Select to export closing codes.

Trades
Select to export trades.

Audit Setup
Select to export audit setup.

Screens and Reports
Select to export screens and reports, including changes made to existing screens and any new screens. New reports are not included.

Departments
Select to export departments.

Locales
Select to export locales.

Category
Select to export categories.

Reliability Ranking
Select to export reliability ranking values.

Custom Fields
Select to export custom fields, including classes.

Flex SQL
Select to export Flex SQL.

Updated Text
Select to export updated text.

System Codes
Select to export system codes.

Mobile
Select to export Infor EAM Mobile configuration settings.

Include Translations
Select to include translations in the export.

Messenger Setup
Select to export messenger setup.

KPIs and Inboxes
Select to export KPIs and Inboxes.

Account Detail Setup
Select to export account detail setup.

eRecord Setup
Select to export eRecord Setup.

Web Service Prompts
Select to export web service prompts.

Call Center Setup
Select to export call center setup.

Data Collection Setup
Select to export data collection setup.

eRecord Setup
Select to export eRecord Setup.

Email Setup
Select to export email setup.

Alerts Setup
Select to export alerts setup.

4 Click **Export**.
5 Select the folder in which to save the file, and then click **Save**.

Importing base configuration

Import files created by the Configuration Manager.

To import base configuration:

1 Select **Administration > System Configuration > Configuration Manager**.
2 Click the **Import Base Configuration** tab.
3 Select one of the following options:

Do Not Wait for File to be Imported
Select to execute the import without waiting for the system to complete the process.

Note: To check the results of the Import, click the **Status** tab.

Wait for File to be Imported
Select to execute the import while waiting for completion.

Note: The import process may take a while to successfully process and the system could timeout during the process. If this happens, click the **Status** tab to check the results of the import.

4 Specify this information:

File Location
Specify the location of the file created during the Export process. Click **Browse** to locate the file.
Note: Click **View File Contents** to view the contents of the file.

Notification Email Address
Specify the email address to which the system sends email notification once the process is complete.

5 Click **Import**.

Viewing the status of imports and exports

View the status of all imports and exports performed on the system as well as the history of imports and exports.

To view the status of imports and exports:

1 Select **Administration > Setup > Configuration Manager**.
2 Click the **Status** tab.
   Note: File Path is a hyperlink that can be used to download an export file once it has been successfully created.
3 Select the record for which to view status details, and then click **View Status Details**.
4 Select the group for which to view error details, and then click **View Error Details**.
5 View the error details.
6 Click **Close**.
7 Click **Close**.

Screen designer

Modify the page layout of record view, detail view, and list-detail view pages. You can move fields, modify the display type of fields, and rename field labels.

Using screen designer keyboard shortcuts

Keyboard shortcuts are keys or key combinations for system functions. The following keyboard shortcuts allow easy access to screen designer functions while in designer mode.

Table 3: Screen designer keyboard shortcuts

Function	Shortcut
Switch to screen designer mode	ALT+E
Save layout	CTRL+S
Open group selection	CTRL+G
Switch to preview mode to view layout of screen with hidden fields removed, and without saving changes on the screen/returning to normal mode	ALT+W

Function	Shortcut
Exit screen designer mode	CTRL+I

Displaying pages in screen designer mode

Modify the page layout of record view, detail view, and list-detail view pages. You can move fields, modify the display type of fields, and rename field labels.

To display pages in designer mode:

1. Open any record view, detail view, or list-detail page.
2. Click **Screen Designer**.
3. Specify this information:

   Copy from Group
   Select the group from which to copy the screen layout.

   Save to Group
   Select the group to which to save the screen layout.
   Note: To save the screen layout to multiple user groups, click **Advanced**.

4. Click **Continue**.

Moving fields in screen designer mode

Move fields from one container to another container or move fields within the same container. In designer mode, a container is indicated by a red dotted line.

Note: Only custom fields associated to a * **Class** and * **Organization** can be moved to another block.

To move fields:

1. Display the selected page in designer mode.

   See Displaying pages in screen designer mode on page 121.

2. Click the field to move, and then drag the field to the desired location.

   Note: When dragging a field to the desired location, the field is always inserted below the field onto which it was placed.

   To move a field to the first field position, you must drag the field onto the current first field, and then move the current first field down.

3. Click **Save**.

Modifying field display properties

Change the display properties for fields as necessary. The system uses five field properties: Required, Protected, Optional, Hidden, and Not Available.

To modify field display properties:

1 Display the selected page in designer mode.

   See Displaying pages in screen designer mode on page 121.

2 Right-click the field to modify.

   Note: All five of the field properties are NOT available for all fields.

3 Choose one of the following field property options:

   Required
   Select to indicate that the field is required.

   Protected
   Select to indicate that the field is read-only.

   Optional
   Select to indicate that the field is not required.

   Hidden
   Select to indicate that the field is not shown in detail mode but is always displayed in list view and is still available.

   Not Available
   Select to indicate that the field should not be displayed in detail or list views.

4 Click **Save**.

Modifying field labels

Change the labels used for fields as necessary.

Note: Changes to field labels apply to ALL user groups.

To modify field labels:

1 Display the selected page in designer mode.

   See Displaying pages in screen designer mode on page 121.

2 Right-click the field to modify, and then select **Edit Field Names**.

   Note: When the state of a field is changed to **Not Available**, **Protected**, or **Hidden**, the system clears any default value that was previously defined for the field.

3 Modify the current field label as necessary.

4 Click **Done**.

Modifying block display properties

A block of fields is indicated by a title in red and a blue line separating a group of fields from other groups of fields. In the example below, the blocks of fields are titled Equipment Details, Tracking Details, Part Association, Hierarchy, and Custom Fields. Hide entire blocks of fields as necessary.

To modify block display properties:

1 Display the selected page in designer mode.
   See Displaying pages in screen designer mode on page 121.
2 Right-click inside the block to modify (NOT inside a red container).
3 Choose one of the following block property options:

   Show Block
   Select to display the entire block of fields.

   Hide Block
   Select to hide the entire block of fields.

4 Click **Save**.

Modifying block labels

Change the labels used for blocks of fields as necessary.

Note: Changes to block labels apply to ALL user groups.

To modify block labels:

1 Display the selected page in designer mode.
   See Displaying pages in screen designer mode on page 121.
2 Right-click the block to modify.
3 Choose **Edit Block Name**.
4 Modify the current block label as necessary.
5 Click **Done**.

Modifying link and generic button display properties

Change the display properties for links and generic buttons as necessary. Generic buttons are those that are common across many forms, such as **Submit** and **Clear**.

To modify link and generic button display properties:

1 Display the selected page in designer mode.
   See Displaying pages in screen designer mode on page 121.
2 Right-click the link or button to modify.
3 Choose one of the following link or button property options:

   Enable Link/Button
   Select to enable the link or button.

   Disable Link/Button
   Select to disable the link or button.

   Edit Link/Button Name
   Select to edit the link or button label name.

4 Click **Save**.

Modifying function button display properties

Change the display properties for function buttons as necessary. Function buttons are those that perform a procedure or open a popup, such as Create WO on the **Assets** form.

To modify function button display properties:

1 Display the selected page in designer mode.
   See Displaying pages in screen designer mode on page 121.
2 Right-click the button to modify.
3 Choose one of the following button property options:

   Show Button
   Select to display the button.

   Hide Button
   Select to hide the button. If you select to hide a button, the right-click option is still available.

   Not Available
   Select to disable the button. If you select to make a button Not Available, then both the right-click option and the button are hidden.

4 Click **Save**.

Modifying link and button labels

Change the labels used for links and buttons as necessary.

Note: Changes to link and button labels apply to ALL user groups.

To modify link and button labels:

1 Display the selected page in designer mode.
   See Displaying pages in screen designer mode on page 121.
2 Right-click the link or button to modify.
3 Choose **Edit Link/Button Name**.
4 Modify the current link or button label as necessary.
5 Click **Done**.

Defining grids

Create a new grid or copy an existing grid and modify the grid definition. A grid can be added to the menu as a new screen or as a tab on another form.

Note: To define grids that all users can see, you must be logged in as the R5 user.

To define grids:

1 Select **Administration > Screen Configuration > Grid Designer**.

2 Click **New Record**.

3 Specify this information:

Grid Name
Specify the name of the grid, and then specify a description in the adjacent field.
Note: Names of List type grids must be six characters in length, with ‘U’ as the second letter. Names of Tab type grids must be three characters in length and begin with 'X'.

Copy From
Specify an existing grid to copy. **Description**, **Grid Type**, **Parent Screen**, **Parent Screen** description, **FROM Clause**, **WHERE Clause**, and **SELECT Statement** are automatically populated.

Grid Type
Choose one of the following options:
- **List View**
- **Tab**
- **Alert Management**

Parent Screen
Specify the parent screen for the grid if the new grid will be added as a tab on an existing form if **Grid Type** is selected. The parent screen description is automatically populated.

FROM Clause
Specify the FROM Clause for the grid, including each table and table alias.

SELECT Statement
Speciy the SELECT Statement for the grid. On the **Record View** page, fields can be selected only from the lookup. To modify the fields selected or to add fields and functions expressions individually, click the **Fields** tab.

WHERE Clause
Specify the WHERE Clause for the grid, including parameters as necessary.

Custom Field Table
Specify the custom field table used for the dataspy lookup for the grid if custom field selection is enabled.

Active
Active is selected if the grid has been validated on the **Validation** page.

4 Optionally, select the **Enable Custom Field Selection in Dataspy** check box to enable custom field selection in the dataspy for the grid.

5 Optionally, select the **Mobile Grid** check box to set the grid as a Mobile grid on the **Record View** page.

6 Optionally, select the **GIS WO Attribute Mapping Grid** check box to allow work order fields defined on this grid to be associated to GIS event attributes, which enables EAM work order data to be synchronized in the GIS map display.

Note: This feature is only available when using LRS (Linear Referencing System) enabled map services.

The Map Attributes popup on the Infor EAM toolbar inside the ArcMap application is used to associate work order UDG fields to GIS event attributes.

7 Click **Save Record**.

Defining fields for grids

Define fields for grids to modify the SELECT statement for the grid. Fields in the SELECT statement can be true fields or function calls (including parameters).

To define fields for grids:

1 Select **Administration > Setup > Grid Designer**.
2 Select the grid for which to add fields, and then click the **Fields** tab.
3 Click **Add Field**.
4 Specify this information:

Field
Specify the field to add to the grid.
Note: Lookup Dataspies allow you to choose the following:
- fields from the tables in the FROM clause
- any fields in the whole database including any you created
- functions

Alias
Specify the alias for the field.
Note: Field **Alias** can include only letters, numbers, and '_'. The same **Field** can be added twice if it appears in two different tables, but only with a different field alias each time.

Header Location
Choose one of the following options to display a field in the header section above the grid:
- **None**
- **Code**
- **Description**
- **Header 1**
- **Header 2**
- **Header 3**

Field Label
Specify the label for the field.

Data Type
Choose one of the following options:
- **Upper Case**
- **Mixed Case**
- **Numeric**
- **Date**

- **Currency**
- **Decimal**
- **Date/Time**
- **Duration**
- **Time**
- **Boolean**
- **Long**
- **Dependent**

Lookup Entity
Specify the entity used to populate the Dataspy lookup for the field. The system automatically populates entity description.

Lookup Query
Specify the query used to populate the Dataspy lookup for the field. The system automatically populates **Lookup Query Text**.

Grid Key
Select to identify the field as a key field for the grid.

5 Click **Submit**.

Note: To create a hyperlink to a screen for this field, click **Add/Edit Hyperlinks**.

See Setting up hyperlinks on page 128.

Defining parameters for grids

Map parameters to fields on parent screens for user-defined grids with **Grid Type** = **Tab**. This tab shows both system parameters and user-defined parameters from SELECT and WHERE statements.

To define parameters for grids:

1 Select **Administration > Setup > Grid Designer**.
2 Select the grid for which to define parameters, and then click the **Parameters** tab.
3 Select a parameter to map to the parent screen. The system automatically populates **Parameter**,**System**, and**Data Type**.
4 Specify this information:

Parent Grid Field
Enter the parent screen field for the parameter. For example, map parameter :wonum to **WO No.** on the **Work Orders** form when adding a new tab with child records to that form.

5 Click **Submit**.

Defining validation for grids

Define a default Dataspy for a grid, and then mark the grid as active.

To define validation for grids:

1 Select **Administration > Setup > Grid Designer**.
2 Select the grid to validate, and then click the **Validation** tab.
3 Click **Create Default Dataspy**. The system validates the full query statement for the grid record and creates the default dataspy for the new grid as "All records".
4 Specify this information:

   Active
   Select to validate the grid definition and make the grid available for use.
   Note: If you unselect **Active**, the system saves the record and makes the grid inactive.

Defining and generating views

Use relational database views to expand the complexity and functionality of user defined grids in EAM. Define these database views by specifying a unique view name and a SQL statement. Generate these views to make them available for use with Grid Designer. Unlike user defined grids in EAM, views allow you to use outer joins and unions to combine data from two or more tables.

To define and generate views:

1 Select **Administration > Screen Configuration > Views**.
2 Click **New Record**.
3 Specify this information:

   View
   Specify a unique code value to identify the view database record, and then specify a description of the new record in the adjacent field.

   View Name
   Specify a unique which will be used as a reference on user defined grids. All view names must begin with `U5`.

   SQL Statement
   Specify the SQL statement query to generate the searchable object or database view.

4 Click **Save Record**.
5 Click **Generate** to run the **Test SQL** process and generate the new database view. If the view is generated successfully, the **Active** check box is selected, and the view is ready for use with Grid Designer.

Setting up hyperlinks

Create or edit hyperlinks to connect a form to another form. Hyperlinks allow access to related forms or reports from a link on the original form.

To set up hyperlinks:

1 Open an Infor EAM form.

   Note: You may also set up hyperlinks on the **Fields** tab of the **Grid Designer** page.

2 Select a record, and then click the **Record View** tab.

3 Click **Screen Designer**.

4 Right-click in a field, and then choose **Hyperlink**. The system automatically populates **Source Screen Name** and **Source Field Name**.

5 Specify this information:

   Hyperlink
   Enter a unique name for the hyperlink.

   Destination Screen Mode
   Select to set hyperlink as query pages or to set hyperlinks to display in insert mode.

   Destination Screen/Report
   Enter the name of the hyperlink screen or report. The system automatically populates the destination screen/report description.
   Note: If you select a report for **Destination Screen/Report**, the system empties and protects **Default Dataspy**. The system also selects **Query** for the Destination Screen Mode and protects the Destination Screen Mode options.

   Destination Field
   Select the field for which to create a hyperlink.

   Sequence Number
   Enter the sequential order for the hyperlink.

   Default Dataspy
   Select the global dataspy for the hyperlink.

6 Click **Submit**.

Using screen designer for web service prompts

Modify the layout of screens and properties of web service prompt fields. In addition, you can select the groups for which the changes apply. While tab sequence and display properties are established initially on the **Fields** page for Web Service Prompts, fields can be moved around the screen and display types can be changed using the screen designer feature.

See the *Infor EAM User Guide*.

Note: Re-sequencing fields via screen designer may cause the prompt to function differently than the administrator originally intended. Exercise caution when re-sequencing fields via screen designer.

The following functionality is specific to screen designer for web service prompts:

1 If you have access to the screen designer feature on system delivered screens, you also have access to screen designer on web service prompt screens.
2 Make screen design changes with caution as certain changes can adversely affect the intended behavior of the screen. For example, if you move a controlling organization or class/class organization

field to the bottom of a prompt, the system may not display any class-specific custom fields until the entire prompt has been navigated.

3. Any field-level changes on the **Web Service Prompt Definition** form overwrite the corresponding field on the **Prompt** form for all groups when the screen is next opened, regardless of changes made via screen designer. For example, creating and updating prompt definitions impact the corresponding screen for all user groups.
4. Hyperlinks are not available.
5. "User Defined Field Options" and "User Defined Field Lookup Values" right-click options are not available.
6. The "Not Available" attribute is not available.
7. The "View Field Details" option is not available.
8. When editing field names, translating to other languages is not available.
9. Lookup Filters can be applied only to user defined fields. In addition, the user defined field must have the lookup defined on the base screen for which the web service is related.
10. There is no web service prompt screen designer option for links and generic buttons as these cannot be displayed on a web service prompt-based screen.

Defining web service prompts

Define web service prompts representing web services and fields rendered on the user-defined screen using the Web Services Prompt Engine. System administrators can use web services to create user-defined screens for use within Infor EAM. Web service prompts contain the definitions for these screens.

The following rules apply to forms for which web service prompts are available:

- The system displays the functions of all system-delivered Infor EAM **List View** and **Record View** pages.
- BSCOMM (Comments) is displayed.
- No user-created screens are available.

The system displays all screens meeting the above criteria if a web service has not been specified; otherwise, only screens related to the web service will be displayed.

To define web service prompts:

1. Select **Administration > Web Service Prompt Engine > Web Service Prompts**.
2. Click **New Record**.
3. Specify this information:

   Web Service Prompt
   Enter a unique code for the web service prompt, and then enter a description of the prompt in the adjacent field.

   Out of Service
   Select to indicate the web service prompt is out of service.

4. Click **Save Record**.

Note: The system automatically creates a screen record whose code and description correspond with the web service prompt. The user-defined screen can now be placed into the menu for one or more user groups. These new screens are not visible on the **Screens** form.

Defining web services for web service prompts

Define the Infor EAM web services available for use on the user-defined screen representing the selected web service prompt.

To define web services for web service prompts:

1. Select **Administration > Web Service Prompt Engine > Web Service Prompts**.
2. Select the web service prompt for which to define web services, and then click the **Web Services** tab.
3. Click **Add Web Service**.
4. Specify this information:

   Screen
   Enter the screen for which to define web services details. The system automatically populates the screen description.

   Tab
   Enter the tab to be specified for the selected screen. The system automatically populates the tab description.
   Note: Tab should be left blank if the web service is to be based on the Record View of the selected Screen.

   If the Comments **Tab** is selected, the system replaces the selected **Screen** with BSCOMM and clears the **Tab** value because the insert, update, and delete Comment web services do not actually reside on the **Comments** tab. These web services exist on the Comments pop-up (BSCOMM), a screen within Infor EAM. Because Comments are generic and can apply to many screens, the **Entity** and **Record** for which the Comments are related need to be entered when inserting, updating, or deleting Comments using the Web Service Prompt Engine. The system administrator can make the **Entity** field ‘fixed’ via **Field Type** and supply the correct **Entity** value so that it is not necessary to enter it with each Comment record. In addition, the **Entity** field can be ‘protected’ via Display Type so that users can only enter Comments for the appropriate **Entity**.

   Action Code
   Select the action code for the selected screen, e.g., insert, update, delete.

   Process Group
   Enter the process group for the selected screen. Fields related to the lowest process group will be displayed first on the Web Service Prompt Engine, and so on. The default value for this field is based on the INCRLINO installation parameter.

   Web Service
   Enter the web service for the selected screen.
   Note: The system defaults the**Web Service** if only one **Web Service** exists for the **Screen**, **Tab**, and **Action Code**.

If you enter the **Web Service** without entering **Screen**, **Tab**, and **Action Code**, the system populates **Screen**,**Tab**, and **Action Code** when the Web Service is selected.

5 Click **Submit**. The system automatically creates a field record on the **Fields** tab for each controlling organization in the selected web service. **Controlling Org.** will be selected for these records.

Note: In determining the sequence for **Controlling Org.** for each process group/web service, the system multiplies the value in the WSPFSEQ parameter by the web service process group. This new parameter will be used as a multiplier to ensure adequate field sequence separation between web services defined for the prompt allowing users to add the remaining prompt fields as necessary. The default value for this parameter is 100.

Defining fields for web service prompts

Add, update, or delete fields for each web service that will be available on the Web Services Prompt.

Fields available for use will be those related to the web services defined on the **Web Services** page of the **Web Service Prompts** form.

Note: This form contains no capability for defining language translations for field labels displayed. When the prompt is executed, field labels display as entered on the **Fields** form for the selected web service prompt. To display prompts in multiple languages, a separate Web Service Prompt must be created for each language.

User defined fields are available for web service prompts. The fields display in a list of all fields under the appropriate web service for some insert/update web services. These user defined fields inherit properties from the associated reference form. Right-click in Screen Designer mode to define options for user defined fields. When you highlight a user defined field in the grid, the system protects **Field Type** and **Query Code**. This information is defined on the base screen for which the web service is related.

See the *Infor EAM User Guide*.

Entity lookup user defined fields show records for all organizations in the user's organization list when a controlling organization is not available. A record cannot be submitted if the controlling organization and the user defined field organization are in conflict.

To define fields for web service prompts:

1 Select **Administration > Web Service Prompt Engine > Web Service Prompts**.
2 Select the web service prompt for which to define fields for web services, and then click the **Fields** tab.
3 Click **Add Field**.
4 Specify this information:

Process Group–Web Service
Specify the process group for which to add the web service field. **Screen** and **Tab** are automatically populate.

Field
Specify the field to add to the process group. Available fields are based on the selected web service.

Field Label
Specify the name for the field. This information will be displayed as the field boiler text for the Web Services Prompt Engine. The default **Field Label** is equivalent to the **Field**.

Field Type
Specify the field type based on the selected field and web service. The default **Field Type** is the system-delivered type for the selected **Field**. However, you may change this value. The user-defined **Field Type** is displayed on the Web Service Prompt Engine. You can change the default to one of the following options:

- **Alphabetic**
- **Computed**
- **Date**
- **Fixed**
- **Free format text**
- **Key Field**
- **Numeric**
- **Retrieved Field**

Note: Key Field is available only when an "update" or "delete" web service is selected. When setting up a web service prompt that uses an update or delete web service, the system administrator must create a **Field** for each key field the web service requires to uniquely describe a record. **Field Type** should be Key Field. The web service prompt engine first prompts you to enter the key field value(s) for the record to process, such as **Equipment** and **Equipment Organization**. For updating web services, the system queries for the record to display the results. You may update and then submit the record. For deleting web services, after you enter all key field values, the system deletes the record.

Retrieved Field is available only when an "insert" web service is chosen. When setting up a web service prompt that uses an insert web service, one or more key field values must be retrieved from a web service previously processed in the current prompt record. The administrator needs to create a **Field** of type Retrieved Field for each of the key fields. For example, a web service prompt is created that allows you to create a work order and an activity for the work order simultaneously. You want the activity to be associated with the work order that is created in a previous process group; however, the data will be entered into the web service prompt engine and processed simultaneously. To ensure the activity is associated with the correct work order, the system must first process the "insert" work order web service, then pass (retrieve) the work order number and work order organization back to the create activity web service. This key field information, along with other required activity data, is used to create the activity and relate it to the proper work order. Retrieved Field (Field Type = Retrieved Field) records would be created for the activity work order number and activity work order organization because the work order number and organization are required to associate the activity.

Retrieve From Group–Web Service should be populated with the web service from which these key field values are retrieved. In this example, they are retrieved from the "insert" work order web service. **Retrieve Field** will be the key field in the retrieve from web service from which the data is retrieved. In this example, **WO Number** is one of the retrieved fields. Another **Field** should be created similarly to define how to retrieve the work order organization for use in creating the activity. Field values can only be retrieved from web services with a lesser process group number. For example, a value cannot be retrieved for use in the current web service unless a previous web service was processed to provide the information.

Retrieved Field and **Key Field** are not available when **Unmapped** is checked.

Retrieved Field Type is not associated with the functionality available on the **Retrieved Values** page.

If a field is defined as Checkbox, it appears as a checkbox on the **Web Service Prompt Engine** page.

Display Type
Specify how the field will be displayed using the Web Service Prompt Engine. The default value will be the system default for the selected field. The user can change the default to one of the following options:

- **Optional**
- **Required**
- **Hidden**
- **Protected**

Note: If **Field Type** is Fixed or Computed, only Protected and Hidden will be available for **Display Type**. If **Field Type** is Retrieved Field, only Hidden will be available for **Display Type**.

Sequence
Specify a numeric value for the sequence. Fields are displayed using the Web Service Prompt Engine in ascending order by their Sequence. The default value provided by the system is based on the INCRLIND parameter.
Note: It is important to ensure that the web service prompt fields are displayed grouped together, using the Web Service Prompt Engine, by **Process Group–Web Service**. The **Sequence** range available is controlled for fields for the selected **Process Group–Web Service**. The **Sequence** must not overlap with a **Sequence** associated with a previous or subsequent process group. For example, web service prompt fields are grouped on the Web Service Prompt Engine by **Process Group–Web Service**, then by **Sequence**.

Minimum Length
Specify the minimum number of characters for the field.

Maximum Length
Specify the maximum number of characters for the field.

Next Sequence
Specify the number at which to begin the next sequence.

Query Code
Specify the query code. The **Query Code** defines values available for selection in a list of values field when a server connection is available. For example, the query and list of available values will be based on the Infor EAM tables.

Mobile Query Code
Specify the mobile query code that defines a list of values that is available for the field.
Note: The mobile device uses the Query Code list of values if an application server connection exists; otherwise, the Mobile Query Code list of values is used. For example, local data populates the list of values.

Retrieve Field
Specify the name of the field from which to retrieve data. The system automatically populates **Retrieve From Group–Web Service**and **Retrieve Field X-Path**.

Query Web Service
Specify the query web service. A **Query Web Service** applies only when defining key field for an "update" web service. The **Query Web Service** is used to query the data in the record to display to the user for possible updates.

Unmapped Field
Select if specified field is not mapped to any field in web service. The field value can then be processed further by the Prompt as part of a calculation or retrieved values.

Use Previous Value
Select to use the previous field value.

If Data Is
Specify the **Go To** condition. This field describes the condition in which the system does not access the field defined by **Next Sequence** but instead places focus on the **Go To Sequence**.

Pattern
Specify the pattern that should be met for the **Go To** condition.

Go To
Specify the field sequence that the system will follow, versus **Next Sequence**, if the condition is met.

Clear Previous Values Starting From Go To Target Field
Select to enable the system to carry forward values for fields with **Use Previous Value** selected, when the prompt sequence is less than (<) the “Go To” target field sequence. For example, previous values for prompt fields >= “Go To” target field sequence will be cleared. Otherwise, the system will carry forward values for fields with **Use Previous Value** selected, when the prompt sequence is less than (<) the “Go To” source field sequence. For example, previous values for prompt fields <= “Go To” source field sequence will be cleared).

Retrieve From Group–Web Service
Specify the web service from which key field values will be returned and used in a subsequent process group.

Computed Data
Specify the computed data for the field when **Field Type** is **Computed**.

Pattern Match
Specify a pattern for **Field Type** of **Alphabetic** for which entered data must match in order to be valid.
Note: The following "wild card" characters are supported when defining a **Pattern Match**:

- . (period): single alphabetical characters, A through Z
- # (pound sign): any single number, 0 through 9
- _ (underscore): any single alphanumeric character, A through Z and 0 through 9
- % (percent): a string of alphanumeric characters
- , (comma): OR condition
- : (colon): THROUGHOUT condition
- ! Any character(s) or numbers(s): data entered should not match what follows the "!" NOT condition.

See Defining retrieved values for web service prompts on page 136 for more information on referencing the prompt field inside SQL statements contained within **Query Code**, **Mobile Query Code**, and **Computed**.

5 Click **Submit**.

Note: To remove a field, select the field to remove, and then click **Remove Field**. Fields corresponding to the **Controlling Organization** for a web service cannot be removed from this page because they are critical to processing the web service. However, if the web service itself is removed from the **Web Service** page, all related fields are automatically removed including **Controlling Organization**.

Note: Errors are not displayed on this page if all necessary required, key, or retrieved fields are not defined for the web service prompt to function properly using the Web Service Prompt Engine. An error is displayed when the Web Service Prompt Engine processes records with insufficient prompt fields. An error is also displayed from the Web Service Prompt Engine if a next sequence is defined that does not exist within the prompt definition.

Defining retrieved values for web service prompts

Create, edit, and delete retrieved values for a web service prompt. Values can be retrieved from the database and automatically populated into the **Destination** field when you enter data into the **Source** field. Using retrieved values saves data entry time and prevents potential key stroke mistakes.

A good example for using retrieved values would be when an employee regularly creates a work order and activity for which they will complete. When the employee enters his or her user name for the work order Created By field, the system can locate the employee associated with the entered user name and populate that employee's **Trade** on the activity automatically.

Note: Setting up retrieved values requires identifying the **Source**, the **Destination**, and the **SQL Statement** used to query the information related to the supplied data. SQL statements can be defined on the **Queries** screen.

To define retrieved values for web service prompts:

1 Select **Administration > Web Service Prompt Engine > Web Service Prompts**.

2 Select the web service prompt for which to define retrieved values, and then click the **Retrieved Values** tab.

3 Click **Add Retrieved Value**.

4 Specify this information:

Source
Enter the source field sequence. The system automatically populates the source description.

Destination
Enter the field sequence for which to populate the retrieved data. The system automatically populates the destination description.

Query Code
Enter the query code on which the retrieved value will be based. The system automatically populates **SQL Statement**.

Note: The system allows referencing other prompt fields inside the user-defined SQL statement. The syntax is ":<prompt sequence #>. For example, if you want to reference a prompt field whose Sequence = "2" inside the 'where' clause of their SQL statement, enter ":2".

5 Click **Submit**.

Copying web service prompts

The copy web service prompt feature copies a web service prompt, including all details.

To copy web service prompts:

1 Create a web service prompt.

See Defining web service prompts on page 130.

2 Right-click, and then select **Copy Web Service Prompt**.

3 Specify this information:

New Web Service Prompt
Enter the name for the new web service prompt. The system automatically populates the New Web Service Prompt description.

4 Select the record types to copy, and then click **Submit**.

Note: Some exceptions apply to the header details copied.

Out of Service value is not copied.

If the detail record contains a **Query Code** or **Mobile Query Code** that is not valid at the time the record is copied, the system does not copy the record.

Viewing log files

View and save Infor EAM log and configuration files. Saved files are copied to a specified location on the local drive.

To view log files:

1 Select **Administration > Setup > View Log Files**.

2 Specify this information:

File Type
Choose one of the following options:

- All
- Log
- Configuration

Log Type
Choose one of the following options:

- `Ejcron`
- Session

- Session List
- Server
- Grid Query
- Apache
- Report
- Axis

3 Click **Display Files**.
4 Select the files to save.

   Note: If multiple files are selected, the files are automatically compressed and saved as one file.

5 Click **Save**.
6 Select the folder in which to save the file, and then click **Save**.

Data collection

Overview

The data collection module speeds the system acquisition of business information by offering shortcuts in the form of scanned input, minimized operator activity, and system-generated prompts to guide users to accomplish a system function quickly. The data collection module reports on the movements and activities of the organization's equipment, including recording locations and modifications to equipment, thus serving as an audit trail for an asset's lifecycle. The data collection module can be a valuable tool for businesses seeking to take charge of their serialized assets and to enhance their financial reporting on difficult-to-manage item movements.

Defining queries

Define queries using existing Infor EAM data or SQL statements. Use SQL statements to define complex validation queries or validation queries to multiple system tables.

Note: Define this type of validation only if you are familiar with the Infor EAM data model and have a good working knowledge of SQL.

To define queries:

1 Select **Administration > Start Center Setup > Queries**.
2 Click **New Record**.
3 Specify this information:

   Query
   Specify the code for which to define a query.

SQL Statement
Specify the SQL statement.
Note: To verify the SQL Statement, click **Test SQL**. A message indicating the accuracy of the statement is displayed.

Normal
Select if you want this query to appear in the Normal lookups.

Data Collection
Select if you want this query to appear in the data collection lookups for asset tracking.

Lookup
Select if you want this query to appear in all lookups.

KPI
Select if you want this query to appear in the KPI lookups.

Inbox
Select if you want this query to appear in the Inbox lookups.

Chart
Select if you want this query to appear in the Chart lookups.

Equipment Ranking
Select if you want this query to appear in the Equipment Ranking lookups.

4 Click **Save Record**.

Defining transaction prompts

Transaction prompts define where and in what order the data collection module populates information in the system. You can validate incoming data at the field level, as well as at conditional navigation between prompts.

Referring to the data collection diagram, determine what data to enter, in what sequence it should be gathered, and how to group data for processing to Application Programming Interfaces (APIs). Define data prompts for each barcode transaction type.

If you use GIS functionality, you will need to load GIS assets into the system at the system initialization. Ensure that the GISOBJID is manually assigned for each asset you need to integrate during the system initialization. These manually assigned GISOBJIDs must have values in a range of 0 to 100,000,000. The GISOBJID Sequence Generator begins automatically numbering equipment records that are created through Infor EAM or the GIS system with `100,000,001`.

Note: You cannot load a GIS asset into the system with a GISOBJID greater than 100,000,000.

For equipment audits, create scanner prompts with the **Interface Type A (Equipment Audits)** and **L (Equipment Audit Lines)**.

To define transaction prompts:

1 Select **Administration > Data Collection > Monitor Interface**.

2 Open the **Transaction Type** form.

3 Click **New Record**. **Forms SQL Code** is automatically populated.

4 Specify this information:

Transaction Type
Specify the transaction type for which to define prompts. The transaction type description is automatically populated.

Line
Specify a unique code identifying the prompt/processing definition line within the scanning transaction.

Data Type
Select one of the following options:

- **Alphabetic**
  Select for alphabetic characters.

- **Computed**
  Select for the system to automatically make a calculation.

- **Date**
  Select for the system to prompt for data that has a time component.

- **Fixed**
  Select to define a fixed value.

- **Numeric**
  Select for numeric characters.

Prompt Description
Specify the prompt as it is to appear on the scanning device.

Choose one of the following options:

- **Fixed for Data Type**
  Specify, for Fixed Data, the fixed data value for this prompt. For example, if equipment type will always be Asset, enter A.

- **If you selected Computed for Data Type**
  Specify, for Computed Data, the SQL command string used for the calculation. Use `TKD_PROMPTDATA1, TKD_PTOMPTDATA2`, etc., to see the relevant column on the tracking transaction table.

- **If you selected Alphabetic for Data Type**
  Specify, for Pattern Match, a pattern match. See Step #8 for more information about Pattern Match.

- **If you selected Date for Data Type**
  Specify, for Date Format Mask, a date format mask. The date format mask should match the data that is being entered in the data collection upload columns.

Pattern Match
Specify the pattern matching to be performed by the scanner. Pattern characters can include the following values:

- . (period)

  Represents a single alphabetical character, A through Z
- # (pound sign)

  Represents any single number, 0 through 9
- _ (underscore)

  Represents any single alphanumeric character, A through Z and 0 through 9
- % (percent)

  Represents a string of alphanumeric characters
- , (comma)

  Represents an OR condition
- : (colon)

  Represents a THROUGH condition
- Any character(s) or number(s)

  Indicates that exact character or number in that position
- ! any character(s) or number(s)

  Indicates data entered should not match what follows the "!"

Archive Column
Specify the column where the system archives transaction data.

Interface Type

- A (Equipment audits)

  Indicates the equipment audit starting point and designates a batch number
- ADI (Add Details Interface)

  Adds comments to a record
- E (Events (work order) interface)

  Creates and updates work orders and activities
- H (Booked hrs interface)

  Books labor hours on a work order activity
- I (Inventory issues)

  Tracks inventory transactions of assets or parts, such as issues, returns, store-to-store movements, etc.
- IRI (Inspection results interface

  Tracks inspection results
- L (Equipment audit lines)

  Indicates the equipment audit data

- MANF (Manufacturers interface)
  Tracks manufacturer information
- O (Equipments interface)
  Tracks assets, hierarchies, and user attributes
- PART (Parts interface)
  Creates and updates part information
- PURC (Purchase order interface)
  Downloads, creates, and updates purchase orders
- R (P.O. receipt)
  Receives assets and parts with or without a purchase order
- READ (Readings interface)
  Records meter readings
- REQ (Requisition interface)
  Creates and updates requisitions for Goods requested transactions
- S (Stocktake interface)
  Enters physical inventory counts
- TOUS (Tool usage interface)
  Tracks tool usage information

Group Sequence
Specify the sequence in which to group data collection transactions.

Upload Column
Specify the interface column in which to load the data.

Action Code
Specify the action that the selected interface performs on this data.

Prompt Sequence
Specify the chronological order in which this prompt occurs. Do not skip sequence numbers.

Minimum Length
Specify the minimum number of characters required for the data to enter at the prompt. Enter nothing or 0 to make this prompt optional.

Next Prompt
Specify the next prompt to display on the barcode scanner. The maximum number of digits is eight.

Maximum Length
Specify the maximum number of characters required for the data to enter at the prompt.

Dup. Previous Value
Select to duplicate the previous value of the prompt.

If Data Is
Specify branch conditions, as necessary. Branch conditions include the following values:

- != represents not equal
- < represents less than
- <= represents less than or equal to
- = represents equal to
- > represents greater than
- >= represents greater than or equal to

Note: Infor suggests that you prompt the user once and then use a calculated field for each subsequent time.

Pattern
Specify the pattern of the data collected. You can enter only one pattern.

Go To
Specify the prompt to display if the result of **If Data Is** and **Pattern** is true.
Note: This field is used by Oracle Forms.

Query Code
Specify the query code that defines a lookup for this prompt.

LOV Entity
Specify the entity of the lookup.

Validate File
Specify the filename of an ASCII text file against which to validate entries. The filename must be in DOS format. For example, you can enter a file containing a list of authorized employee codes. When you enter an employee code, the reader accesses the file and validates the scanned code against the employee list.

Lookup Attached
Select to make the lookup defined by **SQL Code** available. If you do not select this field, data is still validated against **SQL Code**, but the lookup is not available.

Not Available
Select to ensure data entered is not in the lookups.

Override
Select to allow users to enter non-valid data if **`Not Available`** is unselected or to specify valid data if **Not Available** is selected.

Print Barcode Label
Select to print a barcode label.
Note: This field is used by Infor EAM Mobile.

5 Click **Save Record**.

Note: Click **Validate** to validate the transaction prompt.

Defining return transaction prompts

Define return prompts to create default values for specific prompts. For example, if creating an inter-warehouse transfer issue with a prompt for requisition number, requisition line, and outstanding quantity, set up a trigger to search and automatically populate outstanding quantity with a value. Define triggers using SQL statements.

To define return transaction prompts:

1. Select **Administration > Data Collection > Monitor Interface**.
2. Open the **Transaction Type** form.
3. Select the transaction type for which to define return prompts, and then click the **Return Prompts** tab.
4. Click **Add Return Prompt**.
5. Specify this information:

   Source Prompt
   Enter the number corresponding to the prompt sequence number that triggers the return prompt when you leave or tab out of the field. The system automatically populates the source prompt description.

   Target Prompt
   Enter the number corresponding to the target prompt sequence number that receives the default value. The system automatically populates the target prompt description.
   Note: **Target Prompt** must be greater than **Source Prompt**.

   Query Code
   Enter the code identifying the SQL statement that calculates the default value for the target prompt. The system automatically populates **SQL Statement**.

6. Click **Submit**.

Entering data with the prompt machine

Enter data into the data collection module with the **Prompt Machine** form instead of a barcode scanner, as necessary. Submit one or more transactions of a selected transaction type.

Note: You must tab through the prompt data fields. You cannot navigate through the form by performing a left-mouse click on a specific field. The only field available for navigation in this manner (by performing a left-mouse click) is **Transaction Type**.

To enter data with the prompt machine:

1. Select **Administration > Data Collection > Prompt Machine**.
2. Specify this information:

   Transaction Type
   Enter the transaction type for which to enter data. The system automatically populates the description of the transaction type and displays the prompt data fields associated with the transaction type.

3 Click **Add Transaction**.
4 Enter data for the prompt data fields as necessary.
5 Click **Add to List**.
6 Click **Process Transactions**.

Note: If you tab from the current **Prompt Data** to a lower-numbered **Prompt Data**, the system automatically adds the record to the Transactions list, completing the current transaction and beginning a new transaction.

Viewing scanner transactions to be processed

View scanner transactions to be processed. The number of records available to view constantly changes as new records are processed through the system interface.

Note: View and correct any errors on the **Error Correction** page.

To view scanner transactions to be processed:

1 Select **Administration > Data Collection > Monitor Interface**.
2 View the transaction information.

Setting up jobs

Set up predefined jobs. View and modify jobs. Disable jobs to stop their next scheduled executions or restart previously stopped jobs.

Note: The JobCacheRefreshInterval tag in MPConfiguration.xml controls how often the job information is monitored for changes. By default, the JobCacheRefreshInterval tag checks the jobs every 15 minutes.

To set up jobs:

1 Select **Administration > Data Collection > Job Setup**.
2 Select the job to set up.
3 Specify this information:

Active
Select to enable the job to start at the Next Run date and time.
Note: If you unselect the **Active** check box, the system disables the next execution of the job.

4 View the schedule pattern using **Month**, **Day of Month**, **Day of Week**, **Hour**, and **Minute**. The schedule patterns are typically numeric, but can also include the following characters:

Symbol	Description
* (asterisk)	Matches all days, months, hours, and minutes, e.g., an asterisk in Day of Week indicates that the system performs the job every day of the week.

Symbol	Description
, (comma)	Separates lists of days, months, hours, and minutes, e.g., 31, 12, 0, 0 represents 12:00 A.M. on December 31.
- (hyphen)	Specifies a range, e.g., 10-12 equals hours 10, 11, and 12.
/ (backslash)	Specifies increments, e.g., 0/15 minutes equals minutes 0, 15, 30, and 45.
L	Indicates the last, e.g., Day of Month=L equals the last day of the month.

See the table below for an example of a schedule pattern:

Month	Day of Month	Day of Week	Hour	Minute	Description
*	*	*	0	5	Run 5 minutes past mid-night, every day.
*	*	1-5	22	0	Run at 10:00 P.M. on each weekday.
*	*	*	0-23/1	0	Run each hour, every day.
3-12/3	L	*	1	0	Run at 1:00 A.M. on the last day of each calendar quar-ter.

5 Click **Submit**.**Next Run** date and time are automatically populated.

Correcting scanner transaction errors

Correct transaction errors by correcting data prompt values, and then submit the changes to the system database. Save the updated record to resubmit it to the interface for reprocessing. The system automatically reprocesses the correct record when saved.

Note: If a transaction error does not exist for an interface transaction, the system protects all fields.

To correct scanner transaction errors:

1 Select **Administration > Data Collection > Monitor Interface**.
2 Select the record for which to correct transaction errors, and then click the **Error Correction** tab.
3 Enter corrections to the data prompt values to correct the transaction error.
4 Click **Save Record**.

Setting the data warehouse installation parameters

Set the data warehouse installation parameters to specify which data marts will be populated by the ETL driver. The installation parameters work in conjunction with the data warehouse run parameters to establish the date range by which the ETL process extracts data from the system and then populates the specified data marts within the data warehouse with the extracted data.

Specifically, the data warehouse installation parameters indicate the system modules for which the ETL process is going to load the data. The data warehouse run parameters establish the date range of a load type (full or incremental) for loading and purging data from the data warehouse.

See the following table for a list of the data warehouse installation parameters:

Installation Parameter	Description	ETL Module	Table Values
`DWLABOR`	Booked Labor hours and Available Labor	LABOR	Trades, occupation types, personnel, and work orders
`DWMATL`	Daily Material transactions	MATL	Daily material transactions, stores, suppliers, work orders
`DWPARTS`	Parts and Stores daily values	PARTS	Parts, purchase orders, suppliers, classes, and stores for the SDS and PDS
`DWORDERS`	Purchase orders and order lines	ORDERS	Purchase orders, order line types, stores, suppliers, and part classes on orders
`DWSTATUS`	Daily Status changes	STATUS	Entities and status changes
`DWWARNTY`	Warranty claims accumulating values	WARRANTY	Equipment, suppliers, and warranty claims
`DWWORK`	Work orders accumulating and daily values	WORK	Equipment, service requests, work orders, budgets, and work order costs

Each of the previous parameters indicates a specific data mart. For example, the `DWLABOR` parameter represents the LABOR ETL module (data mart) for which the ETL extracts data for trades, occupation types, personnel, and work orders.

Enter the appropriate setting for each of the parameters/data marts as necessary. You can also change the setting of the data warehouse parameters to temporarily enable or disable the loading of data into any of the data marts.

To set the data warehouse installation parameters:

1 Select **Administration > Security > Install Parameters**.

Note: Filter the list of installation parameter records to display only the data warehouse installation parameters using the Quick Filter.

See the *Infor EAM User Guide*.

2 Select the data warehouse parameter for which to enter a setting, and then click the **Record View** tab.

3 Specify one of the following settings for the data mart **Value**:

Option	Description
ON	Specify to indicate that the data mart is activated and will be populated by the ETL process based on the date entered for Load from Date on the Data Warehouse Run Parameters form. **Note:** The default Value setting for each parameter is `ON`.
OFF	Specify to indicate that the data mart is not active and will not be populated by the ETL process. **Note:** If you set the data mart to `OFF`, any data that is currently in the selected data mart at the time you set the parameter to `OFF` will remain in the data mart.
TRUNCATE	Specify to indicate that the ETL process will truncate the respective date mart tables, and the data mart will not be populated in the future (which is the same as setting the parameter to `OFF`) based on the date entered for Load from Date on the **Data Warehouse Run Parameters** form.

Note: If you change the setting of a data warehouse parameter from `TRUNCATE` to `OFF`, the change will have no effect on the data mart, because both the `OFF` and the `TRUNCATE` settings prevent the ETL process from loading data into the data mart. Changing the setting from `TRUNCATE` to `ON` will activate the load process for the data mart, and data will be loaded into the data mart by the ETL.

The DWTL driver must be enabled on the **Job Setup** form for any data mart to be populated by the ETL when you set any data warehouse installation parameter to `ON`.

See Setting the data warehouse run parameters on page 148.

However, if you set any of the parameters to `OFF` or `TRUNCATE`, the parameter setting will function as designed regardless of the setting of the DWTL driver.

4 Click **Save Record**.

Setting the data warehouse run parameters

Set the data warehouse run parameters to initialize the data warehouse run control table and establish the appropriate run parameter settings for executing the data warehouse ETL process at regularly scheduled intervals. You can also modify run parameters as necessary and execute an ETL process manually. Set parameters to initiate a full or partial (incremental) data load and/or purge data.

When running the ETL process for the first time, you must run a full load with no errors. After running a clean full load, you do not need to run a full load again, because the data warehouse retains all of the data from the full load. Subsequent future loads can be run automatically based on your data warehouse setup, e.g., on a nightly basis. Future loads will be incremental and will only add to the existing data by loading the data since the last load. Therefore, after completing a full load, the system

automatically resets the Load from Date to the current date (date of the most recent load) and the Load Type to Incremental so that you do not have to reset those parameters for future data loads.

Note: Although an incremental load only loads data since the most recent load, an incremental load also verifies time stamps for records so that it will load any changes that have been made to an existing historical record or for transaction data that may be post-dated, etc.

Although it is not necessary, you can run a full load if desired. If you select Purge Old Data, running a full load purges all existing data in the data warehouse before loading any data; therefore, you can run a full load to purge the existing data from the data warehouse and then reload all of the data based on a new Load from Date, etc.

Note: The data warehouse does not maintain historical values for parts and stores. Instead, the data warehouse takes daily snapshots of the value of materials and inventory in each snapshot. Therefore, purging the existing data from the data warehouse will also purge non-historical value information.

See Understanding historical inventory valuation for the Infor EAM data warehouse on page 151.

After running a full ETL load, you must check the data warehouse run log for any errors.

See Viewing data warehouse run log errors on page 153.

You must run a full load without any errors prior to switching to an incremental load. If any errors occur during the full load, you must correct the errors and run a full load until no errors occur.

Setting the parameters for running the data warehouse load procedure

Set the parameters for running the data warehouse load procedure to indicate whether to initiate a full or partial data load, and to specify the date from which to load data. The system always runs a full load first and then sets the data load to the incremental setting. Save the settings for future use as necessary.

Note: Executing a data warehouse data load is an intensive database process, and Infor strongly recommends that you only initiate a data load during non-peak system usage hours.

The AETL process periodically updates Infor EAM Analytics data. If you are installing Infor EAM Analytics for the first time, you should complete a full load of the data warehouse ETL. If you are upgrading Infor EAM Analytics from a previous version, you should only perform incremental loads of the data warehouse ETL. Performing a full load after an upgrade will result in the loss of data.

To set the parameters for running the data warehouse load procedure:

1. Select **Administration > Data Collection > Data Warehouse Run Parameters**.
2. Select the **Execute Load Procedure** check box to enable the data warehouse ETL job to execute the data load process to transfer production data into the data warehouse tables.
3. Specify this information:

   Load Type
   Select one of the following options:

Option	Description
Full	Select to execute a full data load.
Incremental	Select to execute an incremental data load.

4 Specify the **Load from Date**.

Note: You should only select **Full** as the **Load Type** when running the ETL process for the first time or after removing errors. After running a clean full load, you do not need to run a full load again unless you want to delete the existing data from the data warehouse.

The **Load from Date** should generally be set from the beginning of the calendar or fiscal year two or more years in the past. When selecting the date, consider that each year added to the data warehouse results in the use of additional database space. Only include years for which the data is useful for analysis.

You can select **Purge Old Data** and set **Purge to Date** to the date through which records should be purged. The next time the ETL runs, it will first purge records with dates on or before **Purge to Date**. The ETL will then unselect **Purge Old Data** and continue with the load process. Infor strongly recommends that you select **Purge Old Data** if you are going to run a full data load.

After running a full load with no errors, all future loads should be incremental. After completing a full load, the system automatically resets the **Load from Date** to the current date (date of the most recent load) and sets the **Load Type** to **Incremental**.

5 Click **Save Record**.

Note: Saving the run parameter settings applies the run parameter settings to the regularly scheduled ETL process and will be in effect when the system executes the process as scheduled.

You can set the run parameters to execute both a data load and data purge process simultaneously. To execute a data load and data purge simultaneously, select both **Execute Load Procedure** and **Purge Old Data**, and then enter a **Load Type**, **Load from Date**, and a **Purge to Date**.

The default setting indicating the threshold for committing records to the data warehouse tables is 1500 records. If you would like to specify a different threshold, a database administrator must reset this value in the database. Contact your database administrator for additional information.

Each step of the load process is recorded in the data warehouse run log.

See Viewing the data warehouse run log on page 152.

Setting the parameters for running the data warehouse purge procedure

Set the parameters for running the data warehouse purge procedure to specify to purge old data and indicate the date from which to purge the data.

To set the parameters for running the data warehouse purge procedure:

1 Select **Administration > Data Collection > Data Warehouse Run Parameters**.
2 Select the **Purge Old Data** check box to execute a data purge process.
3 Specify the **Purge to Date** to purge the data through the specified date.
4 Click **Save Record**.

Note: Saving the run parameter settings applies the run parameter settings to the regularly scheduled ETL process and will be in effect when the system executes the process as scheduled.

You can set the run parameters to execute both a data load and data purge process simultaneously. To execute a data load and data purge simultaneously, select both **Execute Load Procedure** and **Purge Old Data**, and then enter a **Load Type**, **Load from Date**, and a **Purge to Date**.

Understanding historical inventory valuation for the Infor EAM data warehouse

The data warehouse ETL process includes data marts, two of which are a stores daily snapshot (SDS) and a parts daily snapshot (PDS). The SDS data mart captures daily summaries of the value of your inventory by store, organization, and part class. The PDS data mart captures daily summaries of the value of your inventory by part. However, PDS only captures daily summaries for the parts for which you have indicated to save historical data using the **Save History** checkbox on the **Record View** tab of the **Parts** page when creating parts.

This section describes the manner in which the SDS and PDS derive historical inventory valuation data for the data mart when executing the initial data load for the SDS and PDS and how the ETL process calculates historical inventory valuation for the data warehouse for different inventory scenarios.

Inventory valuation is normally calculated using the sum of stock value as it exists at the time that the ETL process is executed. Historical stock values are derived using stock transactions in reverse order and backing out the changes to stock quantities and prices. However, some historical stock value information is either not available or is impractical for use in calculating historical values.

Note: Because of the manner in which historical inventory value must be determined for the data warehouse, the calculation of historical inventory value for some of the inventory scenarios may result in an approximate value that is as close to the exact value as possible.

Updating the invoice price

In Infor EAM, pricing updates are determined based on the PRICETIM installation parameter. If PRICETIM is set to I, then a new price is calculated upon approval of an invoice for the stock item.

When updating the invoice price, the ETL process treats data from schemas set to update prices at invoice time as though they were set to update prices upon receipt.

The data warehouse updates prices upon receipt due to the complexity of synchronizing transactions with invoices while re-establishing historical stock levels and prices.

Note: Large gaps between receipt and invoice time may result in inaccuracies in the precise time the price update occurred, which also affects the value of inventory in stores during that period. However, because daily inventory valuations are calculated at the store, part, and class level, small differences in price will not have a significant effect unless there is a large price difference on an expensive item or a large quantity of that item.

Recalculating pricing based on the average price type

Regardless of the selected price type for the store (Average, Standard, Last Price, LIFO, or FIFO), the ETL process assumes Average price type. Storeroom materials are priced at the storeroom level in Infor EAM based on the setting of the PRICETYP installation parameter.

Accurate historic data for price types other than Average is not available. As receipt transactions are backed out, the part price is recalculated using the average pricing method, but the price is adjusted to the issue price whenever an issue or return to stock transaction occurs, unless you have selected

LIFO or FIFO as the price type for a part. If you have selected LIFO or FIFO as your price type, SDS and PDS use average price for all transactions, including issues and returns, to ensure the accuracy of stock prices for transactions dates occurring a long time from the current system date.

Recalculating values for repairable spare parts

No historical data is available to calculate previous values for repairable spare parts that are currently being repaired internally and the value of the repairable spare currently being repaired by a supplier. These values are null for historical dates.

Recalculating prices for unapproved receipt transactions

Infor EAM assumes a RECV transaction in the R5TRANSLINES table for parts received from a purchase order for which the receipt is not approved. However, Infor EAM does not update the stock quantity and price until the receipt is approved. If there is a gap in time between the receipt and the approval of the receipt, it is possible that the quantities and prices inserted into the parts work table at the beginning of the process will not match the transaction. Therefore, only approved receipt transactions are reversed.

Adjusting stock quantities of child assets in an asset hierarchy

Normally if an asset is associated with dependent child assets in a hierarchy for which costs are tracked by asset, there are also spare parts associated with the assets in the hierarchy. Infor EAM adjusts the stock quantity of the child assets when the parent is issued to a work order, and the structure of the assets is stored in the R5STRUCTURES table. However, the R5STRUCTURES table only shows the current relationship between the assets, not any historical relationship. Therefore, the ETL process does not consider the object hierarchy structure when calculating historical stock values.

Viewing the data warehouse run log

View the data warehouse run log to access detailed information about data warehouse processes. The **Data Warehouse Run Log** form enables you to view information such as the operation processed, the target database object, start and end time, the elapsed time of the process, and the status of a process. View detailed error information to view error numbers, error messages, and sequences.

Delete run log records and error messages as necessary. Infor recommends that you delete old run logs and error messages periodically.

Note: Check the data warehouse run log for any errors after running a full load. You must run a full load without any errors prior to switching to an incremental load. If any errors occur during the full load, you must correct the errors and run a full load and purge until no errors occur.

Viewing data warehouse run log details

View data warehouse run log details to access detailed information about data warehouse processes and their status.

To view data warehouse run log details:

1. Select **Administration > Data Collection > Data Warehouse Run Log**.
2. Select the **Run Number** for which to view details, and then click the **Details** tab.
3. View the details for the selected **Run Number**.

Viewing data warehouse run log errors

View data warehouse run log errors to access detailed error information such as error numbers and error messages.

To view data warehouse run log errors:

1. Select **Administration > Data Collection > Data Warehouse Run Log**.
2. Select the **Run Number** for which to view details, and then click the **Errors** tab.
3. View the errors for the selected **Run Number**.

GIS administration

Software requirements and pre-installation checklist

- If you previously installed Infor EAM GIS Toolkit in a location other than `C:\inforEAM\GIS`, e.g., you modified the `SETUP.BAT` file supplied on the Infor EAM GIS Toolkit CD, contact Infor Technical Support.
- Install Infor EAM GIS Extensions to integrate Infor EAM with ESRI.

  See Installing or upgrading Infor EAM GIS extensions on page 154 procedures to install Infor EAM GIS Extensions or to upgrade a previously installed version of the Infor EAM GIS Toolkit to the Infor EAM GIS Extensions.
- If you are upgrading from a previously installed version of the Infor EAM GIS Extensions or are reinstalling to a new location, the Installation Wizard automatically backs up user-created files from the toolbar and help directories. The Installation Wizard saves the toolbar.bak and help.bak directories in the original installation location.

ESRI PRODUCT VERSION 10.0

Infor EAM supports connectivity with ArcGIS 9.3.1 SP1 and ArcGIS 10.0 SP1. Anytime you upgrade your ArcGIS installation to v10.0 SP1 you are required to perform following steps on the EAM application server for the GIS integration to work correctly:

1 Open \depconfig\extended_properties.xml.
2 Specify the version number of the ArcGIS server in <gis><version/></gis> tags. E.g., To support ArcGIS server version 10.0, the tags will look like this:

```
<gis>
      <version>10.0</version>
</gis>
```

3 Perform redeployment on EAM.
Note: By default, Infor EAM provides support for ArcGIS 9.3.1 SP1.

Installing or upgrading Infor EAM GIS extensions

To install or upgrade Infor EAM GIS Extensions:

1 Insert the Infor EAM GIS Extensions CD into the proper drive.
2 Choose the folder specific to your version of ArcGIS:

9.3
Select this folder if you have ArcGIS 9.3.1 SP1 installed on your machine. Execute the GIS93101WN201110.exe file.

10
Select this folder if you have ArcGIS 10.0 SP1 installed on your machine. Execute the GIS10WN201110.exe file.

Note: See Software requirements and pre-installation checklist on page 153.

3 Click **Next**.
4 Select **`I accept the terms of the license agreement`** if you agree to the terms, and then click **Next**.
5 Verify that the required applications are installed, and then click **Next**.
6 Select **`Install New Infor EAM GIS Extensions`** to install Infor EAM GIS Extensions for the first time or to upgrade to Infor EAM GIS Extensions from a previous version, and then click **Next**.

Note: Select **`Add or Remove Infor EAM GIS Extensions`** if you have already installed or upgraded to this version of Infor EAM GIS Extensions but want to add or remove individual extensions from your configuration.

7 Select the extensions to install. See the following information:

Note: Configuration and Help are required selections.

Create Equipment
Select to install Infor EAM equipment creation within ESRI.

Create Work Order
Select to install the Create Work Order popup.

Events
Select to install the Infor EAM Events popup.

- **Map Feature Attributes**
  Select to install the Map Feature Attribute popup.

- **Synchronize Records**
  Select to install the Synchronize Records popup.

- **Synchronize Attributes**
  Select to install the Synchronize Atrributes popup.

- **Data Filter**
  Select to install the Data Filter popup.

8. Click **Next**.
9. Enter the directory in which to install the Infor EAM GIS Extensions, and then click **Next**.
10. Review the settings information, and then click Next.
11. Click **Finish**.

    Note: If the Infor EAM GIS Extensions are not visible by default in ArcMap, choose **Tools > Customize > Toolbars** from the menu bar, and then select **Infor EAM GIS Extensions**.

Understanding GIS integration

Both Infor EAM and ESRI's GIS should reflect an accurate representation of your company assets. Link Infor EAM equipment records and GIS features with a GIS object identification number (GIS ID in Infor EAM GISOBJID in ESRI).

Note: Both SDE connection and direct connection are supported for the Infor EAM to ESRI GIS integration.

Define user preferences to control how ESRI responds when a user creates new equipment records within Infor EAM and how Infor EAM responds when a user creates new features within ESRI.

ESRI and Infor EAM create and synchronize corresponding equipment/features based on field mappings and GIS profiles. The field mappings and GIS profiles ensure the systems populate accurate attribute data while creating features/equipment.

Field mappings, which are defined at the layer level, allow users to move or copy specific data from one feature to its corresponding equipment record or vice-versa, e.g., map the DISTRICT attribute in ESRI to the Organization field in Infor EAM. The system populates the equipment record's Organization with the data contained in the DISTRICT attribute for the feature.

See Defining field mappings for attributes (Esri) on page 166.

Equipment profiles, which serve as equipment templates, can be related to GIS layers. If an attribute value will be the same for all features in a layer, then the profile can be used to populate this equipment value, e.g., if the Organization of the GIS profile is Org 1, all equipment/features created based on that profile belong to Org 1.

See these topics:

- Defining preferences for the creation of Infor EAM equipment (ESRI) on page 169
- Defining preferences for the creation of GIS features (Infor EAM) on page 170

Note: During equipment/feature creation, if there are both field mappings and a GIS profile, the system populates fields based on the mappings first. If you do not define a mapping for a field, the system populates the field based on the information defined on the related GIS profile.

If a field mapping for an attribute exists, the system always populates the equipment field based on the data of the attribute, even if the attribute value is empty and the GIS profile value contains data.

The Infor EAM-GIS integration supports both the ArcIMS and the ArcGIS server platforms. However, certain aspects of the integration differ slightly between the ArcIMS and ArcGIS platforms. The differences are noted where appropriate within this guide.

Defining equipment for features defined prior to integration

If you are integrating ESRI and Infor EAM for the first time, move multiple GIS features to Infor EAM through data collection.

Every GIS feature for which you create a corresponding Infor EAM equipment record must have a GISOBJID number.

Note: If you need to integrate a GIS feature with Infor EAM that does not have a GISOBJID field for its layer, you must manually create the field.

See Creating GISOBJID fields for layers manually (ESRI) on page 156.

After you manually create the GISOBJID field for each layer you need to integrate with Infor EAM, manually enter a GISOBJID number for each feature within the layer. numbers that you manually enter must be less than 100,000,000.

Creating GISOBJID fields for layers manually (ESRI)

Infor EAM automatically generates GIS ID numbers once the two systems are fully integrated, but you must manually enter a `GISOBJID` number in the attribute table of every GIS feature that you want to move to Infor EAM prior to integrating the systems. For every layer containing GIS features that need to be integrated with Infor EAM manually create a `GISOBJID` field.

To create `GISOBJID` fields for layers manually:

1. Open ArcMap to an existing map.
2. Select the layer for which to add a `GISOBJID` field.
3. Right-click the layer, and then choose **`Open Attribute Table`**.
4. Click **Options**, and then select **`Add Field`**.
5. Specify this information:

   Name
   Enter `GISOBJID`.
   Note: Enter the name of attribute column headers using all uppercase letters. The system only searches column headers in all uppercase letters when performing a search based on a GIS Filter.

   See the *Infor EAM GIS User Guide*.

Type
Select `Long Integer`.
Note: Enter a precision of 9.

6 Click **OK**.

Configuring the geoprocessing service for the ArcGIS server

The Infor EAM-GIS integration supports both ArcIMS and ArcGIS Server. When integrating Infor EAM and GIS using ArcIMS server, you must create an Image Service on the ArcIMS Server. See ESRI documentation for more information. If you are integrating Infor EAM and GIS using ArcGIS Server, you must create a Map Service, Geocoding services, and also a Geoprocessing Service. See ESRI documentation for more information on creating these services. You must create the Geoprocessing service using the InforTools.tbx toolbox located in the \arcgisserver\ directory of the Infor EAM GIS product CD.

See Modifying the GIS installation parameters (Infor EAM) on page 158 for more information on enabling communications with these mapping services.

Configuring for ArcGIS server version 10.0

To configure the Geoprocessing Service for the ArcGIS server:

1 Open the ArcCatalog application.
2 Locate the GIS Servers menu, and then select your GIS server.
3 Right-click the server, and then choose **Add New Service**.
4 Specify this information:

Name
Specify the GIS Service name, e.g., InforTools.

Type
Select **`Geoprocessing Service`**.

Description
Specify a description for the GIS service as necessary.

Startup Type
Select **`Automatic`**, and then click **Next**.

Execution Type
Select **`Syncronous`**.

Toolbox
Locate the InforTools.tbx file on your ArcGIS server.
Note: InforTools.tbx is included on the Infor EAM GIS product CD.

Jobs Directory
Specify the location of the ArcGIS jobs directory.

Output Directory
Specify the location of the ArcGIS output directory.

Maximum Number of Records Returned by Server
Specify the maximum number of records to be returned by the ArcGIS server when running a job.

5 Click **Next**.
6 Select **Enable Web Access**, and then click **Next**.

Note: The value displayed in the **URL** field is the value that must be entered for the GISGPSRV installation parameter.

7 Complete the remaining steps of the Add GIS Service process as necessary, and then click **Finish**.

Configuring for ArcGIS server versions 10.1 and 10.2

To configure the Geoprocessing Service for ArcGIS server versions 10.1 and 10.2:

1 Open ArcMap 10.1/10.2 session.
2 Navigate to InforTools.tbx, and expand the plus icon that appears in the file. The BufferTool popup is displayed.

Note: Locate the InforTools.tbx file on your ArcGIS server in the Catalog window of Arc Map.

3 Right-click on the BufferTool, and then click **Open**.
4 Click **OK** on the BufferTool popup.
5 Select the Geoprocessing - Results menu item from the main menu of the ArcMap 10.1/10.2.
6 Select the latest execution result from the Results window, right-click the selection, and then select the Share As - Geoprocessing Service menu item and publish the geoprocessing service. See ESRI ArcGIS documentation for information if errors are encountered while publishing the Geoprocessing service.

Configuring Infor EAM and ESRI's ArcMap

Configure Infor EAM and ESRI to best meet the specific needs of your company.

Configuring ArcMap for equipment creation (ESRI)

Configure ArcMap to to allow auto-creation of Infor EAM equipment records from within ESRI's GIS.

To configure ArcMap for equipment creation:

1 Select **Tools > Extensions**.
2 Select **Infor EAM Create Asset Editor Extension**, and then click **Close**.

Modifying the GIS installation parameters (Infor EAM)

Modify the GIS installation parameters in Infor EAM before using GIS.

Note: To display GIS parameters only, select GIS in Dataspy.

To modify the GIS installation parameters:

1 Select **Administration > Security > Install Parameters**.
2 Select the following parameters and modify as necessary:

Configuration parameters

Parameter	Description
GISAIMSP	Specify the ArcIMS platform. Acceptable values are **`SHAPEFILE`** and **`SDE`**.
GISAIMSV	Specify theArcIMS version. For example, enter **`9.2`** if this is the installed version of ArcIMS.
GISCONTP	Specify the connection type between the Infor EAM web server and the ArcIMS server by entering a value of **`TCP`**, **`HTTP`**, or **`HTTPS`**. If no value is specified, a **`TCP`** connection is assumed. **Note:** Used only for ArcIMS server.
GISGPSRV	GIS geoprocessing service (AGS only). SeeConfiguring the geoprocessing service for the ArcGIS server on page 157.
GISHOST	ArcIMS server name (and domain if required).
GISIMGFM	Format of map image returned from ArcGIS Server. Acceptable values are BMP, GIF, JPG (default), PNG, and PNG24. **Note:** Used only for ArcIMS server.
GISPORT	Port number on which the `rcIMS` service mentioned in the GISSERV install parameter is accessed. **Note:** Used only for ArcIMS server.
GISSERV	Name of the default Image Service setup on the ArcIMS server or Map Service URL on ArcGIS Server.
GISSRVTP	Specify the GIS server type. Acceptable values are IMS (default) and AGS.
GISSVAXL	GIS map file for service identified by GISSERV. Used for viewing nearest address, e.g., reverse geocoding. **Note:** GISSVAXL supports HTTP, fully qualified file paths, and UNC file paths. The system requires this to load the XML of the AXL and retrieve the geocoding definitions. Such information is not available via ArcXML responses. You do not need to specify a value for GISSVAXL if you are using ArcGIS.

Parameter	Description
URLGIS	Enter **`http://your.infor.com.server/attachments/giswo/tenantid/`**. Use **`http://your.infor.com.server /attachments/giswo/default/`** if no tenant id exists. This value is used when displaying and printing map attachments of the work order.

Search-related parameters

Parameter	Description
GISABLC	Maximum number of advanced buffer layers allowed in an advanced search. The default is 3.
GISADDR	Name of the Address Layer in the Image Service setup in the GISSERV install parameter. **Note:** When ArcGIS Server is being used and a geocoding process is established, the system does not use this parameter as this information is contained within the geocoding service described by parameter GISGEOSV. If geocoding is not being used with ArcGIS Server, the system uses this information when performing searches.
GISCCCOL	Name of the Zone Column in the attributes of the Zone Layer. This parameter is used for non-geocoded, zone-only searches. **Note:** When ArcGIS Server is being used and a geocoding process is established, the system does not use this parameter as this information is contained within the geocoding service described by parameter GISGEOSV. If geocoding is not being used with ArcGIS Server, the system uses this information when performing searches.
GISCITY	Name of the Zone Layer in the Image Service setup as the GISSERV install parameter. This parameter is used for non-geocoded, zone-only searches. **Note:** When ArcGIS Server is being used and a geocoding process is established, the system does not use this parameter as this information is contained within the geocoding service described by parameter GISGEOSV. If geocoding is not being used with ArcGIS Server, the system uses this information when performing searches.
GISSTCOL	Name of the Zone Column in Attributes of the Address Layer. This parameter is used for non-geocoded address searches. **Note:** When geocoding is used, the system does not use this parameter as this information is contained within the geocoding service described by parameter GISGEOSV or GISSERV, depending on whether ArcGIS Server or ArcIMS is used.
GISEQUIP	Default equipment layer name

Parameter	Description
GISGEOSV	ArcIMS: Name of the secondary address for geocoding layers. (See GISSERV for the default Image Service setup). Values should be separated by commas and can identify layers of different services (eg. Layer2, Layer3, Service2.Layer1). ArcGIS Server: Name of the geocoding service(s). Values should be separated by commas.
GISGMAXC	Specify the maximum number of geocoding match candidates. The default is 100.
GISGMIN	Specify the minimum geocoding score that the system should display in the Matching Addresses popup. The default is 20. Separate multiple geocoding score values with a comma. The first value listed is the score for GISSERV and subsequent entries are values for each GISGEOSV.
GISINTRS	Specify the separator for searching for intersection addresses. The defaults are &, |, and @. Values should be separated with a space. **Note:** When ArcGIS Server is being used and a geocoding process is established, the system does not use this parameter as this information is contained within the geocoding service described by parameter GISGEOSV. If geocoding is not being used with ArcGIS Server, the system uses this information when performing searches.
GISMAPS	Set to **`Global`** to display a single map in Infor EAM based on GIS installation parameters. Set to **`Organization`** to display maps based on Organization. Set to **`Department`** to display maps based on Department. Department Security must be enabled when set to Department.
GISNARAD	Specify the radius, in meters, used for viewing the nearest address. The default value is 1500.
GISSTCOL	Name of the Street Column in Attributes of the Address Layer **Note:** When geocoding is used the system does not use this parameter as this information is contained within the geocoding service described by parameter GISGEOSV or GISSERV, depending on whether ArcGIS Server or ArcIMS is used.
GISZOFCT	Factor (%) of default extent by which the map search result will be enlarged. The default is 2.

Highlighted line parameters

Parameters	Description
GISLNCOL	Specify the color of the highlighted lines in the GIS map by entering an RGB color of 0 to 255.

Parameters	Description
GISLNWID	Specify the width of highlighted lines in the GIS map, or enter **LAYERDEFINED**. **Note:** For more information about the **LAYERDEFINED** value, see Customizing map symbols on page 164. If ArcGIS Service is being used and the value for this parameter is **LAYERDEFINED** the color information will come from the map's MXD symbology definition versus the GISLNCOL.

Highlighted point parameters

Parameters	Description
GISPTCOL	Specify the color of the highlighted points in the GIS map by entering an RGB color of 0 to 255.
GISPTTYP	Specify the point type. Valid values for ArcIMS: STAR, CIRCLE, CROSS, SQUARE, TRIANGLE, RASTERMARKER, or LAYERDEFINED. Valid values for ArcGIS Server: CIRCLE, CROSS, SQUARE, DIAMOND, X, RASTERMARKER, or LAYERDEFINED. Default is CIRCLE. **Note:** If ArcGIS Service is being used and the value for this parameter is LAYERDEFINED the color information will come from the map's MXD symbology definition versus the GISPTCOL.
GISPTWID	Specify the width of the highlighted point used in the GIS map.

Highlighted polygon parameters

Parameters	Description
GISPLYCL	Specify the fill color used for highlighted polygons in the GIS map by entering an RGB color of 0 to 255.
GISPLYBC	Specify the color used for the boundary of highlighted polygons in the GIS map by entering an RGB color of0 to 255.
GISPLYFT	Specify the fill type of highlighted polygons in the GIS map by entering a value of HORIZONTAL, BDIAGONAL, CROSS, DIAGCROSS, FDIAGONAL or VERTICAL.
GISPLYTR	Specify the transparency level of the color fill of highlighted polygons in the GIS map. **Note:** If you are using ArcGIS Server, you do not need to specify a value for GISPLYTR because the system does not support the ability to highlight a polygon using a transparent image.

Markup line and point parameters

Parameters	Description
GISMLCOL	Specify the color of the GIS markup line. The defaults are 255, 55, and 155.
GISMLWID	Specify the width of the markup line. The default is 4.
GISMPCOL	Specify the color of the markup point. The default is 255, 55, and 155.
GISMPTYP	Specify the type of the markup point. Valid values for ArcIMS: CIRCLE, STAR, CROSS, SQUARE, TRIANGLE, or RASTERMARKER. Valid values for ArcGIS Server: CIRCLE, CROSS, SQUARE, DIAMOND, X, or RASTERMARKER. Default is CROSS.
GISMPWID	Specify the width of the markup point. The default is 15.

Selected feature parameters

Parameters	Description
GISSFCLR	Specify the highlight color of selected features. The defaults are 248, 138, and 29.

Linear equipment label parameters

Parameters	Description
GISDREL	Specify how the system should display boundary labels for linear equipment (referred to as 'routes' in GIS). Acceptable values are L, N, and A. The default is L. L to display boundary labels for the longest path (in the event of multiple route paths). N to display no boundary labels. A to display boundary labels for all paths (in the event of multiple route paths).

Text marker label parameters

Parameters	Description
GISTFNTC	Specify the font color of the text marker label.

Parameters	Description
GISTFNTS	Specify the font style of the text marker label by entering BOLD, BOLDITALIC, ITALIC, REGULAR, OUTLINE, or UNDERLINE. The default is BOLD.
GISTFNTZ	Specify the font size of the text marker label. The default is 10.
GISFONT	Specify the font of the text marker label. The default is Arial.
GISTGCLR	Specify the color with which to highlight the text marker label.
GISTOCLR	Specify the color with which to outline the text marker label.
GISTPRMD	Specify the print mode for the text marker label by entering ALLUPPER, ALLLOWER, NONE, or TITLECAPS. The default is ALLUPPER.
GISTLPCL	Specify the point color of the text label.
GISTLPTP	Specify the point type of the text label by entering CIRCLE, STAR, CROSS, SQUARE, TRIANGLE or RASTERMARKER. **Note:** For more information about the **`RASTERMARKER`** value, see Customizing map symbols on page 164.
GISTLPWD	Specify the width of the point used in the text label.

Overview map parameters

Parameters	Description
GISOVSV	Specify the image service to display within the overview map. The default is the value from GISSERV.
GISOVSZ	Specify the size of the overview map. The number you enter represents a percentage of the width of the current map. The default is **`25`**.

Customizing map symbols

Infor EAM provides basic symbols for use as map markers; however, you can customize your map symbols with the `RASTERMARKER` or `LAYERDEFINED` installation parameter values.

Define unique symbols with the `RASTERMARKER` value. The `RASTERMARKER` value allows you to place user-defined images on the ArcIMS server, and the system identifies features based on your user-defined image.

The `LAYERDEFINED` value allows you to display symbols based on those defined in ArcIMS from the layer's renderer symbology. The system maintains the displayed images even when you highlight features on the map, e.g., if you highlight manholes and transformers on your map, the system displays the renderer's distinct images for manholes and transformers, but highlights the images according to the color specified in the image's corresponding color installation parameter.

`GISLNWID` is `LAYERDEFINED`. Then use MxD symbology for color versus GISLNCOL.

GISPTTVP->GISPLOL.

Note: Images must be set up as follows: IMS images must see the GIS server and AGS images must see the Infor EAM server.

Granting interface permissions for data filter grids (Infor EAM)

Users can filter Infor EAM data within ESRI using the Data Filter popup. Grant interface permissions to each of the filterable grids.

To grant interface permissions for data filter grids:

1. Select **Administration > Security > User Groups**.
2. Select the user group for which to grant interface permissions, and then click the **Interface Permissions** tab. See the following table of functions in order to grant user group access to the grids accessible by the GIS data filter:
3. Change this information:

Function	Grants Access To
BEGEQ	Equipment grid
BEGEQC	Equipment and related cost details grid
BEGEQE	Equipment and related event details grid
BEGWAC	Work order and related activity details grid
BEGWEQ	Work order and related equipment details grid

4. Select a function listed in the table above.
5. Specify this information:

   Query
   Select to allow users to retrieve records.

6. Click **Submit**.

Defining Infor EAM user information (ESRI)

Define Infor EAM user information in GIS so that you can create Infor EAM equipment records from within GIS.

Infor EAM user information must be defined for each GIS client machine. After defining user information in GIS's ArcMap, you can define preferences for the creation of Infor EAM equipment records and create them within ArcMap.

To define Infor EAM user information in GIS:

1 Open ArcMap to an existing map.
2 Click **ArcEditor**.
3 Specify this information:

User
Enter a valid Infor EAM user name.
Note: If you are working in a multi-tenant environment, enter username@tenantID, e.g., if your username is SMITHB and your tenant ID is dsmp1, enter SMITHB@dsmp1.

Password
Enter the user's Infor EAM password.

Confirm Password
Re-enter the user's Infor EAM password.

Organization
Enter the organization under which the user logs in to Infor EAM.

Style
Select the style sheet to apply to Infor EAM popups in ArcMap. The system applies the selected style sheet to the popup immediately.
Note: The system provides three stylesheets: Default, Blue, and Gray. To create a custom style sheet, open DEFAULT.XSS located in C:\inforEAM\GIS\TOOLBAR\STYLES and make changes to the file as necessary. Do not save your changes to the original DEFAULT.XSS file; instead, save the style sheet under a new name to the same location. The newly created style sheet appears as an option in the dropdown list for **Style**.

Infor EAM URL
Enter the URL address for the Infor EAM server to which ArcMap should connect, e.g., http://<yourserver.yourcompany>/axis/...services/EWSConnector.

Tenant
Enter the tenant ID if you are working in a multi-tenant environment.

4 Click **Submit**. ArcMap saves the record on the user's machine in C:\inforEAM\GIS\CONF\EWSUSER.XML.

Note: The system automatically creates this file if it does not already exist.

Defining field mappings for attributes (Esri)

Define field mappings for attributes stored within Esri's GIS and Infor EAM at the layer level. The fields are populated based on the mappings during equipment/feature creation and synchronization.

Note: To define field mappings, you must have OEGGMP permissions.

During equipment/feature creation, the fields are populated based on the mapping relationship, e.g., to create an equipment record based on an existing feature, map data from a GIS Attribute to an Infor EAM Attribute. Infor EAM populates the field with the data contained in ESRI's GIS. You can also define field mappings based on constant values, e.g., enter a GIS Value of HYDRANT and map it to the

category field in Infor EAM. During equipment creation, the system always populates the category field with HYDRANT.

During synchronization, the system accesses field mappings to ensure corresponding equipment records and features reflect accurate data. If there is a discrepancy in data, the system copies data from one system to the other.

Note: You do not have to define field mappings for a feature's layer, location X, or location Y. These values are automatically populated in the EAM equivalent fields during creation and synchronization. You may, however, define additional field mappings for these GIS attributes if you want the values of these fields copied into other EAM fields.

You may map more than one GIS Attribute to a single Infor EAM Attribute and vice-versa. During creation and synchronization, the system concatenates the data into the single field based on the **Sequence** and **Delimiter**.

Likewise, you can map an Infor EAM Attribute that contains concatenated data into more than one GIS Attribute and vice-versa. During creation and synchronization, the data is parsed based on the **Sequence**. If the system must parse data because one field is mapped to multiple fields, it verifies that the number of fields to which to map data matches the instances of concatenated data in the source field. If it does not, the data is not synchronized. If, however, the source field in the owner system contains a null value, the null value is copied to the multiple fields in the other system, overwriting any data that those fields originally contained.

Identify a **Source** system, which controls creation, and an **Owner** system, which controls synchronization. The data is mapped from the **Source** system during equipment/feature creation. The data is copied from the **Owner** system during synchronization. See the following example.

You define the following field mapping for the Hydrant layer:

GIS Attribute	Infor EAM Attribute	Source	Owner
ADDRESS	Description	GIS	Infor EAM

During synchronization of the Hydrant layer, the system discovers that a feature with the ADDRESS attribute of 156 Main Street does not have a corresponding Infor EAM equipment record. The system creates an equipment record and automatically populates its description field with 156 Main Street because Esri's GIS is the **Source**.

Later, you update the same equipment record's description to 256 Main Street in EAM. During the next synchronization of the Hydrant layer, the system updates the GIS feature's ADDRESS attribute to 256 Main Street because Infor EAM is the **Owner** of this attribute.

Note: The system only compares attribute data for EAM and GIS if the attribute has a defined field mapping and the **Action** is set to Copy.

To define field mappings for attributes:

1. Open ArcMap to an existing map.

   Note: The map must contain an integrated layer to access the Map Feature Attributes popup.

2. Click **Display Map**.
3. Select the layer for which to define field mappings.
4. Click **Add Mapping**.
5. Specify this information:

Type
Specify the mapping type for the record as **`Equipment`** or **`Work Orders`**.

Infor EAM Grid
If you selected **`Work Orders`** as the value for **Type**, specify the EAM user defined grid to use for mapping. The fields available for mapping are based upon the EAM grid selected here.
Note: The user defined grid must be **`Active`** and have the **GIS WO Attribute Mapping Grid** check box selected to show in this lookup.

Type and **Infor EAM Grid** fields only display when an event layer is selected to define field mappings.

Source
Select the system from which data should be mapped during equipment/feature creation. Choose one of the following options:

GIS
Select to map data from GIS when creating new equipment records based on an existing GIS feature.

Infor EAM
Select to map data from Infor EAM when creating new features based on an existing Infor EAM equipment record.

Both
Select to apply this mapping when creating new equipment records/features regardless of which system the object originally resides. The system maps data from Infor EAM when creating new features and maps from ESRI's GIS when creating new equipment records.

6 Select the attribute (GIS Attribute or Infor EAM Attribute) from which data should be mapped or enter the value (GIS Value of Infor EAM Value) that should be mapped. The attribute or value should coincide with the source system, e.g., if you selected GIS as the **Source** system, select a GIS Attribute of GIS Value to map.

Note: If you select Layer, Location X, Location Y, or Feature Length as the **GIS Attribute** from which to map data, the system automatically populates **Source** as GIS, **Action** as Copy, and **Owner** as GIS.

7 Select the attribute (GIS Attribute or Infor EAM Attribute) to which data should be mapped.

See the following table to understand the relationship between Mapped From and Mapped To, e.g., if you select a GIS Attribute in Step 6, you must enter an Infor EAM Attribute in Step 7:

Mapped From	Mapped To
GIS Attribute	Infor EAM Attribute
GIS Value	Infor EAM Attribute
Infor EAM Attribute	GIS Attribute
Infor EAM Value	GIS Attribute

Note: For linear features, map the GIS Attribute feature length to the Infor EAM Attribute equipment length, and then map the GIS Attribute for the feature's unit of measure to the Infor EAM Attribute

equipment length unit of measure to enable linear equipment capabilities in Infor EAM. You must create your own GIS attribute in ESRI for the feature's unit of measure.

8 Specify this information:

Action
Choose one of the following options:

Copy
Select to copy the attribute data from the Source system.

Move
Select to move the attribute data from the Source system. After the move is completed, the data will only exist in one system.
Note: If you select **Move**, the system protects **Owner**. Defining an **Owner** implies the data exists in both systems.

Owner
Select the system that controls synchronization when a discrepancy exists between a corresponding feature and equipment record. Data is copied from the **Owner** system to the field of the other system.

Sequence
Select the sequence number of the mapping. If you select any number other than 1, the system enables **Delimiter**.
Note: You must select a **Sequence** number greater than 1 in the event that you map more than one GIS attribute to a single attribute within Infor EAM, e.g., if you map HYDRANT and HYDRANT_ID from GIS to **Asset** EAM within , the system must know which data to list first in the EAM Asset field.

Delimiter
Specify the delimiter value to use in the event that you map more than one GIS attribute to a single EAM Attribute.

9 Click **Submit**.

Defining preferences for the creation of Infor EAM equipment (ESRI)

Define preferences for Infor EAM equipment records that you create from within the GIS system. When you define preferences, specify the equipment profile that GIS should use to create the Infor EAM equipment record when you create features in the related GIS layer.

Note: When creating equipment records, the system populates fields based on field mapping. If there is no mapping available for a field, the system populates the field based on the GIS profile.

Based on the information you enter in the Infor EAM Preferences popup, GIS can automatically create an Infor EAM equipment record in the same layer as its corresponding GIS feature whenever you define a new GIS feature. The system will not create an Infor EAM equipment record if the layer of the GIS feature is not listed in the preferences file.

Note: If you want to save an existing preference file in a different location, relocate the file, and then enter the new file path in Path To Preferences.

To define preferences for the creation of Infor EAM equipment:

1. Open ArcMap to an existing map.
2. Click **ArcEditor**.
3. Click the **Preferences** tab.
4. Specify this information:

   Path To Preferences
   Enter the file path in which to store the Infor EAM preferences.
   Note: ArcMap saves all files as .XML files.

5. Click **Add Preference**.
6. Specify this information:

   Profile
   Enter the Infor EAM equipment profile that ArcMap should use to create Infor EAM equipment records. The system automatically populates **Profile Org.**

   Layer
   Select the GIS layer in which Infor EAM equipment records should appear.

   Auto-create
   Select if you want GIS to automatically create corresponding Infor EAM equipment records for features that you create within GIS.

   Default
   Select if this preference record is the default preference record.
   Note: Each profile can have only one default preference record per layer. You cannot select more than one record containing the same layer as a default record.

7. Click **Submit**.

Defining preferences for the creation of GIS features (Infor EAM)

Define preferences for GIS features that you create from within Infor EAM. When you define preferences, specify the equipment profile related to the layer in which you intend to create the new GIS feature. The system retrieves the default **Layer**, **Location X**, and **Location Y** based on the preference.

Note: When creating features, the system populates attribute data based on field mapping. If there is no mapping available for an attribute, the system populates the attribute data based on the GIS profile.

Also specify how Infor EAM retrieves data for the creation of GIS features. There are three ways to populate data for the creation of GIS features from within Infor EAM: Auto-create, Prompt, and Manual.

Auto-create

If you specify the preference for the creation of GIS features as Auto-Create, when users select a GIS profile when defining new Infor EAM equipment, the system automatically generates a **GIS ID** and populates the default **Layer**, **Location X**, and **Location Y**based on the preference.

Fleet management configuration

Understanding fleet configuration

Use the **Fleet Configuration** page to personalize the vehicle ticketing, maintenance, and billing process for pool, loaner, and/or assignment fleets of vehicles. First, create billing parameters to configure the point at which vehicle tickets are billed. Next, set up billing schedules to determine the billing end dates for the period billing process, and create exceptions to include in bills when needed. Next, grant authorizations to specific user groups for specific vehicle types. Finally, identify fuel, maintenance, and billing categories.

You must also define cost codes, employees, and assets for use in the fleet management module. The cost codes, employees, and assets are not a part of the fleet management module.

Creating parameters for fleet configuration

Set up parameters to determine the **Vehicle Ticket** form behavior and how the vehicle usage will be billed.

To create parameters for fleet configuration:

1. Select **Work > Fleet > Fleet Configuration**.
2. Specify this information:

   Update Ticket PM Details
   Choose one of the following options:
   - **At Issue**

     Select to update the PM details on the vehicle ticket when a vehicle is issued.
   - **At Return**

     Select to update the PM details on the vehicle ticket when a vehicle is returned.
   - **Issue and Return**

     Select to update the PM details on the vehicle ticket when a vehicle is issued and returned.

     Note: Previous and next PM details are updated on the ticket of the specified time(s).

   Min. Hours Billed
   Enter the minimum number of hours to be billed. For example, if the **Min. Hours Billed** is four hours and the vehicle is returned after two hours, the customer will be billed for the minimum amount of four hours.

Offshift Billing Hours
Enter the number of hours if the usage includes any time outside of the billing start and end time. For example, if the normal billing hours are from 8:00 AM to 5:00 PM, any hours before 8:00 AM and after 5:00 PM will be considered offshift billing hours. Vehicles issued or returned outside the billing hours are billed accordingly. The offshift billing hours are billed once every 24-hour period.

Prompt When No Billing Code
Select to provide a warning message from the vehicle ticket if the system cannot find a billing code or markup code on the vehicle ticket at the time the vehicle is issued.

Billing Start Time
Select the time, in hours, at which the normal billing hours for the day should start, and then enter the time, in minutes, at which the normal billing hours should start in the adjacent field.

Billing End Time
Select the time, in hours, at which the normal billing hours for the day should end, and then enter the time, in minutes, at which the normal billing hours should end in the adjacent field.
Note: If both **Billing Start Time** and **Billing End Time** are empty, the system selects a 24-hour billing cycle. **Billing Start Time** must be before **Billing End Time**.

Round Billing Hrs. Up
Select to round the billing hours to the nearest ¼, ½, or whole hour.
Note: If you do not want to round the ticket billing hours up, do not enter a value for **Round Billing Hrs. Up**.

Pool
Select to indicate that the fleet customer and cost code on the vehicle record needs to be updated with the ticket values when a pool ticket is created.

Loaner
Select to indicate that the fleet customer and cost code on the vehicle record needs to be updated with the ticket values when a loaner ticket is created.

Assignment
Select to indicate that the fleet customer and cost code on the vehicle record needs to be updated with the ticket values when an assignment ticket is created.

3 Click **Save Record**.

Note: If the process fails to run automatically as scheduled, click **Run Billing Process** to manually run the billing process. The system generates customer bills, beginning with the earliest **Period End Date** specified on the **Billing Schedules** page of the **Fleet Configuration** form that is past due.

See Setting up billing schedules for fleet configuration on page 173.

You cannot manually run the billing process unless the **Process Start Date/Time** on the **Billing Schedules** page is before the current system date and time; the period has not been billed; Billed on the **Billing Schedules** page is unselected; and the billing process for the record is not currently running or the billing process for the record is running but has been running for longer than 30 minutes.

Setting up billing schedules for fleet configuration

Set up billing schedules to determine what transactions are billed and when they will be created. At the end of the billing schedule, generate customer bills that correspond with the billing schedule Period End Date.

See Creating parameters for fleet configuration on page 171 for more information on running the billing process.

To set up billing schedules for fleet configuration:

1. Select **Work > Fleet > Fleet Configuration**.
2. Click the **Billing Schedules** tab.
3. Click **Add Billing Schedule**.
4. Specify this information:

   Period End Date
   Enter the date at which the billing period will end, e.g., 6/25/05.

   Period Description
   Enter a description of the billing period, e.g., June 2005.

   Process Start Date
   Enter the date at which to start the billing process for the selected billing period.
   Note: The **Process Date**/**Start Time** must be greater than the **Period End Date**.

   Process Start Time
   Enter the time in hours and minutes at which to start the billing process.

5. Click **Submit**.

   Note: If the billing process is currently running for the period, the system selects **In Process**. The system selects **Billed** after the billing process has been run for the billing schedule.

   See Creating parameters for fleet configuration on page 171.

   You can manually select **Billed** to create a starting point for the first billing process.

Creating exceptions for fleet configuration

Create exception codes, and then associate fees with the exception codes that will be included in bills. For example, create an exception code that charges customers for low amounts of fuel in returned vehicles, and then associate a $50 fee for that specific exception. Exception codes are associated with vehicle tickets on the **Exceptions** page of the **Vehicle Ticket** form.

To create exceptions for fleet configuration:

1. Select **Work > Fleet > Fleet Configuration**.
2. Click the **Exception Codes** tab.
3. Click **Add Exception**.
4. Specify this information:

Exception
Enter the exception to be applied to vehicle tickets, and then enter a description of the exception in the adjacent field.

Organization
Enter the organization to which the exception belongs if you use multi-organization security.

Billing Amount
Enter the set fee to associate with the exception during the billing process.

Standard WO
Enter a standard work order that can be used to create work that corrects the exception condition for the vehicle ticket.

Out of Service
Select to prevent the exception from being displayed in the lookups.

5 Click **Submit**.

Granting vehicle ticket authorizations for fleet configuration

Grant vehicle ticket authorizations to define appropriate privileges to user groups for pool, loaner, and assignment vehicle ticket types. Associate specific user groups with specific vehicle ticket types, and then grant authorizations for the user group to insert, delete, and/or update vehicle ticket records of that type.

Note: You can only grant vehicle ticket authorizations if the installation parameter VTTAUTH is set to ON. Contact your system administrator for more information.

To grant vehicle ticket authorizations for fleet configuration:

1 Select **Work > Fleet > Fleet Configuration**.
2 Click the **Vehicle Ticket Authorizations** tab.
3 Click **Add Authorization**.
4 Specify this information:

Ticket Type
Select the vehicle ticket type with which to associate a user group.

User Group
Enter the user group to which to grant vehicle ticket authorizations.

Insert
Select to give the user group authorization to insert new vehicle ticket records.

Update
Select to give the user group authorization to update existing vehicle ticket records.

Delete
Select to give the user group authorization to delete existing vehicle ticket records.

5 Click **Submit**.

Tracking fuel costs for fleet configuration

Track fuel costs and separate fuels costs from other costs by associating part classes that identify fuel parts in inventory. The system bills any parts of the selected class that are issued to vehicles as fuel. Costs related to this billing category are displayed on the bill.

To track fuel costs for fleet configuration:

1 Select **Work > Fleet > Fleet Configuration**.
2 Click the **Fuel** tab.
3 Click **Add Part Class**.
4 Specify this information:

Part Class
Enter the part class that identifies fuel parts in inventory. The system automatically populates the part class description in the adjacent field. The system automatically populates **Part Class Org.**

5 Click **Submit**.

Tracking maintenance costs for fleet configuration

Track maintenance costs for fleet configuration by entering work order types that identify maintenance or non-maintenance related costs for the billing process. Costs related to both maintenance and non-maintenance billing categories are displayed on the bill.

To track maintenance costs for fleet configuration:

1 Select **Work > Fleet > Fleet Configuration**.
2 Click the **Maintenance** tab.
3 Click **Add WO Type**.
4 Specify this information:

WO Type
Select the work order type for which to track maintenance costs.

Maintenance
Select to indicate that the costs are maintenance costs.
Note: If you select **Maintenance**, the costs associated with work orders of this type will display on the **Billing History** page of the **Fleet Customers** form under **Maintenance**. If you unselect **Maintenance**, the costs associated with work orders of the specified work order type will display as non-maintenance costs.

See Viewing Billing Histories for Fleet Customers on page 182

5 Click **Submit**.

Creating fleet billing codes

Create billing codes to determine the normal fees that customers are billed for vehicle usage through the ticketing process. Together, billing codes and markup codes, when associated with specific fleet customers, determine the total rates for specific fleet billing categories.

To create fleet billing codes:

1. Select **Work > Fleet > Fleet Billing Codes**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Enter the organization to which the fleet billing code belongs if you use multi-organization security.

   Code
   Enter a fleet billing code, and then enter a description of the fleet billing code in the adjacent field.

   Class
   Enter the class to which the fleet billing code belongs. The system automatically populates **Class Org.**

   Out of Service
   Select to prevent the fleet billing code from being displayed in the lookups.

4. Click **Save Record**.

Setting up rates for fleet billing codes

Set up rates for fleet billing codes. Specify particular rates for particular dates by setting up start dates and end dates for the rates. For example, a usage rate might fluctuate during different times of the year. Set up usage rates for usage charges, mileage rates for mileage charges, and insurance rates for insurance charges.

To set up rates for fleet billing codes:

1. Select **Work > Fleet > Fleet Billing Codes**.
2. Select the fleet billing code for which to set up rates, and then click the **Rates** tab.
3. Click **Add Rate**. The system automatically populates all currency fields.
4. Specify this information:

   Start Date
   Enter the start date of the rate.

   End Date
   Enter the end date of the rate.

   Note: Start Date must be on or before the **End Date**.

   Usage Rate Type
   Choose one of the following options:

- **Hourly**

  Select to bill usage charges by the hour.
- **Billing Period**

  Select to bill usage charges according to the billing period.
- **Usage Charge**

  Enter the usage charge for the rate, if the rate is a usage rate.

  Note: To set up a usage rate, you must enter both a **Usage Rate Type** and a **Usage Charge**.

Mileage Charge
Enter the mileage charge for the rate, if the rate is a mileage rate.

Insurance Charge
Enter the insurance charge for the rate, if the rate is an insurance rate.

5 Click **Submit**.

Creating fleet markup codes

Create fleet markup codes. Markup codes are used to charges additional fees above and beyond the normal fees, i.e., profit margin. Together, billing codes and markup codes, when associated with specific fleet customers, determine the total rates for fleet billing categories.

To create fleet markup codes:

1 Select **Work > Fleet > Fleet Markup Codes**.

2 Click **New Record**.

3 Specify this information:

Organization
Enter the organization to which the fleet markup code belongs if you use multi-organization security.

Code
Enter a fleet markup code, and then enter a description of the fleet markup code in the adjacent field.

Class
Enter the class to which the fleet markup code belongs. The system automatically populates **Class Org.**

Out of Service
Select to prevent the fleet markup code from being displayed in the lookups.

4 Click **Save Record**.

Setting up rates for fleet markup codes

Set up rates for fleet markup codes. Specify particular rates for particular dates by setting up start dates and end dates for the rates. A markup can be expressed as a flat rate or a flat percentage. For example, select to mark up the cost of fuel by 20 USD (per inventory UOM) or by 50 percent.

Note: You cannot enter a markup charge and a markup percentage for the same markup code.

To set up rates for fleet markup codes:

1. Select **Work > Fleet > Fleet Markup Codes**.
2. Select the fleet markup code for which to set up rates, and then click the **Rates** tab.
3. Click **Add Rate**.
4. Specify this information:

   Start Date
   Enter the start date of the rate.

   End Date
   Enter the end date of the rate.
   Note: **Start Date** must be on or before **End Date**.

   Fuel
   Enter the markup amount for fuel charges.

   Labor
   Enter the markup amount for labor charges.

   Parts
   Enter the markup amount for parts charges.

   Contract Labor
   Enter the markup amount for contract labor charges.

   Pool Mileage
   Enter the markup amount for mileage charges on pool tickets.

   Loaner Mileage
   Enter the markup amount for mileage charges on loaner tickets.

   Assignment Mileage
   Enter the markup amount for mileage charges on assignment tickets.

   Pool Usage
   Enter the markup amount for usage charges on pool tickets.

   Loaner Usage
   Enter the markup amount for usage charges on loaner tickets.

   Assignment Usage
   Enter the markup amount for usage charges on assignment tickets.

Insurance
Enter the markup amount for insurance charges.

Fuel %
Enter the markup percentage for fuel charges.

Labor %
Enter the markup percentage for labor charges.

Parts %
Enter the markup percentage for parts charges.

Contract Labor %
Enter the markup percentage for contract labor charges.

Pool Mileage %
Enter the markup percentage for mileage charges on pool tickets.

Loaner Mileage %
Enter the markup percentage for mileage charges on loaner tickets.

Assignment Mileage %
Enter the markup percentage for mileage charges on assignment tickets.

Pool Usage %
Enter the markup percentage for usage charges on pool tickets.

Loaner Usage %
Enter the markup percentage for usage charges on loaner tickets.

Assignment Usage %
Enter the markup percentage for usage charges on assignment tickets.

Insurance %
Enter the markup percentage for charges on insurance tickets.

5 Click **Submit**.

Setting up fleet customers

Set up fleet customers to use throughout the Fleet Management system. Set up billing details to determine the costs for which the customer is billed.

To set up fleet customers:

1 Select **Work > Fleet > Fleet Customers**.
2 Click **New Record**.
3 Specify this information:

Organization
Enter the organization to which the fleet customer belongs if you use multi-organization security.

Fleet Customer
Enter the name of the fleet customer, and then enter a description of the fleet customer in the adjacent field.

Class
Enter the class to which the fleet customer belongs. The system automatically populates **Class Org.**

Billable
Select if the customer will be billed.
Note: You must select **Billable** to generate bills for the customer.

Out of Service
Select to prevent the fleet customer from being displayed in the lookups.

Bill for No Charges
Select to print a bill by default when the bill is for $0.

Maintenance Labor
Select to bill for maintenance labor.

Maintenance Contract Labor
Select to bill for maintenance contract labor.

Maintenance Parts
Select to bill for maintenance parts.

Fuel
Select to bill for fuel.

Mileage
Select to bill for mileage.

Usage
Select to bill for usage.

Non-maintenance Labor
Select to bill for non-maintenance labor.

Non-maintenance Contract Labor
Select to bill for non-maintenance contract labor.

Non-maintenance Parts
Select to bill for non-maintenance parts.

Insurance
Select to bill for insurance.

Exceptions
Select to bill for exceptions.

4 Click **Save Record**.

Associating cost codes with fleet customers

Associate cost codes with fleet customers to correctly display transaction costs on fleet bills.

To associate cost codes with fleet customers:

1. Select **Work > Fleet > Fleet Customers**.
2. Select the fleet customer with which to associate cost codes, and then click the **Cost Codes** tab.
3. Click **Add Cost Code**.
4. Specify this information:

   Cost Code
   Enter the cost code with which to associate the fleet customer. The system automatically populates the cost code description.

5. Click **Submit**.

   Note: You can only associate a cost code with one fleet customer.

Associating billing codes with fleet customers

Associate billing codes with fleet customers. By associating a specific billing code with a specific fleet customer, you determine the rate for a specific billing category. Together billing codes and markup codes, when associated with specific fleet customers, determine the total rates for fleet billing categories such as usage and mileage.

To associate billing codes with fleet customers:

1. Select **Work > Fleet > Fleet Customers**.
2. Select the fleet customer with which to associate billing codes, and then click the **Billing Codes** tab.
3. Click **Add Code**.
4. Specify this information:

   Billing Code
   Enter the billing code with which to associate the fleet customer. The system automatically populates the billing code description.

   Markup Code
   Enter the markup code with which to associate the fleet customer. The system automatically populates the markup code description.

   Note: You must enter a **Billing Code** and/or a **Markup Code**.

   Equipment Type
   Select the equipment type with which to associate the fleet customer.

   Equipment Class
   Enter the equipment class with which to associate the fleet customer. The system automatically populates the equipment class description and **Equip. Class Org.**

Equipment Category
Enter the equipment category with which to associate the fleet customer. The system automatically populates the equipment category description.

Maintenance Labor
Select to bill for maintenance labor.

Maintenance Contract Labor
Select to bill for maintenance contract labor.

Maintenance Parts
Select to bill for maintenance parts.

Fuel
Select to bill for fuel.

Mileage
Select to bill for mileage.

Usage
Select to bill for usage.

Non-maintenance Labor
Select to bill for non-maintenance labor.

Non-maintenance Contract Labor
Select to bill for non-maintenance contract labor.

Non-maintenance Parts
Select to bill for non-maintenance parts.

Insurance
Select to bill for insurance.

Exceptions
Select to bill for exceptions.

5 Click **Submit**.

Viewing billing histories for fleet customers

Views all previously generated bills, or view a specific billing cycle by entering a **Period End Date**. Fleet bill charges are summarized to the unique fleet customer cost code and vehicle level. Charges are displayed by the following categories: Usage, Mileage, Maintenance, Non-maintenance, Fuel, Insurance, and Exceptions. The system also displays a total charge for each bill line, a subtotal, which summarizes the charges for all bill lines by category, an adjustment line, which summarizes all adjustments entered for previous bills that are included in the selected bill, grand totals of each of the charge categories, and a total bill charge. You can also select to print bills and view current charges.

Note: When filtering the billing histories, **Subtotals** and **Totals** may change because they are relative to the specific fleet bill lines in the grid. **Adjustments** totals will not change, as they are related to the entire bill.

To view billing histories for fleet customers:

1 Select **Work > Fleet > Fleet Customers**.
2 Select the fleet customer for which to view billing history, and then click the **Billing History** tab.
3 Specify this information:

   Period End Date
   Enter the period end date for which to view a bill for a specific fleet customer. The system automatically populates**Bill No.** Click **Current Charges** to view billing details from the current billing period's start date through the system date (today). If a past period needs to be billed, the system cannot display current period data. Click**Print Bill** to print the bill. You must enter a **Period End Date** to print the bill. You cannot print current charges.

4 View the billing history.

Viewing fleet bill transactions for fleet customers

View individual transaction information for specific billing categories. For example, select Usage as the Category, and then click View Transactions. The system displays the specific usage transactions that make up the usage subtotal for the selected line. This includes usages charges and usage markup charges.

To view fleet bill transactions for fleet customers:

1 Select **Work > Fleet > Fleet Customers**.
2 Select the fleet customer for which to view fleet bill transactions, and then click the **Billing History** tab.
3 Specify this information:

   Period End Date
   Specify the period end date for which to view fleet bill transactions for a specific fleet customer, and then select the bill line for which to view bill transactions for fleet customers. **Bill No.** is automatically populated.

   Select the fleet bill line for which to view fleet bill transaction for fleet customers.

   Note: You must enter a **Period End Date** and select a bill line to view fleet bill transactions. You cannot view fleet bill transactions for current charges.

4 Choose one of the following options for **Category**:

Option	Description
Usage	Select to show usage charges only.
Mileage	Select to show mileage charges only.
Maintenance Labor	Select to show maintenance labor charges only.
Maintenance Parts	Select to show maintenance parts charges only.

Option	Description
Non-maintenance Labor	Select to show non-maintenance labor charges only.
Non-maintenance Parts	Select to show non-maintenance parts charges only.
Fuel	Select to show fuel charges only.
Insurance	Select to show insurance charges only.
Exceptions	Select to show exception charges only.

5 Click **View Transactions**.
6 View the charges for the specific transaction category.

Viewing fleet bill adjustment transactions for fleet customers

View individual adjustment transaction information for specific billing categories. For example, select **Usage** as the **Category**, and then click **View Adjustment Transactions**. The system displays the specific usage adjustment charges that make up the entire bill. This includes usages adjustment charges and usage markup charges. The system displays all adjustments related to the bill and category.

To view fleet bill adjustment transactions for fleet customers:

1 Select **Work > Fleet > Fleet Customers**.
2 Select the fleet customer for which to view fleet bill adjustment transactions, and then click the **Billing History** tab.
3 Specify this information:

Period End Date
Specify the period end date for which to view fleet bill adjustment transactions for a specific fleet customer, and then select the bill line for which to view fleet bill adjustment transactions for specific customers.

You must specify a **Period End Date** to view fleet bill adjustment transactions. You cannot view fleet bill adjustment transactions for current charges.

Category
Choose one of the following options:

Option	Description
Usage	Select to show usage charges only.
Mileage	Select to show mileage charges only.
Maintenance Labor	Select to show maintenance labor charges only.
Maintenance Parts	Select to show maintenance parts charges only.
Non-maintenance Labor	Select to show non-maintenance labor charges only.
Fuel	Select to show fuel charges only.
Insurance	Select to show insurance charges only.

Option	Description
Exceptions	Select to show exception charges only.

4 Click **View Adjustment Transactions**.
5 View the charges for the specific adjustment transaction category.

Replacing fleet cost codes

Replace non-billable cost codes on all fleet transactions that will be billed to a fleet customer on the next bill. Replace cost codes on transactions before bills are generated and sent to the general ledger.

First, search cost codes for non-billable cost codes that are associated with at least one fleet transaction (work order, inventory transaction, vehicle ticket, or ticket adjustment) that will be billed in the next scheduled billing period and are not currently locked for replacement by another user. Next, replace existing code values with new cost code values for the appropriate transactions.

Note: You must have query privileges on the **Fleet Cost Code Search & Replace** form for the cost code organization in order to search and replace cost codes.

To replace fleet cost codes:

1 Select **Work > Fleet > Fleet Cost Code Search & Replace**.
2 Click **Search**. The system calculates the number of transactions associated with the non-billable cost code for the current period.

   Note: The system only displays non-billable cost codes that are associated with at least one fleet transaction that will be billed in the next scheduled billing period and are not currently locked for replacement by another user. You cannot search and replace cost codes for billed transactions. You cannot search and replace cost codes for periods that are past due and un-billed.

3 Specify this information:

   New Cost Code
   Enter a new cost code for every **Current Cost Code** that must be replaced.

   Remove
   Select to remove the record from the grid.

   See Viewing cost code errors on page 185.

   Note: To remove all of the transactions at once, select **Remove**. To unselect all the line items at once, unselect **Remove**.

4 Click **Replace**.

   Note: You must enter **New Cost Codes** before clicking **Replace**.

Viewing cost code errors

View all errors that occurred during the cost code search and replace process.

To view cost code errors:

1 Select **Work > Fleet > Fleet Cost Code Search & Replace**.
2 Select the record for which to view cost code errors, and then click the **Errors** tab.
3 View the cost code error information.

Archiving management

Archiving records

Archive work orders, purchase orders, stock transactions, electronic records, and audit trail records.

Note: During the archive process archived items are removed from normal view. The items are added to separate archive tables.

Archived items will no longer be available for reports or budgets.

To archive records:

1 Select **Administration > Setup > Archive Records**.
2 Click **New Record**.
3 Specify this information:

   Archive Through
   Specify the date through which to archive.

4 Optionally, select the **Work** check box to archive work orders where System Status=C and Date Completed <=Archive Through, and then specify the **Work Order Type** to further filter the available work records for archiving.

   The following are archived in connection to work order and work order activities:

Archived Items
Qualifications
Schedules
Additional charges
Material Lists with Event
Pick Lists for the WO
Booked hours
Quotations with Services for the WO
Purchase Orders with Direct Materials for WO Activities
Repair Parts
Calculated costs for the WO

Archived Items
Costs
Instruments (Calibration)
Standards (Calibration)
Systems (VMRS)
Test Points (Calibration)
Aspects (Inspection)
Points (Inspection)
Linear References
Account Details
Matched invoices for POs
Requisitions with WO on header
Quotations that reference the Requisition
Receipts for Direct Materials for WO Activities
Dock Receipts for Direct Materials for WO Activities
Issues/Returns for WO Activities
Supplier Evaluations for WO Activities
Warranty Claims for WO Activities
Reservations for WO Activities
Tools requested for WO Activities
Tool Usage for WO Activities
Customer Contracts for the WO
Customer Invoices with lines for the WO
Fixed payments for the customer contract
Dispatches for standing WO Activities

Note: Only those with a **Status** of **Approved** or **Completed** are archived.

5 Select the Purchasing check box to archive purchasing transactions.
The following are archived related to archived invoices:

Archived Items
Invoices with Matched or Cancelled status
Lines
Extra charges and discounts

Archived Items
Extra charges for costs tab
Invoice allocations
Account details

The following are archived related to archived purchase orders:

Archived Items
PO Headers-Order clauses, lines, extra charges, revisions
Blanket Orders
Booked Hours
Dock receipts
Packing slips
Invoices
Order Tracking
Supplier Evaluation

The following are archived related to archived requisitions:

Archived Items
Requisitions headers with Approved or Cancelled status
Lines
WOs
WO repair parts referencing the Requisition/Requisition line
Warranty claims referencing the Requisition/Requisition line
Transactions

The following are archived related to archived quotations:

Archived Item
Quotation headers and lines

6 Select the **Stock Transactions** check box to archive stock transactions with a **Status** of **Approved** or **Cancelled**.

The following are archived related to stock transactions:

Archived Items
Issues/Returns

Archived Items
Price Correction
Manual Price Type Change
Return for Repair
Stocktake with Approved or Cancelled status

7 Select the **Audit Trail** check box to archive the audit trail, a history of changed records.

8 Select the **Electronic Records** check box to archive electronic records.

The following shared tables are archived related to archived work orders, work order transactions, purchasing transactions, and stock transactions.

Archived Items
Descriptions
Audit Trail Records
Electronic Signatures
Event Addresses
Documents
Comments
Custom Fields
Associated Parts
Permits
Account Details

Note: Select a value from 0 to 23 for the ARCHTIME install parameter to schedule a time for the archive process to run between 12:00 AM and 11:00 PM, e.g., for 12:00 AM, select 0 and for 11:00 PM, select 23.

Set the ARCHTIME to null to let the archive process run immediately on clicking **Start**.

9 Click **Start** to begin the archive process.

10 The archive record is saved.

Note: Click **Status** to view the number of records archived.

Click **Stop** to halt the archive process. This will stop the process but will not cancel the process. The current archive record will finish before stopping. The transactions already archived will not roll back.

Viewing archive results

To view archive results:

1 Select **Administration > Setup > Archive Records**.
2 Click the tab corresponding to the archive results you wish to view.
3 View the archive results.

Viewing comments for archived work order events

To view comments for archived work order events:

1 Select **Administration > Setup > Archived Events**.
2 Select the archived work order for which to view comments, and click the **Comments** tab.
3 View the comments.

Basic module data creation

Defining administration setup

Define administration setup options to format the module to your specifications.

To define administration setup:

1 Select **Administration > Administration Setup**.
2 Specify this information:

Line Number Increment (INCRLINO)
Enter the value by which to increase the line number when automatic line numbering is activated.

Minimum Password Length (PASSMINL)
Enter the minimum number of characters allowed for a system password.

Password Duration Days (SECUPWEP)
Enter the number of days in the password expiration period.

Reuse Password Days (SECUPWRP)
Enter the number of days before a user can reuse an expired password.

Infor EAM CD Key (CDKEY)
Enter the Infor EAM CD Key.

Infor EAM Consumer Reports CD Key (CDKEY)
Enter the Infor EAM Consumer Reports CD key.

Infor EAM Report Author CD Key
Enter the Infor EAM Report Author CD key.

Infor EAM Requestor CD Key (CDKEY)
Enter the Infor EAM Requestor CD key.

Infor EAM Barcoding CD Key (7IBCDKEY)
Enter the Infor EAM Barcoding CD key.

User Lock Attempts (SECUVIOL)
Enter the number of consecutive password violations that can occur before a user is locked out of the system. The system administrator must unlock the user.

Mixed Case Passwords (PASSUPER)
Select Yes or No to indicate whether the system allows mixed case for password verification. If NO, the system does not use mixed case in password verification. If YES, the system uses mixed case in password verification.

Tab Save Behavior (TABSAVE)
Select Insert to return to Insert Mode after modifying a record on List/Detail tabs. Select Update to stay in Update Mode after modifying a record.

Database Name (DBNAME)
Enter your database name, i.e. "Production," "Development," or "Test."

Company Name (OURCOMP)
Enter the name that appears on reports.

Report Attachment Upload Directory (ADRDOCUP)
Enter the document upload directory.

Application Server URL (APPURL)
Enter the URL path for the application server.

E-mail Sender (SMTPSEND)
Enter the name of the e-mail sender used by Infor EAM.

E-mail Server (SMTPSERV)
Enter the name or IP address of the SMTP e-mail server.

Conversion Database Tablespace
Enter a separate data tablespace for all conversion data.

Conversion Index Tablespace
Enter a separate index tablespace for all conversion data.

Web User Authentication Method
Select the method for authenticating an Infor EAM web user. Select Standard to use the credential defined on the user's records in Infor EAM. Select LDAP to use the credential defined in the LDAP provider configured for Infor EAM deployment. Select External to use an external authentication service configured for Infor EAM deployment.

Web Service Authentication Method
Select the method for authenticating an Infor EAM Connector web service user. Select Standard to use the credentials defined on the user's records in Infor EAM. Select LDAP to use the credential defined in the LDAP provider configured for Infor EAM deployment. Select External to use an external authentication service configured for Infor EAM deployment.

Mobile User Authentication Method
Select the method for authenticating an Infor EAM Mobile user. Select Standard to use the credentials defined on the user's records in Infor EAM. Select LDAP to use the credential defined in the LDAP provider configured for Infor EAM deployment. Select External to use an external authentication service configured for Infor EAM deployment.

Databridge Authentication Method
Select the method for authenticating an Infor EAM Databridge user. Select Standard to use the credentials defined on the user's records in Infor EAM. Select LDAP to use the credential defined in the LDAP provider configured for Infor EAM deployment. Select External to use an external authentication service configured for Infor EAM deployment.

Enable/Disable KPI Driver
Click to enable or disable KPI driver.

Enable/Disable E-mail Driver
Click to enable or disable e-mail driver.

3 Click **Save Record**.

Defining equipment setup

Define equipment setup options to format the module to your specifications.

To define equipment setup:

1 Select **Administration > Equipment Setup**.
2 Specify this information:

Auto-number Assets (AUTOANUM)
Select Yes or No to indicate whether the system automatically generates asset numbers.

3 Click **Save Record**.

Defining equipment statuses for equipment setup

Define statuses for equipment. Equipment status indicates the state of the equipment listed.

To define equipment statuses for equipment setup:

1 Select **Administration > Equipment Setup**.
2 Click the **Equipment Statuses** tab.
3 Click **Add Status**.
4 Specify this information:

Status
Enter a user code for the equipment status, and then enter a description in the adjacent field.

System Status
Enter the system status. The system automatically populates the system status description.

System Default
Select to set the system default to the current code.

5 Click**Submit**.

Defining equipment types for equipment setup

Define types for equipment. Equipment types indicate the use of the equipment listed.

To define equipment types for equipment setup:

1 Select **Administration > Equipment Setup**.
2 Click the **Equipment Types** tab.
3 Click **Add Type**.
4 Specify this information:

Type
Enter a user code for the equipment type, and then enter a description in the adjacent field

System Type
Enter a code for the system type.
- A (Assets)
- C (Category)
- L (Location)
- S (System)

System Default
Select to set the system default to the current code.

5 Click **Submit**.

Defining equipment criticality for equipment setup

To define equipment criticality for equipment setup:

1 Select **Administration > Equipment Setup**.
2 Click the **Equipment Criticality** tab.
3 Click **Add Code**.
4 Specify this information:

Code
Enter a user code for the equipment criticality, and then enter a description in the adjacent field.

System Default
Select to set the system default to the current code.

5 Click **Submit**.

Defining purchasing setup

Define purchasing setup options to format the module to your specifications.

To define purchasing setup:

1 Select **Administration > Purchasing Setup**.
2 Specify this information:

Allow Over Receipt (OVERRECV)
Choose one of the following options to indicate whether the system allows for items to be purchased over the receipt limit:
- If Yes, allow to receive more than ordered.
- If No, do not allow to receive more than ordered.

Auto-populate Quantity to Receive (RECVAUTO)
Select Yes or No to indicate whether the system automatically populates the quantity to receive on the PO Receipt form

Default PO Receipt Description (DOCKDESC)
Enter the default PO receipt description.

Default Purchase Order Description (PORDDESC)
Enter the default purchase order description. Changing the value does not affect existing data.

Default Requisition Description (REQDESC)
Enter the default requisition description.

3 Click **Save Record**.

Defining expense types for purchasing setup

Define expense types for purchasing. Expense types indicate the use of the expense listed.

To define expense types for purchasing setup:

1 Select **Administration > Purchasing Setup**.
2 Click the **Expense Types** tab.
3 Click **Add Type**.
4 Specify this information:

Type
Enter a user code for the expense type, and then enter a description in the adjacent field.

System Default
Select to set the system default to the current code.

5 Click **Submit**.

Defining requisition statuses for purchasing setup

Define statuses for requisitions. These statuses indicate the state of the requisitions.

To define requisition statuses for purchasing setup:

1. Select **Administration > Purchasing Setup**.
2. Click the **Requisition Statuses** tab.
3. Click **Add Status**.
4. Specify this information:

   Status
   Enter a code for the requisition status, and then enter a description in the adjacent field.

   System Type
   Enter one of the following system types:
   - A (Approved)
   - C (Cancelled)
   - R (Awaiting Approval)
   - U (Unfinished)

   System Default
   Select to set the system default to the current code.

5. Click **Submit**.

Defining purchase order and transaction statuses for purchasing setup

Define statuses for purchase orders and transactions. These statuses indicate the state of the purchase orders and transactions.

To define purchase order and transaction statuses for purchasing setup:

1. Open the **Purchasing Setup** form.
2. Click the **PO and Transaction Statuses** tab.
3. Click **Add Status**.
4. Specify this information:

   Status
   Enter a user code for the purchase order and transaction status, and then enter a description in the adjacent field.

   System Type
   Enter one of the following system types:
   - A (Approved)
   - C (Cancelled)
   - R (Awaiting Approval)
   - U (Unfinished)

System Default
Select to set the system default to the current code.

5 Click **Submit**.

Defining materials setup

Define materials setup options to format the module to your specifications. These options were formerly defined as installation parameters.

To define material setup:

1 Select **Administration > Materials Setup**.
2 Specify this information:

Automatically Associate Parts (AUTOPART)
Select Yes or No to indicate whether the system automatically updates the Parts Associated list for equipment.

See the *Infor EAM User Guide*.

Note: Update the Parts Associated list for approved lines on a receipt. If AUTOPART is set to AUTO, the system verifies whether the received part is associated with an equipment's Parts Associated list when a purchase order receipt is approved for a work order. If the received part is not associated with the equipment's Parts Associated list, the system adds the part to the list using the quantity of the transaction as the Parts Associated quantity.

If the part is already associated on the Parts Associated list, the system updates the quantity of the part on the Parts Associated list to the transaction quantity if the transaction quantity is greater than the existing quantity on the Parts Associated list. If the transaction quantity is not greater, then the system does not make any updates. This association applies to issues, not just receipts.

Auto-number Parts (AUTOPNUM)
Select Yes or No to indicate whether the system automatically generates part numbers.

Default Transaction Description (TRANSDESC)
Enter the default transaction description.

3 Click **Save Record**.

Defining work setup

Define work setup options to format the module to your specifications.

To define work setup:

1 Select **Administration > Work Setup**.
2 Specify this information:

Book Days (COMDAYS)
Enter the number of days during which you can book hours on closed work orders. Infor recommends a minimum value of 1. Changing the value does not affect existing data.

Issue Days (ISSDAYS)
Enter the number of days for which issues can be made after you close a work order. Valid values are any non-negative numbers. Changing the value does not affect existing data.

Return Days (RTNDAYS)
Enter the number of days that parts can be returned to the store after the work order has been closed. Valid values are any non-negative numbers. Changing the value does not affect existing data.

Tool Days (TOOLDAYS)
Enter the number of days to update tool usage costs after completion of a work order.

Non-Work Order Days (NPRDAYS)
Enter the number of days for which you can book past nonproductive hours, which is labor performed without a work order. Changing the value does not affect existing data.

Cascade Work Order Status (EVTCASCD)
Select Yes or No to indicate whether changing a parent work order's status to Closed or Cancelled causes the status of child work orders also to change.

Enforce Work Order Dates (BOOKDATE)
Select Yes or No to indicate whether to enforce date constraints when booking hours. If set to No, the system ignores the constraints. If set to Yes, the system enforces the constraints.
Note: Setting this parameter OFF may result in inconsistencies within your booked hours data.

3 Click **Save Record**.

Defining work order priorities for work setup

Define work order priorities. These priorities indicate the order in which work orders should be completed.

To define work order priorities for work setup:

1 Select **Administration > Work Setup**.
2 Click the **Work Order Priorities** tab.
3 Click **Add Code**.
4 Specify this information:

Code
Enter a user code for the work order priority, and then enter a description in the adjacent field.

System Default
Select to set the system default to the current code.

5 Click **Submit**.

Defining work order statuses for work setup

Define work order statuses. These statuses indicate the state of existing work orders.

To define work order statuses for work setup:

1. Select **Administration > Work Setup**.
2. Click the **Work Order Statuses** tab.
3. Click **Add Status**.
4. Specify this information:

   Status
   Enter a user code for the work order status, and then enter a description in the adjacent field.
   - A (Approved)
   - C (Cancelled)
   - R (Awaiting Approval)
   - U (Unfinished)

   System Status
   Enter a code for the system status. The system automatically populates the system status description.

   System Default
   Select to set the system default to the current code.

5. Click **Submit**.

Defining work order types for work setup

Define work order types. These types indicate the condition of existing work orders.

To define work order types for work setup:

1. Select **Administration > Work Setup**.
2. Click the **Work Order Types** tab.
3. Click **Add Type**.
4. Specify this information:

   Type
   Enter a user code for the work order type, and then enter a description in the adjacent field.

   System Type
   Enter a code for the system type.
   - A (Assets)
   - C (Category)
   - L (Location)
   - S (System)

   System Default
   Select to set the system default to the current code.

5 Click **Submit**.

Appendix

Understanding installation parameters

During the Infor EAM installation process, installation parameters enable different modules/system components and establish many default values for your system, such as multi-organization security, part pricing, etc. Part of the installation process involves running scripts that set these default values in the Infor EAM database, and many of the scripts contain values known as installation codes or parameters.

This appendix contains a complete listing of all the installation parameters used for Infor EAM broken down by modules, as well as codes related to add-on modules and other advanced system features.

Many of the parameters set during installation are "fixed," which means that once the parameter is set, the value/setting of the parameter cannot be changed or modified. Fixed parameters are also designated in the tables below.

Unless otherwise indicated, all non-fixed parameters can be set as necessary following the Infor EAM installation to tailor your system environment.

See Defining installation parameters on page 11.

Barcode parameters

Barcoding is an add-on module for both Infor EAM (Oracle Forms) and/or Infor EAM that enables you to design and print barcode labels for assets, parts, work orders, etc.

Set values for barcode parameters according to the following table.

For more information on setting values for parameters, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
BARCODB	B	This code indicates the prefix of the bar-code bin.	Yes
BARCODL	L	This code indicates the prefix of the bar-code lot.	Yes
BARCODN	N	This code indicates the prefix of the serial number of the barcode equipment.	Yes
BARCODO	O	This code indicates the prefix of the bar-code equipment.	Yes

Code	Example	Description	Fixed
BARCODP	P	This code indicates the prefix of the barcode part.	Yes
BARCODS	S	This code indicates the prefix of the barcode store.	Yes
BARCODV	V	This code indicates the prefix of the barcode physical inventory.	Yes
BARCODW	W	This code indicates the prefix of barcode of work order and activity.	Yes
BARFILL	#	Single-character filler between a work order and activity bar code	No

Base parameters

Base parameters are related to core system components and features that must be set for Infor EAM (Oracle Forms) and Infor EAM to work properly. Base parameters also include settings for Databridge.

Set values for base parameters according to the following table.

For more information on setting values for parameters, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
$BTRACE	No	Enables the BAIM trace utility. Set the parameter to Yes to enable the trace functionality. Set the parameter to No to disable the trace functionality. The default value for this parameter is No and should only be set to Yes at the request of a customer support technician.	No
$CATSF	1	Financial Parameter for Category code for type SF	No
$CATSH	1	Financial Parameter for Category code for type SH	No
$CATST	1	Financial Parameter for Category code for type ST	No
$LTR CDIR	F:\BAIMTRACE	Identifies the trace file directory created on the Infor EAM server for the insertion of trace files for local transactions The value used in this parameter should be from the perspective of someone looking at a command prompt on the server. Do not use the value of a mapped drive.	No

Code	Example	Description	Fixed
$RE QNUM	YES	Parameter for Requisition Number from Infor EAM to be sent to `APPS`	No
$RTR CDIR	F:\BAIMTRACE	Identifies the trace file directory created on the Oracle Applications server for the insertion of trace files for remote transactions You must only specify a value for $RTR CDIR for implementations in a distributed environment. The value used in this parameter should be from the perspective of someone looking at a command prompt on the server. Do not use the value of a mapped drive.	No
$SERVUOM	EA	Unit of Measure for Service types to be sent to APPS	No
$SFLTYPE	1	Financial Parameter for Line type for type SF	No
$STL TYPE	1	Financial Parameter for Line type for type SH,ST	No
@ADDPO	Y	This code indicates whether the Databridge Add PO (Outbound) transaction is activated.	No
@AD DREQ	Y	This code indicates whether the Databridge Add Requisition transaction is activated.	No
@CANPO	Y	This code indicates whether the Databridge Cancel PO (Outbound) transaction is activated.	No
@CAN PORL	N	This code indicates whether the Databridge Cancel requisition lines for Cancel PO (Inbound) transaction is activated.	No
@CAN REQ	Y	This code indicates whether the Databridge Cancel Requisition transaction is activated.	No
@CHG PO	Y	This code indicates whether the Databridge Change PO (Outbound) transaction is activated.	No
@CHGREQ	Y	This code indicates whether the Databridge Change Requisition activated.	No
@DBPID	2	Databridge `DUNS+4` partner ID	Yes

Code	Example	Description	Fixed
@DOCK REC	N	Indicates whether the Databridge Receive-PO transaction will support on-dock receipts. Set to `Y` to enable on-dock receipts for the ReceivePO transaction.	No
@HM SINT	NO	Infor EAM is integrated with Infor HMS. Enter `YES` if integrated. Enter `NO` if not integrated.	No
@LDPAY	Y	This code indicates whether the Databridge Load Payable (Outbound) transaction is activated.	No
@NEWACT	N	This code indicates whether to automatically create an activity when `INFOREAM.ACT` tag is null.	No
@NEW PART	N	This code indicates whether to automatically create a new part when `ITEM` tag is null.	No
@NIT MOUT	N	This code indicates whether the Databridge Sync Item (Outbound) transaction exports temporary parts.	No
@PORECV	Y	This code indicates whether the Databridge Receive PO (Outbound) transaction is activated.	No
@SYNCITM	Y	This code indicates whether the Databridge Sync Item (Outbound) transaction is activated.	No
@SYNCPRJ	Y	This code indicates whether the Databridge Sync Proj Info (Outbound) transaction is activated.	No
@SYN CRES	Y	This code indicates whether the Databridge Sync Reservation transaction is activated.	No
@SYNC WO	Y	This code indicates whether the Databridge Sync Maint Order transaction is activated.	No
@UP DINV	Y	This code indicates whether the Databridge Update Invy (Outbound) transaction is activated.	No
@UP DPTM	Y	This code indicates whether the Databridge Update person time (Outbound) transaction is activated	No
~QUEUES~	1	Number of concurrent queues	No
~SLEEP~	15	This code indicates the interval time (in seconds) for the `BDRV` driver.	No

Code	Example	Description	Fixed
~SLEEPB0	86400	This code indicates the interval time (in seconds) for `BDRV` queue 0.	No
~SLEEPT0	3600	This code indicates the interval time (in seconds) for `TDRV` queue 0.	No
7IACD KEY	000-0000-00000-XXXX	Infor EAM CD key	No
7IBCD KEY	000-0000-00000-0000	Infor EAM Barcode module CD key	No
7ICCD KEY	000-0000-00000-XXXX	Infor EAM Reports Consumer CD Key	No
7IMCD KEY	000-0000-00000-000A	Infor EAM Mobile CD key	No
7IPCD KEY	000-0000-00000-XXXX	Infor EAM Reports Author CD Key	No
7IWCD KEY	000-0000-00000-000C	Infor EAM Mobile CD key	No
AC COUNT	YES	This code indicates whether accounting information is to be upgraded to use the `DR/CR` format `(YES)` or uses * for all accounts `(NO)`.	No
AD VREPT	YES	Indicates whether you are using the Infor EAM Advanced Reporting or another reporting product. Set to `YES` to indicate that you are using the Advanced Reporting Module. Set to `NO` if you are using another reporting product or Crystal Clear Reporting.	No
AMSG COST	250	Indicates the maximum allowable SQL score for Alert Management grid Dataspies.	No
AP-PLGWH	25x25	Specifies the width and height of the image displayed on the header of the application in widthxheight format.	No
APPLO-GO	http://google.com/image.gif	Determines the image displayed on the header of the application. Specify the URL location of the image to display it. Leave blank to use the default image. **Note:** If a value is specified, Infor strongly recommends also setting a value for `APPLGWH`.	

Code	Example	Description	Fixed
APP-NAME	Infor EAM	Determines the application name displayed on the login page and the header of the application. **1** To display the default application name, leave blank. **2** To exclude or not display an application name, enter a hyphen. **3** To display an alternate application name, specify it.	No
ARCHTIME	2	This code indicates the time of day at which the archiving process runs. Values are in 24-hour time (0-23). The default is `'2'` (2:00 A.M.) Leave this value blank to execute the archiving process immediately.	No
ARCREC	NO	This code indicates whether Infor EAM stores error records from the data collection module in table `R5ARCINTERRORS`. If set to `YES`, the system stores the records in `R5ARCINTERRORS`. If set to `NO`, the system does not store the records.	No
ASDEP TYP	SL	Default depreciation method: This code indicates the default depreciation method for asset depreciation. However, you can also set the depreciation method at the organization level. `SL`= straight line `SYD`=sum of years digits `DDB`=double declining balance `UOO`= units of output	No
AU TOANUM	NO	This code indicates whether Infor EAM automatically generates asset numbers.	-
AUTOKB NM	NO	This code indicates whether the system auto-generates knowledge base article codes. Valid values are `'YES'` and `'NO.'`	No
BRE TRIES	5	Maximum number of retries in the `BDRV` driver.	No
CAS CADE	YES	This code indicates whether cascading occurs for cost code changes made on the equipment forms (Asset, Position, System) to the **Equipment** tab of the **PM** form.	No

Code	Example	Description	Fixed
CDKEY	000-00A0-00000-B0C0	CD key code. Enter the number from the CD label in `MP5SET.SQL` when installing the Infor EAM Oracle database.	No
CD KEYREQ	000-00A0-00000-B0C0	Infor EAM Requestor CD key code.	No
CGMPON LY	NO	This code indicates whether Infor EAM will create an electronic record and/or require an electronic signature for work performed on `cGMP` equipment. To configure electronic records and signatures for `cGMP` equipment, you must set this parameter to `YES` and set up electronic records and signatures for the `EVNT` entity. If `CGMPONLY` is set to `YES` and you have configured electronic records/signatures for the `EVNT` entity, Infor EAM will only create an electronic record and/or require an electronic signature for any work orders created for `cGMP` equipment. If `CGMPONLY` is set to `NO` and you have configured electronic records and signatures for the `EVNT` entity, Infor EAM will create electronic records and/or require an electronic signature for all work performed on any equipment.	No
CMOR GALL	*	Select `Yes` to add all common Org.'s to the new users, and to attach a new common Org. to all users. Select `No` if you don't want to add all common Org.'s to the new users, and you do not want to attach a new common Org. to all users. Select `*` to add `*` common Org.'s to the new users, and to attach a new `*` common Org. to all users.	No
CSV DATEF	YYYY-MM-DD	`CSV` Export date format. This is the java format of the date fields to be exported.	No
DBNAME	Production	This code identifies your database, such as `'Production'`,`'Development'` or `'TEST'`. The install parameter also supports the use of four standard variables: `MP5USER`, `:MP5DFLTORG`, `:MP5GROUP`, and `:MP5ORG`.	No

Code	Example	Description	Fixed
DEF CALLR	4	This code defines the default value for **Find Caller By** on Service Request. `1` = E-mail, `2` = Customer, `3` = Name, `4` = Phone. Valid values are `1`, `2`, `3`, and `4`.	No
DE FCURR	EUR	Base currency. All rates for other currencies refer to this default currency. Do not change this setting once in use. After you set this default, you cannot change it without introducing inconsistencies to the database.	No
DE FLANG	FR	Base language. Infor EAM uses this parameter during installation. Do not change this setting once in use. After installation, you cannot change this value because Infor EAM cannot retrieve certain system records in an alternative language.	Yes
DEFORG	*	Default Organization value for entities with multi-organization security set to `OFF`.	Yes
DSSLTIME	60, 90	The amount of time, in seconds, that will flag a Dataspy as slow. Once it is flagged as slow, the user will be warned each time they attempt to run the Dataspy. Leave blank to disable.	No
DOCOVR WR	YES, NO	Set to YES to allow previously uploaded documents to be updated. if set to YES, a copy of the overwritten document is not maintained. Set to NO to prevent overwriting previously uploaded documents. This parameter is not enforced when Infor Document Management (IDM) is in use.	
DUAL CURR	EUR	Dual currency. `EUR` indicates whether to use the triangular conversion method to convert currency amounts to and from `EURO` currency.	No
ENX HOST		ENX Suite Host URL (e.g. http://servername:8080/enxsuite)	No
EPAKURL	http://www.google.com/?what=yes	URL path for the EPAK server. This path will be used to display `EPAK` content for Infor EAM.	No

Code	Example	Description	Fixed
ES MONTHS	3	Number of months for which to (re)calculate Energy Star readings. For example, if the current month is May and the number of months is set to 3, then readings will be created for February, March, and April.	No
FAAMOD	OFF	This code indicates whether the user must enter a **Certification Number** and **Certification Type** for electronic signatures, which are required by the Federal Aviation Administration (FAA) for electronic signatures. Certification numbers and types are associated with employee records on the **Qualifications** tab of the **Employee** form.	No
FLXAUDIT	999999	This number determines the number of milliseconds after which the performance of Flex statements will be audited if the statement takes longer.	No
FRONTPG	YES	Print front page code. This code indicates the default value for **Include Front Page** on the Print dialog box. The default value for this parameter is `YES`. If the parameter is set to `YES`, **Include Front Page** is selected by default. If the parameter is set to `NO`, **Include Front Page** is unselected by default.	No
GDPROPTN	ON	Set to ON to enable the Revoke option for Callers, Contacts, Employees, Supervisors and Users. Set to OFF to hide the Revoke option.	No
GRID COST	100	`SQL` score for Dataspys	No
HOSTED	-	This code indicates whether the installation is hosted.	Yes
HTML COMM	OFF	Set to ON to display the HTML editor bar on the **Comments** page. Set to OFF to hide the HTML editor bar.	No
IDM-SRVR	IDM URL(e.g. https://servername:8080/ca/)	URL of the Infor Document Manager application server.	No
INBXSCOR	100	`SQL` score for inbox queries. The setting of this parameter determines whether or not the system will allow inbox queries to run that do not have a sufficient score.	No

Code	Example	Description	Fixed
INCRLINO	1	Increment value. Enter the value by which to increase the line number when automatic line numbering is activated.	No
INSPCFV	NO	Indicates whether to use the inspection type `C`, `F`, `V` in Infor EAM Mobile. Valid values are `YES` or `NO`.	No
INST CODE	YD04O5VXVXY2	Installation code. Infor EAM uses it for several internal checks. Do not change this code.Infor EAM will not function if you modify this code.	Yes
KEEP BOT	+	Keep boiler texts. A `+` value indicates Infor EAM will not overwrite user-adapted boilertexts when you upgrade the system.	No
KPISCOR	100	`SQL` score for KPI queries.	No
KPISLEEP	1	Enter, in days, how often the KPI driver (KDRV) checks for data to process. Must be a positive integer.	No
LDAP PATH	OFF	Enables the LDAP server component for Infor EAM.	No
LDAPSERV	http://myserver.mycompany.com: 8080/oc4jldap/LDAPAuth	The URL identifying the location of the LDAP servlet.	No
LGNCON	STD	This code stores the login authentication method used for the Infor EAM Connector(web services) users. Set to `STD`to use the credential defined on user records within EAM. Set to `LDAP` to use the credential defined in the LDAP provider configured for the EAM deployment. Set to `EXT` to use an external authentication service configured for the EAM deployment.	No
LGNDBR	STD	This code stores the login authentication method used for Databridge users. Set to `STD`to use the credential defined on user records within EAM. Set to `LDAP` to use the credential defined in the LDAP provider configured for the EAM deployment. Set to `EXT` to use an external authentication service configured for the EAM deployment.	No
LGNDISCL		Specifies the text displayed on the login page. This message can include html tags.	No

Code	Example	Description	Fixed
LGNEAM	STD	This code stores the login authentication method used for EAM web users. Set to `STD`to use the credential defined on user records within EAM. Set to `LDAP` to use the credential defined in the LDAP provider configured for the EAM deployment. Set to `EXT` to use an external authentication service configured for the EAM deployment.	No
LGNLOGO	http://www.google.com/image.gif	Determines the image displayed on the login page. Specify a URL location of the image to display it. Leave blank to use the default image.	No
LGNMOB	STD	This code stores the login authentication method used for Infor EAM Mobile users. Set to `STD`to use the credential defined on user records within EAM. Set to `LDAP` to use the credential defined in the LDAP provider configured for the EAM deployment. Set to `EXT` to use an external authentication service configured for the EAM deployment.	No
LOCALE	NAMERICA	This code identifies the number format to use based on the geographic location of your organization/enterprise. The setting for this code specifies that Infor EAM use the geographic standard for the specified locale regarding the use of decimals and commas in numeric data for all numeric fields. Valid values are `NAMERICA`, `EUROPE`, and `ASI`Use the credential defined on user records within EAM.	No
MFA CLASS	No default value	Specify the full package Java class name of the customer implementation for multi-factor authentication.	No
MOB DOCUL	DATETIME	Specify a suffix that will be appended to the document file name when uploaded from the mobile device to the Infor EAM server. This is done to better ensure uniqueness and help prevent files from being overwritten on subsequent uploads. Valid values are acceptable using comma separation. Default is `DATETIME`.	No

Code	Example	Description	Fixed
MOBORG	NO	This code indicates the Infor EAM Mobile organization downloading mode. Set `MOB ORG` to `YES` for multiple organization mode, or `NO` for single organization mode.	No
MULTI FAC	OFF	Set to `ON` to enable the ability to enter an authentication code in addition to the password on the login screen. Custom configuration is required to enable this option. Set to `OFF` to hide the additional field and only require user name and password.	No
MULTI ORG	YES	This code indicates whether Multi-organization Security (MOS) is activated. You cannot turn off MOS.	Yes
OM BARFMT	NO	This code indicates whether a code and organization are separated with parentheses in Infor EAM Barcode. Valid values are `YES` or `NO`.	No
OPEN MENU	H	This code indicates whether users open the main menu by hovering or clicking. Set to `H` to default the system to open the menu drop-down when the user hovers the mouse over the main menu bar. Set to `C` to default the system to open the menu drop-down when the user clicks on the main menu bar. Navigation inside the menu defaults to hover regardless of this setting.	No
OUR COMP	Your company	Customer name that appears on reports. Modify this code as necessary.	No
PASS MINL	6	Indicates the minimum number of characters allowed for a system password.	No
PASS MAN	0	Indicates the minimum number of non-alphanumeric characters required for a password.	No
PASSMNLR	0	Indicates the minimum number of lowercase characters required for a password.	No
PASSMNNB	0	Indicates the minimum number of numerical characters required for a password.	No
PASSM NUP	0	Indicates the minimum number of uppercase characters required for a password.	No

Code	Example	Description	Fixed
PASSRSET	YES	Determines if the Password Reset option will be displayed on the Login screen. If enabled, the system will require the user to enter a valid **User ID** for which to reset the password. If an email address is specified for the **User ID**, then the user's password will be reset to a random value and also set to expired. This will require the user to change their password as soon as they login using the system generated password. This option will only work for full EAM users, Infor EAM Requestor users and Mobile users.	No
PASS SAID	YES	Indicates whether the User ID can be used as their password. Valid values are `YES` or `NO`.	No
PASSU PER	YES	Indicates whether system allows mixed case for password verification. If set to `YES`, the system does not use mixed case in password verification. If set to `NO`, the system uses mixed case in password verification.	No
PMFS NDEL	30	Indicates the number of days a PM Forecasting session in which forecasting has not been started or a WO Labor Scheduling session in which labor has not been started will be saved. Sessions where forecasting or labor scheduling have begun will be saved until the session is Cancelled or Approved.	No
PRMD SPLY	MULTIPLE	Indicates the number of Infor EAM Mobile prompts displayed. If set to `SINGLE`, the system displays Infor EAM Mobile Prompt in Single Field mode. If set to `MULTIPLE`, the system displaysInfor EAM Mobile Prompt in Multiple Fields mode.	No
PM RVSIGN		This code indicates whether both electronic signature and snapshot are required for PM Revision Control. `ES` = both electronic signature and snapshot required `ER` = only snapshot	No

Code	Example	Description	Fixed
PROD NAME	Infor EAM	Name of the product installed. You can modify this code as necessary.	No
PROD UCTS	D7I	Name of the products used. Values are as follows: `EXTSQL`, If you are using Infor EAM for SQL Server only `EXTORCL`, If you are using Infor EAM (Oracle) only `D7I`, If you are using the Forms interface only `BOTH`, If you are using both Forms interface and Extended interface	No
QUICK DEF	B	This code sets the default value for the **Operator** field on the Quick Filter portion of the Search Bar and Dataspies. Set `QUICKDEF` to `B` for Begins with and `C` for Contains. Applies to text fields only.	No
REFRSH LV	YES	Set to `YES` to designate the system to refresh the data when users return to the List View page from the Record View page or any other tab. Set to `NO` to designate the system to not refresh the List View page.	No
REP BATCH	NO	This code indicates whether to print reports on the server printer (`YES`) or on the client printer (`NO`). **Note:** Infor EAM always treats this parameter as set to `NO`.	No
REPSERV	rep78	The name of the default Oracle report server. Do not use underscores (_) or numbers in the name.	No
REP STOL	10	The amount of time in minutes a report is kept in cache for reuse.	No
RMT MOUT	20	Time out setting for Infor EAM Mobile Real-time web service request, (in seconds).	No
SAFE WARN	NO	Equipment safety warning for Infor EAM Mobile. See Infor EAM Mobile documentation.	No

Code	Example	Description	Fixed
SCN CACHL	OFF	Controls whether a screen with caching Enabled will open to the List View or to the last tab selected prior to leaving the screen. Set to ON to return to the List View. Set to OFF to return to the last tab selected.	No
SDATE	NO	This code determines the transaction date Infor EAM uses for recording/approving a physical inventory in the `R5TRANSACTIONS` table and the `R5TRANSLINES` table. For example, if you start your count on Monday and finish it on Wednesday, this parameter determines which date is recorded. If `YES`, the system records the start date. If `NO`,Infor EAM uses the date the count is approved.	Yes
SECUPWEP	30	Number of days in the password expiration period. You can change this value.	No
SECUPWRP	180	Number of days before a user can reuse an expired password. You can change this value.	No
SECUVIOL	5	Number of consecutive password violations that can occur before a user is locked out of Infor EAM. You can change this value. The system administrator can also unlock the user.	No
SESINTVL	15	Must be set to support multiple application servers. The value specified for this parameter represents a number in minutes. If a session remains inactive for the number of minutes specified for this install parameter, the system will kill the session. **Note:** The system actually doubles the value specified for this parameter setting to create a buffer to ensure that a valid session is not killed. Also, if a value of less than `5` is specified, the system assumes a value of `5` minutes as the setting for the parameter.	No

Code	Example	Description	Fixed
SHOWQURY	NO	This code indicates whether to show the query fields on grids by default. Set `SHOW QURY` to `YES` to show the query fields on grids by default, or set to `NO` to hide the query fields on grids by default.	No
SPECJS	NO	Set SPECJS to YES to use the tenant specified language js file. Set SPECJS to NO to use the common language js file.	Yes
SRD FLTID		Service Request Portal Default ID. Enter the Portal ID that will be used for guests. This Portal ID must have an existing contact information record.	No
STYLECD	default	Identifies the custom web style sheet and associated images.	No
TAB SAVE	INSERT	Set TABSAVE to INSERT to return to Insert Mode after modifying a record on List/Detail tabs. Set TABSAVE to UPDATE to stay in Update Mode after modifying a record.	No
TRAN DESC	Transaction	Transaction description. Changing the value does not affect existing data.	No
UCOLANG	EN	Language code of default user code. Do not change this setting once in use.	Yes
UPLNXS		This code identifies a separate index tablespace for all conversion data uploaded.	No
UPLTBS		This code identifies a separate data tablespace for all conversion data uploaded.	No
WO BARFMT	NO	This code indicates whether work order barcodes are printed in WO#ACT format. Valid values are YES or NO.	No
WSGRID SZ	10000	This code indicates the maximum number of rows returned per block for web service grid.	No
XFR MOPTN	Null (disabled)	To set the X-FRAME-OPTIONS http header, set this install parameter to one of the following values: DENY, SAMEORIGIN, or ALLOW-FROM someurl. Setting this value protects against certain security vulnerabilities (clickjacking) by preventing Infor EAM from running in an iframe.	No

Infor EAM parameters

Infor EAM parameters are related only to Infor EAM and do not affect Infor EAM (Oracle Forms).

Set values for Infor EAM parameters according to the following table.

For more information on setting values for parameters, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
ANALOG	INFO	Analytics logging level. Valid values are: `ERROR`, `WARN`, `INFO`, or `DEBUG`.	No
ANALOGKP	7	Number of days to keep Analytics server log records.	No
ANASYNKP	180	Number of days to keep Analytics synchronization records.	No
AUTOSAVE	YES	This code indicates whether to save work automatically when moving from tab to tab in Infor EAM. Valid values are `YES` and `NO`. If set to `NO`, then Infor EAM displays a message prompting the user to save their work when moving from tab to tab.	No
CANCSTAT	CANC	This code indicates the status used by Infor EAM when a work order is cancelled. You can choose from any equivalent user statuses.	No
DBBUFSIZ	500	Cache size for grid query results	No
DWLABOR	ON	Indicates whether the data warehouse ETL driver will populate the Booked Labor hours and Available Labor data mart. Valid values are `ON` and `OFF`.	No
DWMATL	ON	Indicates whether the data warehouse ETL driver will populate the Daily Material transactions data mart. Valid values are `ON` and `OFF`.	No
DWORDERS	ON	Indicates whether the data warehouse ETL driver will populate the Purchase orders and order lines data mart. Valid values are `ON` and `OFF`.	No
DWPARTS	ON	Indicates whether the data warehouse ETL driver will populate the Parts and Stores daily values data mart. Valid values are `ON` and `OFF`.	No
DWSTATUS	ON	Indicates whether the data warehouse ETL driver will populate the Daily Status Changes data mart. Valid values are `ON` and `OFF`.	No
DWWARNTY	ON	Indicates whether the data warehouse ETL driver will populate the Warranty claims accumulating values data mart. Valid values are `ON` and `OFF`.	No

Code	Example	Description	Fixed
DWWORK	ON	Indicates whether the data warehouse ETL driver will populate the Work orders accumulating and daily values data mart. Valid values are `ON` and `OFF`.	No
EQUIPSTR	C	Define which fields will display in equipment structure. Valid values are `B`, `C`, or `D`. Enter `B` to display both the code and description. Enter `C` to display only the code. Enter `D` to display only the description.	No
REJSTAT	REJ	This code indicates the status used by Infor EAM when a work request is rejected. You can choose from any equivalent user statuses.	No
REPCLEAN	240	Specifies how long in minutes that report temporary data will remain.	No
REPORTMX	100	The maximum number of records that can be returned to the work order, requisition, and purchase order reports in Infor EAM without causing an error.	No
REPPURGE	1440	This code indicates the amount of time (in minutes) to keep an Infor EAM report output file on the server before deleting it.	No
RTIMEOUT	120	This code indicates the amount of time (in seconds) to wait for a report to finish executing before sending it to the report queue.	No
SHOWLOT	Y	Determines whether lots are used for stock information for parts in Infor EAM. The default setting for `SHOWLOT` is `Y`. If `SHOWLOT` is set to `N`, Extended disables the Lot field and it is hidden on forms.	No
SRQREP	5	This code indicates the number of days to search for similar requests. Infor EAM flags similar services requests that are repeated.	No
WHSLEEP	24	This code indicates the time increment (in hours) between each data warehouse ETL procedure update. The default value is `24`.	No
WHSTART	2:00	This code indicates the specific time at which to run the data warehouse ETL update (based on the server time). Enter in the format HH:MM, where HH is `24` hour time, MM is minutes. The default value is `2:00` (2AM).	No
WSLSUPP		Contains a comma separated list of supported Language strings that are encrypted.	No

Code	Example	Description	Fixed
WTIMEOUT	15	The value specified for this parameter indicates the length of time (in minutes) that the client can remain idle/inactive before the server terminates the user's session for both Infor EAM (Oracle Forms) and Infor EAM. After the server terminates the session in Infor EAM (Oracle Forms), the system displays a message indicating that the user's session is being terminated. After acknowledging the message, the server shuts down the Infor EAM application. After the server terminates the session in Infor EAM, the form on which the user was working is still displayed. However, when the user tries again to use the system, the system displays a message and returns to the login screen.	No

GIS parameters

GIS functionality is a feature of Infor EAM only. All of the parameters listed in this section are used only by Infor EAM for GIS Integration. You cannot integrate GIS with Infor EAM (Oracle Forms).

Set values for GIS parameters according to the following table.

See Defining installation parameters on page 11.

Code	Example	Description	Fixed
GISABLC	3	This code identifies the maximum number of advanced buffer layers allowed. The default is `3`.	No
GISADDR	Streets	Name of the Address Layer in the Image Service setup in the `GISSERV` install parameter.	No
GISAIMSP	SHAPEFILE	This code indicates the ArcIMS platform. Acceptable values are `SHAPEFILE` and `SDE`.	No
GISAIMSV	9.0	This code indicates the ArcIMS version. Acceptable values are `4.01` and `9.0`.	No
GISBASEM	Streets	Determines the default ESRI base map that will be used when displaying maps. The REST endpoint specified in parameter GISSERV will overlay the base map. Valid values are: **Streets**, **Imagery**, **Imagery with Labels**, **Terrain with Labels**, **Topographic**, **Light Gray Canvas**, **Dark Gray Canvas**, **Oceans**, **National Geographic**, and **Open Streetmap**.	No

Code	Example	Description	Fixed
GISCCCOL		This code indicates the name of the City or Zone Column in the attributes of the City or Zone Layer. This parameter is used when a user searches by specifying the City or Zone name only.	No
GISCITY		This code indicates the name of the City or Zone Layer in the Image Service setup as the `GISSERV` install parameter. This parameter is used when a user searches by specifying the Zone name only.	No
GISCONTP	TCP	Type of GIS connection. This code indicates the connection type between the Infor EAM application server and the ArcIMS server. Valid values are `TCP`, `HTTP`, or `HTTPS`. If no value is specified, a `TCP` connection is assumed.	No
GISCTCOL		This code indicates the name of the Zone Column in Attributes of the Address Layer.	No
GISDREL	L	Indicates the manner in which the system should display boundary labels for linear equipment (referred to as "routes" in GIS). Valid values are `L`, `N`, and `A`. The default is `L`. If set to `L`, the system displays boundary labels for the longest path (in the event of multiple route paths). If set to `N`, the system displays no boundary labels. If set to `A`, the system displays boundary labels for all paths (in the event of multiple route paths).	No
GISEQUIP	Hydrant	Default equipment layer name. This code indicates the name of the Asset Layer in the Image Service setup in the `GISSERV` install parameter.	No
GISGEOSV	WATER_AXL2, WATER_AXL3	This code indicates the name of the secondary Image Service setup on the ArcIMS server. See the explanation of the `GISSERV` parameter later in this section for the default Image Service setup. Separate values with a comma to enter multiple geocode services, e.g., Service2, Service3, Service4.	No
GISGMAXC	100	This code indicates the maximum number of geocoding match candidates. The default is `100`.	No

Code	Example	Description	Fixed
GISGMIN	20,0,100	This code indicates the minimum geocoding score that the system should display in the Matching Addressess pop-up. The default is `20`. Separate multiple geocoding score values with a comma. The first value listed is the score for `GIS SERV` and subsequent entries are values for each `GISGEOSV`.	No
GISHOST	gisone	GIS server name. This code indicates the host name (and domain if required) of the machine running arcIMS. The URL must be accessible from the Infor EAM server. Do not include http:// in the URL.	No
GISINTRS	& | @	Intersection address searching symbols (default `& | @`). Values should be separated by a space.	No
GISLNCOL	0,255,197	GIS line RGB color (default `0,255,197`). This code indicates the color used for lines in the GIS map by entering an RGB color of `0` to `255`.	No
GISLNWID	4	Specify the width of highlighted lines in the GIS map, or enter `LAYERDEFINED`. **Note:** For more information about the `LAYERDEFINED` value, see "Customizing Map Symbols" in the *Infor EAM User Guide*.	No
GISMAPS	Global	Set to `Global` to display a single map in Infor EAMbased on GIS installation parameters. Set to `Organization` to display maps based on Organization. Set to `Department` to display maps based on Department. Department Security must be enabled when set to Department.	No
GISNARAD	1500	Specify the radius, in meters, used for viewing nearest address. The default value is `1500`.	No
GISMLCOL	255,55,155	GIS markup line RGB color (default `255,55,155`)	No
GISMLWID	4	GIS markup line width (default `4`)	No
GISMPCOL	255,55,155	GIS markup point RGB color (default `255,55,155`)	No

Code	Example	Description	Fixed
GISMPTYP	CROSS	Specify the type of the markup point. Acceptable values are `CIRCLE`, `STAR`,`CROSS`, `SQUARE`, `TRIANGLE`, or `RASTERMARKER`. **Note:** See "Customizing Map Symbols".	No
GISMPWID	15	GIS markup point width (default `15`)	No
GISOVSV	WATER_AXL_OV	Specify the image displayed within the overview map. The default is the default extent of the current map.	No
GISOVSZ	25	Specify the size of the overview map. The number you enter represents a percentage of the width of the current map. The default is `25`.	No
GISPLYBC	255,0,0	GIS polygon boundary RGB color (default `255,0,0`). This code indicates the color used for the boundary of highlighted polygons in the GIS map by entering an RGB color of `0` to `255`.	No
GISPLYCL	0,255,197	GIS polygon fill RGB color (default `0,255,197`). This code indicates the fill color used for highlighted polygons in the GIS map by entering an RGB color of `0` to `255`.	No
GISPLYFT	CROSS	GIS polygon fill type. This code indicates the fill type of highlighted polygons in the GIS map. Valid values are `HORIZONTAL`, , `BDIAGONAL`, `CROSS`, `DIAGCROSS`, `FDIAGONAL`, or `VERTICAL`.	No
GISPLYTR	1	GIS polygon fill transparency (default `1.0`). This code indicates the transparency level of the color fill of highlighted polygons in the GIS map.	No
GISPORT	5300	GIS server port. This code indicates the port number on which the ArcIMS service mentioned in the `GISSERV` install parameter is accessed.	No
GISPTCOL	0,255,197	GIS point RGB color (default `0,255,197`). This code indicates the color used for points in the GIS map by entering an RGB color of `0` to `255`.	No

Code	Example	Description	Fixed
GISPTTYP	CIRCLE	This code indicates the point type in the GIS map. Valid values are `STAR`, `CIRCLE`, `CROSS`, `SQUARE`, `TRIANGLE`, `RASTER MARKER`, or `LAYERDEFINED`. **Note:** See Customizing map symbols on page 164.	No
GISPTWID	15	GIS point width (default 15). This code indicates the width of the point used in the GIS map.	No
GISSBCTL	ON	Determines if the following temporary layers should be cleared when **Select By** map tool is used: address labels, sketches, nearest addresses, and measurements. **Note:** Highlights and selections temporary layers will always be cleared. `ON` will clear temporary layers. `OFF` will not clear temporary layers.	No
GISSBLR	OFF	Determines layers in which features will be selected when the **Select By** map tool is used. `ON` will only select features in the buffer layers chosen in the Search window. `OFF` will select features in all visible layers.	No
GISSERV	WATER_AXL1	This code indicates the name of the primary Image Service setup on the ArcIMS server.	No
GISSFCLR	248,138,29	This code indicates the selected feature highlight color (default `248,138,29`).	No
GISSTCOL		This code indicates the name of the Street Column in Attributes of the Address Layer that is used for non-geocoded address searches.	No
GISSVAXL		GIS map file for service identified by `GIS SERV`. Used for viewing nearest address, e.g., reverse geocoding. **Note:** `GISSVAXL` supports `HTTP`, fully qualified file paths, and `UNC` file paths. The system requires this to load the `XML` of the `AXL` and retrieve the geocoding definitions. Such information is not available via ArcXML responses.	No
GISTFNTC	0,0,0	Specify the RGB font color of the text marker label. Default values are `0,0,0`.	No

Code	Example	Description	Fixed
GISTFNTS	BOLD	This code indicates the font style of the text marker. Valid values are `BOLD`, `BOLD ITALIC`, `ITALIC`, `REGULAR`, `OUTLINE`, or `UNDERLINE`.	No
GISTFNTZ	10	This code indicates the font size of the text marker label. The default value is `10`.	No
GISTFONT	Arial	This code indicates the font of the text marker label. The default value is `Arial`.	No
GISTGCLR	255,255,125	This code indicates the RGB color with which to highlight the text marker label. Default values are `255,255,125`.	No
GISTLPCL	0,0,0	This code indicates the RGB point color of the text label. Default values are `0,0,0`.	No
GISTLPTP	CIRCLE	This code indicates the point type of the text label. Valid values are `CIRCLE` (default), `STAR`, `CROSS`, `SQUARE`, `TRIANGLE`, or `RASTERMARKER`. **Note:** For more information about the `RASTERMARKER` value, see Customizing map symbols on page 164 .	No
GISTLPWD	15	This code indicates the width of the point used in the text label.	No
GISTOCLR	255,255,0	This code indicates the RGB color with which to outline the text marker label. Default values are `255,255,0`.	No
GISTPRMD	ALLUPPER	This code indicates the print mode for the text marker. Valid values are `ALLUPPER`, `ALLLOWER`, `NONE`, or `TITLECAPS`.	No
GISZOFCT	2	This code indicates the default percentage factor by which the map search result will be enlarged. The default value is `2`.	No
URLGIS	http://shotgundemo. inforEAM.net/ attachments/gis-wo/default/	GIS map PDF directory. This value is used when displaying and printing map attachments of the work order.	No

Materials parameters

Materials parameters are related to assets, inventory, and pricing features that must be set for Infor EAM (Oracle Forms) and Infor EAM to work properly.

Set values for materials parameters according to the following table.

For more information on setting parameter values, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
ASSE-TASS	P	This code indicates whether to associate an asset with parts tracked by asset during receipts (R) or during creation of a purchase order (P).	No
AU-TOPART	AUTO	This code determines whether the system automatically updates the Parts Associated list. Update the Parts Associated list for approved lines on a receipt. If AUTOPART is set to AUTO, the system verifies whether the received part is associated with an equipment's Parts Associated list when a purchase order receipt is approved for a work order. If the received part is not associated with the equipment's Parts Associated list, the system adds the part to the list using the quantity of the transaction as the Parts Associated quantity. If the part is already associated on the Parts Associated list, then the system updates the quantity of the part on the Parts Associated list to the transaction quantity if the transaction quantity is greater than the existing quantity on the Parts Associated list. If the transaction quantity is not greater, then the system does not make any updates. Also applies to issues, not just receipts.	No
AUTOP-NUM	NO	This code indicates whether Infor EAM automatically generates part numbers.	No
AU-TOSTOK	Yes	This code indicates whether Infor EAM automatically creates records in tables R5STOCK and R5INSTOCK (+) for data collection.	No
DEFS-TOCK	YES	This code indicates whether the stock management fields (e.g., reorder level, min/max, order level, etc.) should be copied from the highest-level parent store to the child store when a stock record is created in the child store.	No
DEFRQTP	PS	Determines the default line type for requisitions. Specify a user status equivalent to the system status of PS (Stock Parts), PD (Direct Purchase), or RE (External Repair) for the PLTP entity. The system automatically defaults the line type to the specified user status. If DEFRQTP is null or if you enter an invalid value, the system automatically defaults the line type of requisitions to the system status of PS.	No
DEFUOM	EA	Base unit of measure for transactions, such as store issues and returns. Changing this default will not affect existing data. However, Infor strongly recommends using EA (Each) or PEC (Piece, e.g., individual part) as the base unit of measure because of the part-by-asset mechanism.	No

Code	Example	Description	Fixed
DELT-MATL	Y	Delete materials list. Valid values are `Y` and `N`. `Y` implies that Infor EAM will remove the temporary material lists upon completion of the related work order. `Y` also indicates that after completion, the estimated material costs will no longer include data from the temporary material lists. `N` implies that Infor EAM will not remove the temporary material lists.	No
LOTNRG	P	Lot number generation. This code indicates how Infor EAM should generate lot numbers. Valid values are `T` (each receipt), `P` (only parts that are tracked by lot), or - (no lot numbers; lot number ***** is always used). It is possible to change this parameter in a live installation; however, Infor strongly recommends determining a lot-numbering policy before entering data. Changing the value does not affect existing data.	No
MOBSH-WRV	YES	Specify if mobile will do a blind receive of parts on the Active Lines for PO Receipt. Specify YES to show the expected Receipt Quantity. Specify NO to hide the Receipt Quantity.	No
OBST-CASC	A	This code indicates whether parent equipment status changes of I (Installed) or D (Withdrawn) will be cascaded to the child equipment. If set to `A` the system will cascade parent equipment status changes to all children. If set to `D` the system will only cascade parent equipment status changes to dependent children.	No
OVER-RECV	YES	Indicates whether you can receive more parts than the number of parts originally ordered. If set to `YES`, you can receive more parts than the number ordered. If set to `NO`, you cannot receive more parts than the number originally ordered.	No
DRCPTTO	STORE	This code indicates whether Infor EAM receives direct on-dock materials directly to stores or against a work order.	No
PICK-ONCE	YES	This code indicates whether Infor EAM can issue multiple work orders against the same pick list. For example, if this parameter is set to `YES` and you have a pick list associated with a work order and the pick list includes four items for which you only issue one item for the pick list, you can no longer issue items against that pick list again. If the parameter is set to `NO`, you can still issue against the remaining three items on the pick list.	No

Code	Example	Description	Fixed
PLNDRQPO	OFF	This code indicates whether requisitions and unapproved purchase order totals are included in cost summaries for project reports. If the value is `ON`, then Infor EAM includes the cost of requisitions or unapproved purchase orders in the calculation of the total displayed in **Planned** throughout Infor EAM, as well as estimated work order costs that are not yet linked to a requisition or purchase order. If the value is `OFF`, Infor EAM does not include the cost of requisitions or unapproved purchase orders in the calculation of the total displayed in **Planned** throughout Infor EAM. The value for **Planned** is calculated based only on estimated work order costs. Purchase orders with Approved status are displayed in **On Order** throughout Infor EAM until they are Received. However, after purchase orders are received, the purchase order costs are displayed as **Actual** and used in the calculation of **Estimate to Complete**. Infor EAM calculates **Estimate to Complete** for project costs based on the following formula: Current Estimate to Complete – (Planned + Actual)	No
`POSTALLR`	A	Auto status for the DOST entity for full PO receipts. Specify a user status equivalent to the system status `A` (Approved) for the `DOST` entity, and the system automatically changes the purchase order status to the specified value when all the lines on the purchase order are fully received or cancelled. If the purchase order header status is already set to the status defined in this parameter, then the system does not modify the purchase order status. **Note:** If you have set the `POSTALLR` parameter, then the processing rules associated with the `POSTALLR` parameter overrides the rules for the `POSTRECV` parameter.	No

Code	Example	Description	Fixed
POSTRECV	A	Auto status for the `DOST` entity for PO receipts. Specify a user status equivalent to the system status `A` (Approved) for the `DOST` entity, and the system automatically changes the purchase order status to the specified value when one or more lines on the purchase order are partially received. When a `RECV` transaction is approved for a part associated to a purchase order, the system updates the purchase order header status to the specified status. If the purchase order header status is already set to the status defined in this parameter, then the system does not modify the purchase order status. **Note:** If you have set the `POSTALLR` parameter, then the processing rules associated with the `POSTALLR` parameter override the rules for the `POSTRECV` parameter.	No
PRICELEV	P	Price level. This code indicates whether prices must be kept at part level (same part prices for all stores) or at store level (part can have different prices in different stores). Valid values are `P` and `S`. You cannot change this setting once in use.	Yes
PRICETIM	R	Pricing updates. This code determines when Infor EAM updates average unit price and last purchase price. Valid values are `I` (calculate new price at invoice approval) or `R` (calculate new price at receiving approval on basis of PO prices.) Inconsistencies in data will occur if you change this value. After a change, some prices will still be based on the old mechanism while others will be based on the new mechanism. Over time (usually the amount of time required for a complete inventory turnover), a shift will take place from the old mechanism to the new. If the price type of a stock record in the `R5STOCK` table is LIFO or FIFO, Infor EAM calculates pricing updates when you approve a receipt regardless of the setting of this parameter. However, if the setting of this parameter is `I`, Infor EAM calculates pricing updates again when you approve an invoice and/or credit/debit note. Infor strongly discourages changing this setting.	No

Code	Example	Description	Fixed
PRICETYP	A	**Price type**. This code determines the default value for **Price Type** when creating stores and indicates the manner in which Infor EAM prices storeroom materials at the store level. Valid values are `A` for Average price, `FIFO` for First in first out, `L` for Last price, `LIFO` for Last in first out, and `S` for Standard price. `LIFO` or `FIFO` pricing is a time-based pricing method; therefore, you should only set `PRICETYP` to `FIFO` or `LIFO` on the store record if you have selected to keep prices at store level. (See `PRICELEV` earlier in this section.) Infor EAM strongly discourages changing the price type because inconsistencies in data may occur. (See `PRICETIM` earlier in this section.)	No
PROJTRCK	ON	Budget tracking for projects. This code indicates whether **Cost Area**, **Cost Center**, and **Code of Accounts** are displayed and enabled on the **Budgets** tab of the **Project** form. **Cost Area**, **Cost Center**, and **Code of Accounts** enable you to track project costs and budgets more precisely by associating cost areas, cost centers, and codes of accounts with budget codes, as well as enabling project and financial managers to access more detailed information about project budgets on project reports. **Cost Area** , **Cost Center** , and **Code of Accounts** are linked to the `PRCA` (Cost areas), `PRCC` (Cost codes), and `PCOA` (Code of accounts) entities. You can define cost areas, cost codes, and codes of accounts as user codes as necessary based on your project budget tracking preferences on the **System Codes** form. See Defining system codes on page 12.	No
RECVAUTO	YES	This code indicates whether the system should automatically populate the quantity to receive on purchase order receipts. If `RECVAUTO` is set to `YES`, the system automatically populates the **Receipt Qty. (UOM)** on the **Active Lines** page of the **PO Receipts** form with the outstanding quantity for each line on a purchase order receipt. If `RECVAUTO` is set to `NO`, a value must be manually entered for the receipt quantity for each line on the receipt.	No
REQDESC	Requisition	Default requisition description. Changing this value does not affect existing data.	No
RPPRCCAL	NO	This code indicates whether price calculations should be performed when receiving internally repaired spare parts.	No

Code	Example	Description	Fixed
RQSTALLR	A	Auto-status for the `RQST` entity for full PO receipts. Specify a user status equivalent to the system status `A` (Approved), and the system automatically changes the requisition status to the specified value when all lines are fully received or cancelled for a PO receipt. When a `RECV` transaction is approved for a part associated to a purchase requisition via a purchase order (the system does not consider receipts for store to store requisitions) and all of the requisition lines on the requisition are fully received or cancelled, then the system updates the requisition header status to the specified status. If the requisition header status is already set to the value defined by this parameter, then the system does not modify the status. Likewise, if all the lines on a requisition are cancelled and none of the lines have been received, then the system does not consider the setting of this parameter.	No
RQSTRECV	A	Auto-status for the `RQST` entity for PO receipts. Specify a user status equivalent to the system status `A` (Approved), and the system automatically changes the requisition status to the specified value when one ore more lines are partially received for a PO receipt. When a `RECV` transaction is approved for a part associated to a purchase requisition via a purchase order (the system does not consider receipts for store to store requisitions), then the system updates the requisition header status to the specified status. If the requisition header status is already set to the value defined by this parameter, then the system does not modify the status. Likewise, if all the lines on a requisition are cancelled and none of the lines have been received, then the system does not consider the setting of this parameter.	No
RRISS-WAR	YES	This code indicates whether Infor EAM should generate a warning message to check whether you need to create a work order for a spare that has failed when you issue a repairable spare part on the Issue/Return Parts issues form.	No

Code	Example	Description	Fixed
RTNANY	Yes	The `RTNANY` parameter indicates whether you can return a greater quantity of a part than the original issue quantity of the part, and/or whether or not the system allows you to return a part to a different store than the store from which it was issued. If `RTNANY` is set to `YES`, you return any quantity of any parts to any store for which there is a part record on the **Stores** tab of the **Parts** form (the system only requires that a part record exists for the part in the store, not that a bin-stock record exists for the part in the store). If `RTNANY` is set to `NO`, you cannot return a greater quantity of a part than the original issue quantity. The system only allows you to return the quantity of the part that was originally issued to that entity to the same store, bin, and lot. When issuing a part, you issue to an entity (work order, equipment, etc.) from a store. When returning a part, you return from an entity (work order, equipment, etc.) to a store. For example, if `RTNANY` is set to `NO` and if you issue 20 parts to a work order for a piece of equipment on the work order, you can only return those parts from the work order. You cannot return the part directly from the equipment. The `RTNANY` parameter indicates whether you can return a greater quantity of a part than the original issue quantity of the part. If `RTNANY` is set to `YES`, you can return a greater quantity of a part than the original issue quantity. If `RTNANY` is set to `NO`, you cannot return a greater quantity of a part than the original issue quantity.	No
SHOWQ-TY	NO	This code indicates whether to show the expected quantity for Infor EAM Mobile physical inventory.	No
STTKDISC	2	Physical inventory discrepancies. This code indicates how Infor EAM handles physical inventory discrepancies for parts tracked by asset when signing off physical inventories on the **Physical Inventory** form. Valid values are `1`, `2`, or `3`, with `2` being the default value. You can change this value. If the value is `1`, Infor EAM ignores physical inventory discrepancies for parts tracked by asset. If the value is `2`, Infor EAM ignores physical inventory discrepancies for parts tracked by asset, but prints the discrepancies on the sign-off document. If the value is `3`, Infor EAM disables signing off stocktakes for parts tracked by asset.	No

Miscellaneous parameters

Miscellaneous parameters affect settings that are not specific to any module.

Set values for miscellaneous parameters according to the following table.

For more information on setting parameter values, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
~ADRV~	RUNNING 10 JUNE 2004 14:12	Object audit control row	No
~BDRV0~	RUNNING 10 JUNE 2004 14:12	Batch interface error driver	No
~BDRV1~	RUNNING 10 JUNE 2004 14:12	Batch interface driver 1	No
~KDRV~	RUNNING 10 JUNE 2004 14:12	KPI scores	No
~MDRV~	RUNNING 10 JUNE 2004 14:12	Mail data driver	No
~TDRV0~	RUNNING 10 JUNE 2004 14:12	Tracking data error driver	No
~TDRV1~	RUNNING 10 JUNE 2004 14:12	Tracking data driver 1	No

Purchasing parameters

Purchasing parameters are related to purchasing and requisitions that must be set for Infor EAM (Oracle Forms) and Infor EAM to work properly.

Set values for purchasing parameters according to the following table.

For more information on setting parameter values, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
DEFPOTP	PS	Determines the default line type for purchase orders. Specify a user status equivalent to the system status of `PS` (Stock Parts) or `PD` (Direct Purchase) for the `PLTP` entity. The system automatically defaults the line type of purchase orders to the specified user status. If `DEFPOTP` is null or if you enter an invalid value, the system automatically defaults the line type of purchase orders to the system status of `PS`.	No
EXRTUPDT	NO	Manual exchange rate update. Setting this parameter to `YES` will enable users to manually enter exchange rate fields.	No

Code	Example	Description	Fixed
EXTCHG	M	Include adjusted charges in the base price. This code indicates whether Infor EAM automatically includes adjusted charges, such as a discount or an additional charge, when entering information on the Extra charges/Discounts dialog box. If the value is `Y`, Infor EAM automatically selects Include for all the items on the Extra charges/Discounts dialog box and does not allow you to unselect it. If the value is `N`, Infor EAM automatically unselects Include for all the items on the Extra charges/Discounts dialog box and does not allow you to select it. If the value is `M`, Infor EAM automatically unselects Include for all the items on the Extra charges/Discounts dialog box and enables you to select or unselect it as necessary.	No

Code	Example	Description	Fixed
INCREDIT	O	Updates part price for stock for credit and debit notes. This code indicates how Infor EAM handles updating part prices for approved credit and debit notes. Valid values are `O` (Off), `P` (Partial), or`F` (Full), with `O` being the default value. You can change this value. If the Value is `O`, Infor EAM does not update part prices upon approval of a credit or debit note. If the Value is `P`, Infor EAM applies the credit amount in the calculation of Average Price for a part upon approval of a credit note. When the credit amount is greater than the value of the part in stock, Infor EAM applies a portion of the value of the credit amount, up to the value of the part in stock, in the calculation of the average price. By setting the value to `P`, the calculation of the average price might result in an average price of 0 for a part, but it also ensures that the average price cannot be less than 0. The remaining value of the credit amount that is not used in the calculation of the average price is stored as a Credit Balance for the part in stock. If you are using LIFO/FIFO as your pricing method, Infor EAM applies credit amounts similarly to the manner it does if the setting is `P`regardless of the setting you specify for this parameter; however, Infor EAM stores the unused credit amount in the `IVL_LOSTCREDIT` column of the `R5INVOICELINES` table, rather than storing the credit amount as a Credit Balance for the part in stock. If the value is `F`, Infor EAM applies the credit amount in the calculation of Average Price for a part upon approval of a credit note when the credit amount is less than the value of the part in stock. Setting the value to `F` ensures that the calculation of the average price for a part can never result in a value of 0.	Yes
INVADAYS	60	This code indicates the number of days after completion that invoice allocations can be applied to a work order.	No
INVALLOC	NO	Set `INVALLOC` to `YES` to track unallocated invoice differences. Set `INVALLOC` to `NO` to apply all invoice differences to the stock record.	No
INVDESC	Invoice	Invoice description. Changing the value does not affect existing data.	No

Code	Example	Description	Fixed
INVMETH	-	This code indicates the default inventory replenishment method to use for maintaining stock levels. Valid values are (M) for Min/Max, (–) for Reorder level, or (+) for On demand. The default setting for this parameter is Reorder level.	No
INVUPCAT	NO	This code indicates whether the supplier's catalog will be updated upon approval of an invoice.	No
LIMITLEV	L	Limit level. This code indicates if Infor EAM should check the value for orders/requisitions on the header level (H) or line level (L). Changing the value does not affect existing data.	No
MATCHAPP	NO	Automatic approval of matched invoices. This code indicates whether Infor EAM automatically approves invoices for which the cost of all invoice lines has been matched with the cost of the purchase order lines associated with the invoice lines within range of tolerance specified for Match Tolerance Absolute or Match Tolerance % on the **Organization** form. If the value is set to YES Infor EAM automatically assigns A, Approved status for invoices for which all invoice lines have been matched with associated purchase order lines within the specified range of tolerance. If the value is NO, then all invoices must be manually approved.	No
MATCHTOL	0	Match tolerance. This code indicates the tolerated difference (in percentage) between the sum of the invoice lines and the amount specified on the invoice header. Valid values are any non-negative numbers. Changing the value does not affect existing data. **Note:** The MATCHTOL installation parameter is no longer active for Infor EAM (Oracle Forms) or Infor EAM, because users no longer enter a voucher total. Instead, the voucher total is now calculated based on the total invoice costs.	No
POCURR	YES	This code indicates whether Infor EAM allows multi-currency order lines.	No
PORDDESC	Order	Purchase order description. Changing the value does not affect existing data.	No
RCPTCURR	PO	This code indicates which exchange rate Infor EAM uses for receipt or return of goods. PO= exchange rate of purchase order; RCPT= the active exchange at time of receipt/return transaction approval.	No

URL parameters

URL parameters designate locations and directories for schemas, servlets, documents, etc. that must be set for many Infor EAM (Oracle Forms) and Infor EAM add-ons and features to work properly.

Set values for URL parameters according to the following table.

For more information on setting parameter values, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
ADR-DOCUP	http://	Document upload path for Infor EAM Advanced Reporting. The value specified identifies the path from the advanced report server to the document upload directory. Must be a valid URL and can be either `http://` or file `://` `protocol`. The path is necessary to add attachments of type "U" (upload) to the Work Order and Purchase Order reports.	No
DISCSCH	myoracleuser/ mypassword@ mydatabase	The schema connect string for Discoverer	No
DISCVURL	http://myserver.mycompany.com/discoverer/viewer	The URL of the Discoverer viewer	No
ONLMAN	http://myserver.mycompany.com	Contains the full path to the online help	No
OPIMGURL		This install parameter is the absolute URL of the directory where the OPS setup stores the images.	No
RPT-DOCUP	http://mycompany. myserver.com/documents/PDFS	Document upload path for Crystal Clear Reporting. The value specified identifies the path from the Crystal Clear Report Server to the document upload directory. Must be a valid URL and can be either an http:// or file:// protocol.	No
SMTPSEND	mailid@yourcompany.com	Name of the mail sender, which is used in replying to messages	No
SMTPSERV	mail.yourcompany.com	SMTP mail server	No
WDCUPURL	http://myserver.mycompany.com/servlet/WscanUpload	The URL of the web data collection upload file servlet.	No

Work parameters

Work parameters are related to work orders, budgets, and project management features that must be set for Infor EAM (Oracle Forms) and Infor EAM to work properly.

Set values for work parameters according to the following table.

For more information on setting parameter values, see Defining installation parameters on page 11.

Code	Example	Description	Fixed
7ISCDKEY		Infor EAM Caller Login for Service Requests CD key	No
AUTODMEC	Y	This code determines whether the **Remove Equipment** hyperlink on the **Equipment** page of the **Work Orders** form breaks the association between the parent work order and a multiple equipment child work order or whether the system also deletes the multiple equipment child work order. Valid values are Y or N . By default the parameter is set to Y, which means that the system deletes the related multiple equipment child records.	
AUTOPMCL	NO	This code indicates whether to automatically close all released minor PMs at release of the major PMs (YES/NO).	No
BOOKDATE	ON	Indicates whether to enforce date constraints when booking hours. If set to OFF, the system ignores the constraints. If set to ON, the system enforces the constraints. **Note:** Setting this parameter OFF may result in inconsistencies within your booked hours data. Setting BOOKDATE to OFF enables you to book labor hours for a date that is earlier than Date reported. By enabling you to book the hours without any date restrictions based on the Date reported field, you can leave the value for Date reported as is and still book hours for work that has already been completed.	No

Code	Example	Description	Fixed
BOOPLAN	OFF	Booking hours. Valid values are ON and OFF. When booking hours, if the value is ON, Infor EAM gets the trade rate from the activity on which hours are booked. If the value is OFF, Infor EAM gets the rate from the employee table. Changing this value will not affect existing data. If you change this parameter and open work orders exist on which hours have already been booked, inconsistencies will arise. Close work orders before changing BOOPLAN.	No
CALSTD	YES	Determines if calibration standards that have overdue PM work orders can be used to perform a calibration. If CALSTD is set to YES, equipment with overdue PM work orders are available for selection as a calibration standard. If CALSTD is set to NO, equipment with overdue PM work orders are not available for selection as a calibration standard.	No
CASCLOC	NO	Cascade equipment Location changes to PM equipment records. If set to YES cascade changes. If set to NO, do not cascade changes.	No
CLPBWOST	WCMP	This parameter identifies the work order status after checklist Performed By is signed.	No
CLRBWOST	COMP	This parameter identifies the work order status after checklist Reviewed By is signed.	No
CLRRWOST	INPR	This parameter identifies the work order status after checklist Performed By is rejected.	No
COMDAYS	14	Number of days during which you can book hours on closed work orders. Infor recommends a minimum value of `1`. Changing the value will not affect existing data.	No
COVDUPAC	*	This code indicates whether the system allows multiple active warranties. If set to Yes (+), more than one active warranty on a certain equipment can be specified. If set to No(-), only one active warranty on a certain equipment can be specified.	No
COVDURUP	+	This code indicates whether the duration fields are display-only. If set to Yes (+), the duration fields can be entered manually. If set to No (-), the duration fields are display-only.	No
DSCHAVAI	7	Number of days from current date used to calculate labor availability in daily scheduling	No

Code	Example	Description	Fixed
DUPCHECK	ON	If code is set to ON, Infor EAM checks for duplicate and repeated service requests.	No
EVTCASCD	N	Event cascade. This code indicates whether changing a parent work order's status to Closed or Cancelled causes the status of child work orders to also change.	No
INRVCTRL	NO	This code indicates whether Revision control is activated for inspections.	No
INSWOST	L	This code identifies the status used to create work orders from inspection forms. You can choose user codes equivalent to type R (Released).	No
ISSDAYS	0	Issue days. This code indicates the number of days for which issues can be made after you close a work order. Valid values are any non-negative numbers. Changing the value will not affect existing data.	No
JTAUTH	NO	This code indicates whether work order type authorization is activated. Work order type authorization limits which users can update, insert, or delete work orders based on the type of work order.	No
NPRDAYS	14	Nonproductive days. This code indicates the number of days for which you can book past nonproductive hours, which is labor performed without a work order. Note that this parameter may interfere with closed periods data. Changing the value will not affect existing data.	No
PLANLEV	JOB	This code determines the level at which planning will be performed. If JOB is selected then planning can only be done at the job level. If TASK is selected then planning can only be done at the task level. If EITHER then planning can be done on either tasks or jobs.	EITHER

Code	Example	Description	Fixed
PMNEST	YES	Indicates whether to enable the following PM nesting enhancements. Valid values are YES or NO. If YES is selected: The system adjusts the due date forward for nested, more frequent work orders with a status of Awaiting release or Bypassed whenever a work order is Completed. The system adjusts the due date forward for more frequent PM work orders when attempting to release the work order if it is nested with a Completed less frequent work order. If NO is selected: The system adjusts the due date forward for nested, more frequent work orders with a status of Bypassed whenever a work order is completed. The system changes the status of more frequent PM work orders to Released when attempting to release the work order and it is nested with a Completed less frequent work order.	No
PMCRPAST		This code indicates whether Infor EAM can generate new fixed PM work orders with a due date in the past. Valid values are YES and NO. The default setting is NO. If the value is set to YES, Infor EAM creates the next PM work order with a due date that reflects the calculated work order due date and the PM frequency, even if the next due date is in the past. If the value is NO, Infor EAM always creates the PM work order with a future due date.	No
PMRVCAPP	NO	PM Revision Control. This code indicates whether you can create a new revision only from an approved revision.	No
PMRVCDEP	NO	PM Revision Control. This code indicates whether components of a PM depend on the PM itself.	No
PMRVCRES	YES	PM Revision Control. This code indicates whether users can approve lines only from their own departments.	No
PMRVCTRL	NO	PM Revision Control. This code indicates whether PM Revision Control is activated.	No

Code	Example	Description	Fixed
PMWODATE	C	This code indicates the starting date used when calculating the next due date of a variable PM work order. Set to C for completion date, PB for calibration Performed By date, or RB for calibration Reviewed By date.	No
PPMSTAT	A	PM Status. This code indicates the status of a PM work order when generated from a PM schedule. Valid values are `A` for Awaiting Release and `R` for Released. Changing the value will not affect existing data.	No
PROJWOST	L	This code identifies the status used to create work orders on the **Project** form.	No
REOPENPM	NO	Reopen PMs. This code indicates whether a PM work order can be reopened.	No
REQDAYS	-999	Number of days after completing a work order that a requisition can be created against it.	No
RSPCOMP	NO	Indicates whether to display the Qty. Completed on work orders for internally repaired repairable spare parts. If set to NO, the system does not display Qty. Completed. If set to YES, the system displays Qty. Completed and restricts internal repair receipts to completed repairs.	No
RTNDAYS	14	Return days. This code indicates the number of days that parts can be returned to the store after the work order has been closed. Valid values are any non-negative numbers. Note that this parameter may interfere with closed periods data. Changing the value will not affect existing data.	No
SCHPAST	NO	Set to SCHPAST is set to YES to allow scheduling in the past. Set SCHPAST to NO to prevent scheduling in the past.	No
SCHSTAT		The user status of a work order after you have scheduled an activity. You can select any status.	No
SHOWJOB	YES	This code determines whether job plan information is visible in the product. If YES then the Job Plan screen, tabs, and fields will be visible in the product. If NO then this information will not be visible. The default value is NO.	No
SRCLOSE	NO	This code indicates whether to automatically close an associated service request when a work order is closed. Valid values are YES and NO.	No

Code	Example	Description	Fixed
TOOLDAYS	3	This code identifies the number of days to update tool usage costs after completion of a work order.	No
UPWOMATL	N	Determines if the work order planned parts list is updated to include direct requisition and PO line parts if they are not already planned. If 'N', the work order planned parts list is not updated. If 'Y', the work order planned parts list will be updated. If 'P', choose if the work order planned parts list gets updated as lines you add to requisitions and POs.	No
VTTAUTH	OFF	Determines whether the system uses vehicle ticket type authorization. Valid values are ON and OFF.	No
WFFTAUTH	YES	Comments code. Infor EAM uses this code to determine who has authority to change comments in the Comments grid for work orders on the **(WXDONE)** form. If the installation parameter is set to NO, all users can change comments; if the installation parameter is set to YES, only users who can reopen work orders have permission to change comments.	No
WOCLPOUT	NO	This code indicates whether a work order can be closed if purchase requisitions and purchase orders are still outstanding. If set to YES, work orders with outstanding requisitions and purchase orders may be closed. **Note:** This parameter may affect purchase order generation if you allow work orders to be closed for which there are existing open requisitions.	No
WOQUAL	ON	Qualification enforcement for work. Valid values are ON and OFF. When scheduling work, if the value is ON, Infor EAM determines whether an employee is eligible to perform work by comparing the qualifications associated with a work order activity with the qualifications associated with employees on the **Employees** form. Infor EAM enables you to assign any employee with the necessary qualifications/training to perform the work. When scheduling work, if the value is OFF, Infor EAM does not check qualifications for work scheduling, and any authorized users can perform work regardless of any qualifications associated with work order activities.	No

Code	Example	Description	Fixed
WORKDAY	8	Work day hours. This code indicates the default number of hours in a working day. Infor EAM uses this value on the **Activities** tab of the **Work Orders** form to calculate the required number of people when an estimated number of hours and the duration is specified. Changing the value will not affect existing data.	No
WORKWOST	L	This code identifies the user status for work orders when updated by the Generate/Release WOs form. The work order must have the system status R.	No

Organization options

The tables in this appendix display a list of the organization options for Infor EAM multi-organization security (MOS). The tables are organized by corresponding modules for the organization options.

For more information on multi-organization security (MOS) and adding options for organizations, see Implementing multi-organization security (MOS) on page 68.

Base options

See the following table for Base options:

Code	Description	Validation Type	Module	Fixed	Valid Values	Default Value
DOCUMKEY	Value for the Documoto Tenant Encrypted Key (tek).	Free Text	Base	'-'		
DOCUMURL	URL for the Documoto Server.	Free Text	Base	'-'		
DOCUMUSR	Value for the Documoto username.	Free Text	Base	'-'		

Call Center options

See the following table for Call Center module options:

Code	Description	Validation Type	Module	Fixed	Valid Values	Default Value
CASE CASC	Cascades the scheduled dates for case tasks automatically based on the previous tasks and tasks duration.	Code	Call Center	'-'	NO, SCHED BOTH	NO
SREQDSP	Determines which equipment displays. If set to ALL, all equipment is displayed. If set to ASSOCIATED, only equipment associated to the contact is displayed.	Code	Call Center	'-'	ALL, ASSOCIATED	ALL

Equipment options

See the following table for Asset Management module options:

Code	Description	Validation Type	Fixed	Valid Values	Default Value
AINVAPP	Determines resolution of the asset when the asset inventory session is approved, and the Observed Physical/Bin Location is NULL. If FOUND, then system sets the Resolution of the asset to "Asset Found". If NOTFOUND, system sets the resolution of the asset to "Asset Not Found". If BLOCK, the system does not allow approving the session if any unresolved assets exist.	Code	'-'	FOUND, NOTFOUND, BLOCK	FOUND
GENEQMAX	Determines the threshold at which the equipment generation process starts in asynchronous (background) mode. If **Generate Count** is higher than this setting, the process runs asynchronous and the process is queued. Otherwise the process runs synchronous and the user must wait for the process to finish.	Integer	'-'	1, 999999	100

Code	Description	Validation Type	Fixed	Valid Values	Default Value
GENEQWRN	Prevents the start of the equipment generation process when warnings still exist. If set to YES the system asks the user to start the generation process and ignore the warnings. If set to NO, the system does not allow the user to start the generation process.	Code	'-'	YES, NO	NO
GENEQPMR	Prevents the equipment generation process from creating PM work orders if PM revision control is active. If set to YES, the system generates PM work orders without asking for approval. If set to NO, the system will not generate PM work orders. If set to WARNING, the system raises a warning message during the Preview generation.	Code	'-'	YES, NO, WARNING	NO
SRSTSYNC	Determines if the system should maintain a structure record between the header equipment and the segment or the route, if a record is inserted or deleted on the Segments or Routes tab of the equipment screens. If set to I, a structure record will be created at insert. If set to D, the structure record will be removed at delete. If set to ID, the structure is maintained both at insert and delete. If set to OFF, the system will do nothing.	Code	'-'	OFF, I, D, ID	OFF
WSSELECT	Determines the default value of the Include in Move check box on the Associations tab of the Workspace Moves screen. Set to YES to default the selection of the check box. Set to NO to unselect the check box by default.	Code	'-'	NO YES,	YES

Materials options

See the following table for Materials module options:

Code	Description	Validation Type	Module	Fixed	Valid Values	Default Value
IS-STOEMP	Allows the issuing of parts to employee. If the value is NO, parts may not be issued to Employees. If the value is YES, all parts may be issued to employees. If the value is KITS ONLY, only parts tracked as kits may be issued to employees.	Code	Materials	'-'	YES, NO, KITS ONLY	NO
KITLDESC	Provide a default value for Kit Lot Description on Build Kit screen.	Free Text	Materials	'-'		
KITPPULD	IF YES, default Part Pulled checkbox to selected on the Build Kit screen. If NO, default the Part Pulled checkbox to unselected.	Code	Materials	'-'	YES, NO	NO
LOTIEXPL	If NO, the system will not permit issuing a part that has expired (Lot Expiration Date). If YES, the system will allow issuing a part that has expired.	Code	Materials	'-'	YES, NO	YES

Purchasing options

See the following table for Purchasing Management module options:

Code	Description	Validation Type	Module	Fixed	Valid Values	Default Value
IVBYPASS	If set to YES, the system bypasses system rules for validation and processing of invoices from external systems. This option is valid for ION integrations.	Code	Purchasing	'-'	YES, NO	**NO**

Code	Description	Validation Type	Module	Fixed	Valid Values	Default Value
POREVRSN	If YES, Revision Reason is required when creating a new revision of a PO.	Code	Purchasing	'-'	YES, NO	NO

Work options

See the following table for Work Management module options:

Code	Description	Validation Type	Fixed	Valid Values	Default Value
ACTCALL	Specifies the status to automatically assign to the work order after the assignment status of the last activity is Completed, and all other activities are Completed. If left blank, or if the value entered is not a valid value for the system code R (Released), the work order status will not change.	Free Text	'-'		
ACTINFO	Determines what is displayed inside the Activity dropdowns. Set to TRADE to display the description of the trade associated to the activity. Set to NOTE to display the note associated to the activity.	Code	'-'	TRADE, NOTE	TRADE
ACTNOTE	Determines whether or not the system copies the task plan description to the activity note fields. Set to YES to copy the task plan description, and set to NO to prevent the copy.	Code	'-'	YES, NO	NO
ACTSUPP	Selects the preferred supplier of a task plan or job plan on the work order activity, on the job, or on the plan labor record if Hired Labor is selected. If set to YES, the supplier is populated if still blank and a preferred supplier was found. If set to NO, the supplier remains blank and must be manually selected.	Code	'-'	YES, NO	NO
BKPLAUTO	When using Retrieve PO Service Lines on the Book PO Labor screen, Hours Worked is automatically populated for Hours for Service (ST) and Contractor Hire (SH) is automatically populated with the labor hours remaining to be booked for the selected line.	Code	'-'	YES, NO	NO

Code	Description	Validation Type	Fixed	Valid Values	Default Value
CCDUPLCI	Determines whether during approval of a customer contract, the system checks if equipment, projects, or work orders are already used on another active contract with overlapping periods. If ON, the system does not allow the use of the same equipment or projects more than once. If set to OFF, the system does not perform this check. If set to WARNING, the system asks the user what to do. If set to WARNING-CC, the system also considers the charge categories on the other contract and only asks the user if those overlap as well.	Code	'-'	ON, OFF, WARNING, WARNING-CC	ON
CCFIDAYS	Number of days after which no customer invoices will be generated. For Customer Contracts this is after the End Date. For Rentals after the Completed Date. The system will change the Status of the contract or the rental to Finished for this purpose.	Integer	'-'	0, 999999	90
CCGENMAX	Establishes the threshold at which the customer invoice regeneration process starts in asynchronous (background) mode. If the number of contract items multiplied with the number of charge definitions associated to the contract is higher than this setting the process runs asynchronous and the process will be queued. Otherwise the process runs synchronous and the user must wait for the process to finish.	Integer	'-'	1, 999999	100
CHCKL CPB	Determines if a check is performed that all required checklist items are entered or not applicable when signing Performed By. If set to ON, the check is performed. If set to OFF, the signature can be entered without this validation.	Code	'-'	ON, OFF	OFF
CHCKLFUP	Determines if follow-up activities are automatically generated when signing Reviewed By.	Code	'-'	ON, OFF	OFF

Code	Description	Validation Type	Fixed	Valid Values	Default Value
CHCKLGBS	Determines how work order activities are grouped by schedule on the mobile Work Order Checklist screen. If set to REG, the system will use an overdue, due and future group. If set to WEEK, the system will split the month in week numbers where week 1 is day 1-7, week 2 is day 8-14, week 3 is day 15-21 and week 4 is day 22 through the end of the month, and will use these for grouping.	Code	'-'	REG, WEEK	REG
CHCKL-REG	Controls how Regulatory checklist items, marked for Repairs can be completed. If set to N, a valid resolution (or) a combination of a valid resolution and follow-up activity is required. If set to P, a NULL resolution is allowed, along with a follow-up activity. If set to OFF, items can be completed without a resolution or follow-up activity.	Code	'-'	P, N, OFF	N
CHCKLSEQ	Determines if the checklist must be renumbered based on the route attached to the work order. If set to YES, the system renumbers the checklist items.	Code	'-'	YES, NO	NO
CLGROUP	If FULL, the system displays the full tree structure in the closing code lookup with all the levels in the hierarchy. If GROUP, system displays just one level of the hierarchy. If OFF, the closing code lookup operates with no group or hierarchy.	Code	'-'	FULL, GROUP, OFF	OFF
COPY-TOOL	Determines if standard work order tools and PM schedule tools are used to plan, schedule, or plan and schedule tools for work orders. Set to P to copy tool records only to the Plan Tools tab for work order. Set to S to copy tool records only to the Schedule Tools tab for work order. Set to B to create a tool schedule record for the planned hours for each day the activity runs.	Code	'-'	P, S, B	P
CPRC-CLOV	Determines which lookup will be used to categorize capital planning requests. If set to CPRQ, the system will use the default Capital Request Categorization Codes. If set to EMRS, the system will use EMRS codes instead.	Code	'-'	CPRQ, EMRS	CPRQ

Code	Description	Validation Type	Fixed	Valid Values	Default Value
FLUPF-PTP	Determines fi the follow-up work order can have multiple activities with different From Points and To Points. If set to YES, the system allows it. If set to NO, the system does not allow it and one follow-up work order will be created for each activity with a unique From and To Point combination.	Code	'-'	YES, NO	NO
FLUP-TYPE	Determines the type of follow-up a checklist will generate. If set to DM, deferred maintenance activities will be created. If set to WO, a work order will be generated.	Code	'-'	DM, WO	WO
LOTOR-FRQ	Determines the frequency of lockout/tagout (LOTO) reviews, or number of days from the current date after which a LOTO review will be required. It is applied to the Date Review Required during the review of LOTO records.	Integer	'-'	1, 999999	365
LOTOR-REQ	Determines if a review of lockout/tagout (LOTO) records is required. If set to YES, the system requires approval by a reviewer for deletion of LOTO records. If set to NO, the records can be deleted without review.	Code	'-'	YES, NO	YES
LOTOR-REV	Determines if anew revision of isolation point requires review of lockout/tagout (LOTO) records. If set to YES, during the revision approval, the system resets the review data of the LOTO records that reference the isolation point for equipment and locations. If set to NO, the system does nothing.	Code	'-'	YES, NO	YES
LOTO-SYNC	Determines if new revision of isolation point updates lockout/tagout (LOTO) records. If set to YES, during revision approval, the system applies the new isolation point data to the LOTO records that reference the isolation point for equipment and locations. If set to NO, the system does nothing.	Code	'-'	YES, NO	NO
MEROUT-WO	Determines which equipment to copy to route-based PM work orders. Select C for route equipment only, H for header equipment only, or B to have both header and route equipment copied.	Code	'-'	C, H, B	C

Code	Description	Validation Type	Fixed	Valid Values	Default Value
NONCASKP	Determines the automatic update of the status of the associated nonconformities at the closing of work orders. If set to YES, set any unfinished reinspection (observation is 2 or higher) to skipped, if the record was not updated. If set to NO, the system will prevent the closing of the work order.	Code	'-'	YES, NO	NO
NONCAAPP	Determines the automatic update of the status of the associated nonconformities at the closing of work orders. If set to YES, set any unfinished observation to approved, if the record was created for the work order or if it was updated. If set to NO, the system will prevent the closing of the work order.	Code	'-'	YES, NO	NO
OCCLFLUP	Prevents the completion of operator checklists where checklist items exist that have follow-up selected, but for which no follow-up work orders has been created. If set to YES, the system prevents the completion of the operator checklist. If set to WARNING, the user receives a warning message but will be allowed to continue and complete the operator checklist. If set to NO the system will not perform the check.	Code	'-'	YES, NO, WARNING	NO
OCFUFPTP	Determines if the follow-up work order can have multiple activities with different From Points and To Points. If set to YES, multiple points are allowed. If set to NO, multiple points are not allowed and one follow-up work order will be created for each activity with a unique From Point and To Point combination.	Code	'-'	YES, NO	NO
OCFUTYPE	Determines the type of follow-up is generated from a checklist. If set to DM, deferred maintenance activities will be created. If set to WO, a follow-up work order will be created.	Code	'-'	DM, WO	WO
OPCKLFUP	Determines if follow-up activities are automatically generated when signing Reviewed By.	Code	'-'	ON, OFF	OFF

Code	Description	Validation Type	Fixed	Valid Values	Default Value
OPCKL-REG	Controls how Regulatory checklist items, marked for Repairs can be completed. If set to N, a valid resolution (or) a combination of a valid resolution and follow-up activity is required. If set to P, a NULL resolution is allowed, along with a follow-up activity. If set to OFF, items can be completed without a resolution or follow-up activity.	Code	'-'	P, N, OFF	N
PERM-CLEA	Determines if the system cleans up permits after work order changes. If set to NO, the system does nothing. If set to DEACT, the system deactivates permits that are not referenced anymore. If set to DEL, the system deletes the permit references from the work order.	Code	'-'	DEACT, DEL, NO	DEACT
PER-MMAPD	Determines deactivation of mandatory permits. If set to YES, mandatory permits on the work order can be deactivated. If set to NO, deactivation is not allowed.	Code	'-'	YES, NO	NO
PERMR-FRQ	Determines frequency of permit reviews. Indicates the number of days from the current date after which a permit review will be required. It is applied to the Date Review Required during the review of permit records.	Integer	'-'	1, 999999	365
PERMR-REQ	Determines if permit review is required. If set to YES, deletion of permit requires approval by a reviewer. If set to NO, permit records can be deleted without review.	Code	'-'	YES, NO	YES
PERMR-REV	Determines if new revision of permit requires review of permit records. If set to YES, during revision approval the system resets the review data of the permit records that reference that permit for equipment, locations, categories, PM schedules, and standard work orders. If set to NO, the system does nothing.	Code	'-'	YES,NO	YES
PERMSYNC	Determines if new revisions of permits update permit records. If set to YES, at revision approval the system applies new permit data to the permit records that reference that permit for equipment, locations, categories, PM schedules, and standard work orders. If set to NO, the system does nothing.	Code	'-'	YES, NO	NO

Code	Description	Validation Type	Fixed	Valid Values	Default Value
PTWAUTO	Determine the auto creation of permits to work (PTW). If set to YES, permit to work is automatically created for work orders that require them. If set to NO, the creation is a manual process.	Code	'-'	YES, NO	YES
PTWCONFL	When entering a conflicting permit to work record, the system creates a second conflict record attached to the conflicting PTW referencing back to the PTW for which the conflict was created. This option controls how the second record is created. If set to MANUAL, the system creates this second conflict record but leaves the resolution blank and flags the conflicting PTW that un-assessed conflicts exist. If set to SYNC, the system sets the resolution based on the selection for the originating conflict and will not flag the conflicting PTW.	Code	'-'	MANUAL, SYNC	SYNC
PTWEXPIR	Determines which permit to work automatically expires if Valid Until occurs in the past. If set to ACTIVE, only active permits expire. If set to ALL, any permit not closed or cancelled expires.	Code	'-'	ACTIVE, ALL	ACTIVE
PTWLIMIT	Limits the number of open permits to work per work order. If set to YES, only one open PTW is allowed at any one moment. If set to NO, there is no constraint on the number of open permits to work.	Code	'-'	YES, NO	YES
PTWMEC	Creates permits to work for multiple equipment child work orders. If set to YES, the permit to work is created for MEC work orders. If set to NO, the permit to work will still be created, but will be attached to the multiple equipment work order, i.e., the parent.	Code	'-'	YES, NO	NO
RDRVPM	Determines if PM work orders are included in the reliability calculations. If set to YES, PM work orders are included in the reliability calculations if the appropriate closing code is entered. If set to NO, PM work orders are excluded from the calculations.	Code	'-'	YES, NO	YES

Code	Description	Validation Type	Fixed	Valid Values	Default Value
ROUTEEOB	If Y, the system creates multiple equipment child (MEC) type work orders for each route equipment when route based PM work orders are released. They will be related to the parent job.	Code	'-'	Y, N	N
SAFER FRQ	Determines frequency of safety reviews . Indicates the number of days from the current date after which a safey review will be required. It is applied to the Date Review Required during the review of safety records.	Integer	'-'	1, 999999	365
SAFER REQ	Determines if safety review is required. If set to YES, deletion of safety records requires approval by a reviewer. If set to NO, safety records can be deleted without review.	Code	'-'	YES, NO	YES
SAFER REV	Determines if new revision of hazard and precaution requires review of safety records. If set to YES at revision approval the system resets the review data of the safety records that reference the hazard or precaution for equipment, locations, categories, parts, PM schedules and standard work orders. If set to NO, the system does nothing.	Code	'-'	YES, NO	YES
SAFESYNC	Determines if a new revision of precautions updates safety records. If set to YES, at revision approval the system applies the new precaution data to the safety records that reference that precaution for equipment, locations, categories, parts, PM schedules, and standard work orders. If set to NO, the system does nothing.	Code	'-'	YES, NO	NO
TEMP MATL	Determines if temporary material lists are displayed in material lists lookups. If set to YES, the material lists are displayed. If set to NO, the material lists are not displayed in lookups.	Code	'-'	YES, NO	YES
TRACELEV	Determines the level at which MEC work orders will be created after using the Trace Route feature. If set to ROUTE, the MEC work orders will be created for the selected routes. If set to SEGMENT, work orders will be created for the segments attached to the selected routes.	Code	'-'	ROUTE, SEGMENT	ROUTE

Code	Description	Validation Type	Fixed	Valid Values	Default Value
WOBKMIDN	Determines if booking hours across midnight is allowed. If set to YES, two booked labor records are created. If set to NO, an error message displays stating booking hours across midnight is not allowed.	Code	'-'	YES, NO	NO
WOCLFLUP	Prevents the closing of work orders for existing checklist items for which Follow-up is selected but for which no follow-up work order is created. If set to YES, the system prevents the closing of the work order. If set to WARNING, the system sends the user a warning message but the user will be allowed to continue and close the work order. If set to NO, the system does not perform the check.	Code	'-'	YES, NO, WARNING	NO
WOFU TYPE	Determines what kind of follow-up a checklist will generate. If set to DM, deferred maintenance activities will be created. If set to WO, follow-up work orders will be created.	Code	'-'	DM, WO	WO
WOFUF PTP	Determines if the follow-up work order can have multiple activities with different From Points and To Points. If set to YES, it is allowed. If set to NO, this is not allowed and one follow-up work order will be created for each activitiy with a unique From Point and To Point combination.	Code	'-'	YES, NO	NO
WOL STMTR	Set to NEW to update the Last Meter Reading field on Work Order to the most recent reading when WO Status is changed to a new system status of ‘C’. Set to INITIAL to update when WO Status is changed from a system status that is not ‘C’ to a system status of ‘C’. Set to OFF to prevent update on status change.	Code	'-'	OFF, INITIAL, NEW	OFF
WOQC STAT	Specify a work order user status with a system status of R or C. The system automatically set the New Status on the Work Order Quick Close screen to this value.	Free Text	'-'	R, C	C

Navigating default screen locations

Infor delivers all screens in default locations across the system. However your system administrators may change the default navigation path of screens for your organization. To find the default, out-of-the-box location of a screen in Infor EAM consult the tables below. The screens are organized by module in the tables.

Administration menu

This table shows the default navigation path for the Administration menu screens and the tab or pop-up name included on each screen:

Screen	Default navigation	Tab or pop-up name
Administration Setup	**Administration > Administration Setup**	Options
Advanced Reports Author	**Administration > Advanced Reports Author**	Special-Calls Cognos Author URL
Alert Management	**Administration > System Configuration > Alert Management**	List View Record View Before SQL After SQL Grid Parameters Work Order Alerts E-mail Alerts Exceptions History Comments Documents
Archive Records	**Administration > Setup > Archive Records**	List View Record View Work Purchasing Stock Transactions Call Center Audit Trail Electronic Records
Associate Custom Fields	**Administration > Custom Fields > Associate Custom Fields**	Not applicable (Stand-alone L/D)
Audit Setup	**Administration > Security > Audit Setup**	Tables Comments and Custom Fields
Chart Setup	**Administration > Start Center Setup > Chart Setup**	List View Record View User Groups
Classes	**Administration > Setup > Classes**	Record View Custom Fields

Screen	Default navigation	Tab or pop-up name
Closing Periods	**Administration > Security > Closing Periods**	Not applicable (Stand-alone L/D)
Configuration Manager	**Administration > System Configuration > Configuration Manager**	Export Base Configuration Import Base Configuration Status
Cost Codes	**Administration > Setup > Cost Codes**	List View Record View Comments Documents
Crystal Clear Report Status	**Administration > Crystal Clear Report Status**	Not applicable
Custom Fields	**Administration > Custom Fields > Custom Fields**	Not applicable (Stand-alone L/D)
Customer Login	**Start > Programs > Internet Explorer > Enter the URL provided by your system administrator > Customer Login**	Not applicable
Customer Request	**Note:** This screen can only be accessed by using the Customer Request Login screen.	Not applicable
DC Transaction Prompts	**Administration > Data Collection > DC Transaction Prompts**	List View Record View Return Prompts
Documents	**Administration > Setup > Documents**	List View Record View Where Used Comments Documents
E-mail Notification Setup	**Administration > E-mail Messenger > E-mail Notification Setup**	Not applicable (Stand-alone L/D)
E-mail Templates	**Administration > E-mail Messenger > E-mail Templates**	List View Record View
E-mail Viewer	**Administration > E-mail Messenger > E-mail Viewer**	Not applicable (Stand-alone L/D)
Enterprise Search Setup	**Administration > Enterprise Search Setup > Enterprise Search Setup**	List View Record View Repositories Repository Columns
Equipment Setup	**Administration > Equipment Setup**	Options Equipment Types Equipment Statuses Equipment Criticality
eRecords Setup	**Administration > Security > eRecords Setup**	List View Record View

Screen	Default navigation	Tab or pop-up name
Export Configuration	**Administration > System Configuration > Export Configuration**	Export KPIs Export Inbox Items Export Custom Fields Export Flex SQL Export Custom Reports Export Alerts Export User Defined Grids Export Web Service Prompts Export Copied Screens Task Plans
Extensible Framework	**Administration > Screen Configuration > Extensible Framework**	Record View
Flex Business Rules	**Administration > Screen Configuration > Flex Business Rules**	List View Record View
GDPR Administration	**Administration > Security > QR Codes Setup**	Record View Errors
Generate Enterprise Search Definitions	**Administration > Enterprise Search Setup > Generate Enterprise Search Definitions**	Not applicable (Stand-alone)
GL Process Schedules	**Administration > GL Process Schedules**	List View Record View
Global Text Changes	**Administration > Screen Configuration > Global Text Changes**	Not applicable (Stand-alone L/D)
Grid Designer	**Administration > Screen Configuration > Grid Designer**	List View/Record View Fields Parameters Validation
Import Configuration	**Administration > System Configuration > Import Configuration**	Import Batch Document Upload
Inbox Setup	**Administration > Start Center Setup > Inbox Setup**	List View Record View User Groups Ranges Users
Install Parameter Setup	**Administration > Security > Install Parameter Setup**	List View Record View
Install Parameters	**Administration > Security > Install Parameters**	List View Record View
Job Setup	**Administration > Data Collection > Job Setup**	Not applicable (Stand-alone L/D)

Screen	Default navigation	Tab or pop-up name
KPI Setup	**Administration > Start Center Setup > KPI Setup**	List View Record View Ranges User Groups Children History Users
Languages	**Administration > System Configuration > Languages**	List View Record View Error Text Menu Text Code Descriptions Text Boiler Text Comments
Locales	**Administration > System Configuration > Locales**	List View Record View
Materials Setup	**Administration > Materials Setup**	Options
Menu Structure and Permissions	**Administration > Overview > Menu Structure and Permissions**	Not applicable
Mobile Devices	**Administration > System Configuration > Mobile Devices**	List View Record View
Mobile Setup	**Administration > Mobile Setup**	Options
Monitor Interface	**Administration > Data Collection > Monitor Interface**	List View/Record View Error Correction
Multi-org Security	**Administration > Security > Multi-org Security**	Not applicable (Editable Grid)
My Account	Main header drop-down on the left-hand pane	My Account
My Service Requests	**Note:** This screen can only be accessed by using the Service Request Login screen.	Not applicable
Organizations	**Administration > Security > Organizations**	List View Record View Comments Enterprise Locations Fiscal Years Options
Printers	**Administration > System Configuration > Printers**	List View Record View
Prompt Machine	**Administration > Data Collection > Prompt Machine**	Not applicable (Stand-alone L/D)
Purchasing Setup	**Administration > Purchasing Setup**	Options Expense Types Requisition Statuses PO and Transaction Statuses

Screen	Default navigation	Tab or pop-up name
Queries	**Administration > Start Center Setup > Queries**	List View Record View
QR Codes Setup	**Administration > QR Codes Setup**	
Regions	**Administration > Setup > Regions**	List View Record View Comments Historical Temperatures Actual Temperatures Documents Temperature Analysis Chart
Report Organization Structure	**Administration > Setup > Report Organization Structure**	Not applicable (Stand-alone L/D)
Reports	**Administration > Setup > Reports**	List View Record View Parameters Text Comments
Roles Setup	**Administration > Security > Roles Setup**	List View Record View
Screen Setup	**Administration > Screen Configuration > Screen Setup**	List View Record View Comments Types Classes WO Equipment Types Operator Checklist Field Filters
Screens	**Administration > Screen Configuration > Screens**	List View Record View Text Fields to Remember Tabs Comments Custom Tabs Dataspies
Start Center Setup	**Administration > Start Center Setup**	Chart Setup Inbox Setup KPI Setup Queries
Status Authorizations	**Administration > Security > Status Authorizations**	Not applicable (Stand-alone L/D)
System Codes	**Administration > Setup > System Codes**	Not applicable (Stand-alone L/D)

Screen	Default navigation	Tab or pop-up name
User Defined Screens	**Administration > Screen Configuration > User Defined Screens**	List View Record View Fields
User Groups	**Administration > Security > User Groups**	List View Record View Menus Screen Permissions Users WO Authorizations Mobile Menus Charts Comments Documents Inbox Interface Permissions KPI Mobile Settings Scanner Menus Store Security iProcure Security
User Setup	**Administration > Security > User Setup**	List View Record View Comments Organizations Addresses Department Security Documents Inboxes KPIs
View Log Files	**Administration > System Configuration > View Log Files**	Not applicable (Stand-alone List)
Views	**Administration > Screen Configuration > Views**	Not applicable (Stand-alone List)
Web Service Prompts	**Administration > Screen Configuration > Web Service Prompts**	List View Record View Web Services Fields Retrieved Values
Work Setup	**Administration > Work Setup**	Options Work Order Types Work Order Statuses Work Order Priorities

Equipment menu

This table shows the default navigation path for the Equipment menu screens and the tab or pop-up name included on each screen:

Screen	Default navigation	Tab or pop-up name
Asset Inventory	**Equipment > Asset Inventory > Asset Inventory**	Parameters Inventory Results

Screen	Default navigation	Tab or pop-up name
Assets	**Equipment > Assets**	

Screen	Default navigation	Tab or pop-up name
		List View
		Record View
		Comments
		Events
		Costs
		PM Schedules
		Structure
		Actual Consumption
		Addresses
		Calibration
		Depreciation
		Design Consumption
		Documents
		Energy Star Ratings
		Fuel Costs
		Linear Overview
		Linear References
		Linear Where Used
		LOTO
		Keys
		Material Usage
		Meters
		Nonconformities
		Nonconformities Analysis
		OEE Metrics
		Open Repairs
		Open Work Orders
		Parts Associated
		Permits
		Purchase Orders
		Rankings
		Ranking Survey
		Reliability Calculations
		Reliability Growth
		Reservations
		Resources
		Routes
		Route Parents
		Safety
		Segments
		Segment Parents
		Service Codes
		Service Delivery Matrix
		Structure
		Structure Details

Screen	Default navigation	Tab or pop-up name
		Suppliers Supplier Service Codes Test Points Top 10 Breakdown Warranties Warranty Claims Work Order Repair Costs Chart Workspaces
Batch Meter Readings	**Equipment > Process > Batch Meter Readings**	Not applicable (Stand-alone L/D)
Batch Update Reliability Ranking Values	**Equipment > Process > Batch Update Reliability Ranking Values**	List View Record View Comments Reliability Survey Equipment Documents
Categories	**Equipment > Setup > Categories**	List View Record View Comments Calibration Documents Parts Associated Permits Safety Test Points
Change Notices	**Equipment > Additional Features > Change Notices**	List View Record View Comments Lines Assets Locations Addresses Documents Parts Associated
Child Equipment Replacement	**Equipment > Process > Child Equipment Replacement**	Not applicable (Stand-alone)
Closing Codes	**Equipment > Setup > Closing Codes**	List View Record View Classes
Closing Code Hierarchy	**Equipment > Setup > Closing Code Hierarchy**	Not applicable (Stand-alone)
Condition Score Matrix Setup	**Equipment > Additional Features > Nonconformities > Condition Score Matrix Setup**	List View Record View Comments

Screen	Default navigation	Tab or pop-up name
Departments	**Equipment > Setup > Departments**	List View Record View Addresses Comments Documents Structure Tools
Energy Star Message Viewer	**Equipment > Additional Features > Energy Star > Energy Star Message Viewer**	Not applicable (Stand-alone)
Energy Star Setup	**Equipment > Additional Features > Energy Star > Energy Star Setup**	Not applicable (Stand-alone)
Equipment Configurations	**Equipment > Equipment Configuration > Equipment Configurations**	List View Record View Comments Configurations Associated Structure PM Schedules Where Used Calibration Depreciation Documents Maintenance Patterns Meters Parts Associated Permits Safety Test Points Warranties
Equipment Evaluations	**Equipment > Procurement Evaluation > Equipment Evaluations**	List View Record View Comments Equipment Equivalency Cost Analysis Documents
Equipment Generation	**Equipment > Equipment Configuration > Equipment Generation**	List View Record View Details Preview
Equipment Operational Status	**Equipment > Additional Features > Equipment Operational Status**	List View Record View Comments Work Orders Documents

Screen	Default navigation	Tab or pop-up name
GIS Map Search	**Equipment > GIS Map Search**	Not applicable
Key Management	**Equipment > Additional Features > Key Management**	List View Record View Locks Transactions Ring Keys
Linear Direction Setup	**Equipment > Linear Direction Setup**	List View Record View
Locations	**Equipment > Setup > Locations**	List View Record View Comments Events Costs Structure Structure Details Addresses Documents LOTO Material Usage Meters Nonconformities Operator Checklists Open Work Orders Parts Associated Permits RCM Safety Service Codes Service Delivery Matrix Suppliers Supplier Service Codes
Maps	**Equipment > Maps**	List View Record View Comments Parameters Documents
Meters	**Equipment > Setup > Meters**	List View Record View Comments Documents

Screen	Default navigation	Tab or pop-up name
Nonconformities	**Equipment > Additional Features > Nonconformities > Nonconformities**	List View Record View Comments Documents Translations Observations Documents
Nonconformity Observations	**Equipment > Additional Features > Nonconformities > Nonconformity Observations**	List View Record View Comments Documents Checklist
Nonconformities Setup	**Equipment > Additional Features > Nonconformities > Nonconformities Setup**	List View Record View Comments Documents Status Dependencies
Nonconformity Types	**Equipment > Additional Features > Nonconformities > Nonconformity Types**	List View Record View Comments Documents Translations Parts EMRS Material Types
Notebook	**Equipment > Notebook**	List View Record View References Emails Documents
Objectives	**Equipment > Additional Features > Asset Management Policy > Objectives**	List View Record View Comments Energy Targets CPRs (Plans) Documents
Operational Status	**Equipment > Operational Status**	List View Record View Work Orders

Screen	Default navigation	Tab or pop-up name
Policies	**Equipment > Additional Features > Asset Management Policy > Policies**	List View Record View Comments Strategies Documents

Screen	Default navigation	Tab or pop-up name
Positions	**Equipment > Positions**	

Screen	Default navigation	Tab or pop-up name
		List View
		Record View
		Comments
		Events
		Costs
		PM Schedules
		Structure
		Structure Details
		Actual Consumption
		Addresses
		Calibration
		Depreciation
		Design Consumption
		Documents
		Energy Star Ratings
		Energy Star Ratings Chart
		Fuel Costs
		Keys
		LOTO
		Linear Overview
		Linear References
		Linear Where Used
		Material Usage
		Meters
		Nonconformities
		Nonconformities Analysis
		OEE Metrics
		Operator Checklists
		Open Work Orders
		PM Repair Costs Chart
		Parts Associated
		Permits
		Purchase Orders
		Rankings
		Ranking Survey
		Reliability Calculations
		Reliability Growth
		Reservations
		Resources
		Routes
		Route Parents
		Safety
		Segments
		Segment Parents
		Service Codes

Screen	Default navigation	Tab or pop-up name
		Service Delivery Matrix Suppliers Supplier Service Codes Test Points Top 10 Breakdown Warranties Warranty CLaims Work Order Repair Costs Chart Workspaces
Profiles	**Equipment > Setup > Profiles**	List View Record View Comments Documents Parts Associated Permits
Reliability Ranking	**Equipment > Setup > Reliability Ranking**	List View Record View Comments Decision Tree Ranks Equipment Documents
Reservation Calendar	**Equipment > Additional Features > Reservation Calendar**	Not applicable
Risk Matrix Setup	**Equipment > Setup > Risk Matrix Setup**	List View Record View Comments Consequences Documents
Sets/Consists	**Equipment > Sets/Consists**	Record View Equipment
Strategies	**Equipment > Additional Features > Asset Management Policy > Strategies**	List View Record View Comments Objectives Structure

Screen	Default navigation	Tab or pop-up name
Systems	**Equipment > Systems**	

Screen	Default navigation	Tab or pop-up name
		List View
		Record View
		Comments
		Events
		Costs
		PM Schedules
		Structure
		Structure Details
		Actual Consumption
		Addresses
		Calibration
		Depreciation
		Design Consumption
		Documents
		Energy Star Ratings
		Energy Star Ratings Chart
		Fuel Costs
		LOTO
		Linear Overview
		Linear References
		Linear Where Used
		Keys
		Material Usage
		Meters
		Nonconformities
		Nonconformities Analysis
		OEE Metrics
		Open Work Orders
		Operator Checklists
		PM Repair Costs Chart
		Parts Associated
		Permits
		Purchase Orders
		Rankings
		Ranking Survey
		RCM
		Reservations
		Resources
		Routes
		Route Parents
		Safety
		Segments
		Segment Parents
		Service Codes
		Service Delivery Matrix

Screen	Default navigation	Tab or pop-up name
		Suppliers Supplier Service Codes Test Points Top 10 Breakdown Warranties Warranty Claims Work Order Repair Costs Chart Workspaces
Warranties	**Equipment > Warranty > Warranties**	List View Record View Comments Equipment Parts Components Documents VMRS Codes Warranty Claim vs. Settlement Chart
Warranty Claims	**Equipment > Warranty > Warranty Claims**	List View Record View Comments Activities Claim Lines Addresses Documents
Workspaces	**Equipment > Additional Features > Workspaces**	List View Record View Comments Documents Employees Equipment Furnishings Translations
Workspace Moves	**Equipment > Additional Features > Workspace Moves**	List View Record View Comments Documents Translations Associations

Materials menu

This table shows the default navigation path for the Materials menu screens and the tab or pop-up name included on each screen:

Screen	Default navigation	Tab or pop-up name
Add Parts	**Materials > Create Requisition > Add Parts** **Note:** This screen is not directly selectable. When you click on the Add Parts button from the Create Requisition screen, this screen will display.	Add Parts
Breakup Kit	**Materials > Kits > Breakup Kit**	Not applicable
Build Kit	**Materials > Kits > Build Kit**	Not applicable
Calculate EOQ	**Materials > Process > Calculate EOQ**	Parameters Preview
Commodities	**Materials > Setup > Commodities**	List View Record View Comments Documents Fuels
Create Requisition	**Materials > Create Requisition**	Create Requisition
Currencies	**Materials > Setup > Currencies**	List View Record View Exchange Rates Comments Documents
Greenhouse Gases	**Materials > Setup > Greenhouse Gases**	List View Record View Comments Documents
Generate ABC Analysis	**Materials > Process > Generate ABC Analysis**	Parameters Preview
Generate Requisitions	**Materials > Process > Generate Requisitions**	Parameters Preview
Internal Repair Receipts	**Materials > Transactions > Internal Repair Receipts**	List View Record View Comments Parts Documents
iProcure Vendors	**Materials > Setup > iProcure Vendors**	List View Record View Infor EAM Suppliers
Issue/Return Parts	**Materials > Transactions > Issue/Return Parts**	Not applicable
Lots	**Materials > Setup > Lots**	List View Record View Comments Bins Per Store Documents

Screen	Default navigation	Tab or pop-up name
Manufacturer Part Numbers	**Materials > Overview > Manufacturer Part Numbers**	Not applicable
Manufacturers	**Materials > Setup > Manufacturers**	List View Record View Comments Parts Addresses Documents
Non-PO Receipts	**Materials > Transactions > Non-PO Receipts**	List View Record View Comments Parts Documents
Part Condition Tem-plates	**Materials > Setup > Part Condition Templates**	List View Record View Comments Conditions
Part Hierarchy Codes	**Materials > Setup > Part Hierarchy Codes**	Not applicable (Stand-alone L/D)
Part Inspections	**Materials > Transactions > Part Inspections**	List View Record View Comments Documents
Part Number History	**Materials > Overview > Part Number History**	Not applicable (Stand-alone)
Part Reservations	**Materials > Overview > Part Reservations**	Not applicable (Stand-alone)
Part Requisitions	**Materials > Part Requisitions**	List View Record View Documents Parts
Part Warranty Claims	**Materials > Part Warranty Claims**	List View Record View Parts Imported Parts

Screen	Default navigation	Tab or pop-up name
Parts	**Materials > Parts**	List View Record View Comments Stores Stock Suppliers Transactions Prices Stock Value Archived Transactions Contracts Documents Greenhouse Gases Kit Template Manufacturers Nonconformity Types Overview PO History Parts Associated Purchase Orders Repair Details Requisitions Reservations Safety Sales Prices Substitutes Usage Where Used
Physical Inventory	**Materials > Transactions > Physical Inventory**	List View Record View Comments Parts
Pick Tickets	**Materials > Pick Tickets**	List View Record View Comments Parts Documents
PO Receipts	**Materials > Transactions > PO Receipts**	List View Record View Comments Packing Slip Active Lines Processed Lines Documents

Screen	Default navigation	Tab or pop-up name
Quick Store-to-Store Transfer	**Materials > Transactions > Quick Store-to-Store Transfer**	Quick Store-to-Store Transfer
Reasons for Return	**Materials > Setup > Reasons for Return**	List View Record View Comments Documents
Requisition Details	**Materials > View Requisitions > Requisition Details** **Note:** This screen is not directly selectable. When you select a record from the View Requisitions screen, this screen will open.	Requisition Details
Requisitions	**Materials > Requisitions**	List View Record View Comments Parts Services Documents Transactions eRecords Addresses Account Details Open Repairs
Review/Approve Requisitions	**Materials > Review/Approve Requisitions**	Review/Approve Requisitions
Store Groups	**Materials > Setup > Store Groups**	List View Record View Comments Transfer Fees
Store-to-Store Issues	**Materials > Transactions > Store-to-Store Issues**	List View Record View Comments Parts Addresses Documents
Store-to-Store Receipts	**Materials > Transactions > Store-to-Store Receipts**	List View Record View Comments Parts Addresses Documents

Screen	Default navigation	Tab or pop-up name
Store-to-Store Requisitions	**Materials > Store-to-Store Requisitions**	List View Record View Comments Parts Addresses Documents
Stores	**Materials > Setup > Stores**	List View Record View Comments Bins Stock Transactions Addresses Documents Archived Transactions Overview Reservations Stock in Transit Stockouts Taxes
Supplier Part Numbers	**Materials > Overview > Supplier Part Numbers**	Not applicable
Supplier Returns	**Materials > Transactions > Supplier Returns**	List View Record View Comments Parts Documents
Suppliers	**Materials > Setup > Suppliers**	List View Record View Comments Parts Contacts Addresses Account Numbers Commodities Documents Equipment Fuel Mix PO History Rates Service Code Exclusions Service Codes Services

Screen	Default navigation	Tab or pop-up name
Tax Codes	**Materials > Setup > Tax Codes**	List View Record View Rates Comments Documents
Tax Rate Types	**Materials > Setup > Tax Rate Types**	List View Record View Comments Documents
Tax Rates	**Materials > Setup > Tax Rates**	List View Record View Values Comments Documents
Units of Measure	**Materials > Setup > Units of Measure**	List View Record Comments Conversion Documents
View Requisitions	**Materials > View Requisitions**	View Requisitions

Operations menu

This table shows the default navigation path for the Operations menu screens and the tab or pop-up name included on each screen:

Screen	Default navigation	Tab or pop-up name
Analytics Variable Setup	**Operations > Analytics Variable Setup**	List View Record View Attributes
Budget Calendar Types	**Operations > Budgets > Budget Calendar Types**	List View Record View Comments Documents
Budget Groups	**Operations > Budgets > Budget Groups**	List View Record View Comments Items Documents

Screen	Default navigation	Tab or pop-up name
Budget Structures	**Operations > Budgets > Budget Structures**	List View Record View Comments Documents
Budget Terms	**Operations > Budgets > Budget Terms**	List View Record View Comments Periods Documents
Budgets	**Operations > Budgets > Budgets**	List View Record View Details
Bulletin Board Notices	**Operations > Setup > Bulletin Board Notices**	List View Record View
Calendar Groups	**Operations > Setup > Calendar Groups**	List View Record View Calendar Periods Comments Documents
Call Center	**Operations > Call Center**	List View Record View Comments WO Comments Documents
Call Center Setup	**Operations > Setup > Call Center Setup**	List View Record View GIS Attributes Equipment Usability Codes Documents
Case Management	**Operations > Case Management**	List View Record View Tasks Checklist eRecords Event Log Documents Comments Translations

Screen	Default navigation	Tab or pop-up name
Case Management Tasks	**Operations > Case Management Tasks**	List View Record View Comments Documents Checklist
Contact Information	**Operations > Setup > Contact Information**	List View Record View Equipment
Customer Surveys	**Operations > Setup > Customer Surveys**	List View Record View Questions Triggers Results Long Translations Documents Comments Translations
Data Warehouse Run Log	**Operations > Data Warehouse Run Log**	List View Details Errors
Data Warehouse Run Parameters	**Operations > Data Warehouse Run Parameters**	Not applicable (Stand-alone L/D)
Event Log Type Filter	**Operations > Setup > Event Log Type Filter**	Not applicable
Knowledge Base Articles	**Operations > Setup > Knowledge Base Articles**	List View Record View Service Delivery Matrix Equipment
Overview	**Operations > Overview**	Not applicable
Providers	**Operations > Setup > Providers**	List View Record View Comments Documents
Service Categories	**Operations > Setup > Service Categories**	List View Record View Comments Documents
Service Codes	**Operations > Setup > Service Codes**	List View Record View Comments Layers Sales Prices

Purchasing menu

This table shows the default navigation path for the Purchasing menu screens and the tab or pop-up name included on each screen:

Screen	Default navigation	Tab or pop-up name
Assets for PO	**Purchasing > Assets for PO**	Not applicable (Stand-alone L/D)
Blanket Orders	**Purchasing > Blanket Orders**	List View Record View Comments Parts Partial Order Services Users Addresses Clauses Documents
Clauses of Contract Classes	**Purchasing > Contracts > Clauses of Contract Classes**	Not applicable (Stand-alone L/D)
Credit Cards	**Purchasing > Setup > Credit Cards**	List View Record View Comments Users Addresses
Delivery Addresses	**Purchasing > Setup > Delivery Addresses**	List View Record View
Generate POs	**Purchasing > Process > Generate POs**	Parameters Preview
Invoice Allocations	**Purchasing > Invoice Allocations**	Not applicable (Stand-alone L/D)
Invoice Lines per Buyer	**Purchasing > Overview > Invoice Lines per Buyer**	Invoice Lines per Buyer
Invoice Vouchers	**Purchasing > Invoice Vouchers**	List View Record View Comments Lines Costs Documents Utility Bills
PO Revision History	**Purchasing > PO Revision History**	List View Record View Comments Parts Services Clauses

Screen	Default navigation	Tab or pop-up name
PO Terms	**Purchasing > Setup > PO Terms**	List View Record View Comments Documents
PO Update	**Purchasing > Process > PO Update**	List View (editable)
Purchase Orders	**Purchasing > Purchase Orders**	List View Record View Comments Parts Services Documents Clauses Transactions eRecords Translations Tracking Addresses Account Details Open Repairs
Purchasing Clauses	**Purchasing > Setup > Purchasing Clauses**	List View Record View Comments Children Documents
Purchasing Contracts	**Purchasing > Contracts > Purchasing Contracts**	List View Record View Comments Parts Part Discounts Order Discounts Documents
Purchasing Contract Text	**Purchasing > Contracts > Purchasing Contract Text**	Not applicable (Stand-alone L/D)
Quotations	**Purchasing > Quotes > Quotations**	List View Record View Comments Parts Services Addresses Documents eRecords

Screen	Default navigation	Tab or pop-up name
Requests for Quotations	**Purchasing > Quotes > Requests for Quotations**	List View Record View Comments Suppliers Parts Clauses Services Selection Addresses Documents Purchasing eRecords

Work menu

This table shows the default navigation path for the Work menu screens and the tab or pop-up name included on each screen:

Screen	Default navigation	Tab or pop-up name
Adjustments	**Work > Customer Contracts > Adjustments**	List View Record View Comments Documents
Advanced Maintenance Planning Configuration	**Work > Additional Features > Advanced Maintenance Planning Configuration**	Exclude WO Types Status Change Triggers
AMS-Approve Customer Charges	**Work > Additional Features > Asset Management Services > AMS-Approve Customer Charges**	List View Record View
AMS-Customer Contracts	**Work > Additional Features > Asset Management Services > AMS-Customer Contracts**	List View Record View Comments Fixed Charges Documents
AMS-Customer Invoice Lines Overview	**Work > Additional Features > Asset Management Services > AMS-Customer Invoice Lines Overview**	List Only
AMS-Customer Invoices	**Work > Additional Features > Asset Management Services > AMS-Customer Invoices**	List View Record View Comments Lines Documents

Screen	Default navigation	Tab or pop-up name
AMS-Customers	**Work > Additional Features > Service Request > AMS-Customers**	List View Record View Comments Properties Callers Charges Contracts Documents Invoices
AMS-Pricing Schedules	**Work > Additional Features > Asset Management Services > AMS-Pricing Schedules**	List View Record View Comments Custom Trade Rates Custom Part Charges Additional Charges Documents WO Criteria
Approval Lists	**Work > Revision Control > Approval Lists**	List View Record View Comments Approvers Documents
Approve Inspection Results	**Work > Process > Approve Inspection Results**	Parameters Preview
Aspects	**Work > Inspections > Aspects**	List View Record View Comments Prompts Documents

Screen	Default navigation	Tab or pop-up name
Assets Healthcare	**Work > Verticals > Healthcare > Assets Healthcare**	List View Record View Comments Events Costs PM Schedules Structure Account Details Actual Consumption Addresses Calibration Depreciation Design Consumption Documents Energy Star Ratings Fuel Costs Linear References Material Usage Meters Parts Associated Permits Purchase Orders Reliability Survey Resources Service Delivery Matrix Test Points Warranties
Book Labor By Employee	**Work > Process > Book Labor By Employee**	Not applicable (Stand-alone L/D)
Book PO Labor	**Work > Process > Book PO Labor**	Not applicable (Stand-alone)
Calibration Results	**Work > Additional Features > Calibration Results**	List Only
Campaigns	**Work > Projects > Campaigns**	List View Record View Comments Campaign Events Equipment Work Orders Documents eRecords
Capital Planning Requests	**Work > Additional Features > Capital Planning Requests**	List View Record View Comments Documents

Screen	Default navigation	Tab or pop-up name
Conditions	**Work > Inspections > Conditions**	List View Record View Comments Documents
Contract Templates	**Work > Contract Management > Contract Templates**	List View Record View Comments WO Criteria Sales Prices Clauses Charge Definitions Discounts Documents
Contractor Portal	**Work > Contractor Portal**	Record View
Customers	**Work > Contract Management > Customers**	List View Record View Comments Contracts Addresses Documents
Customer Contracts	**Work > Contract Management > Customer Contracts**	List View Record View Comments Charge Definitions WO Criteria Commodities Adjustments Clauses Contract Items Discounts Documents Sales Prices
Customer Invoices	**Work > Contract Management > Customer Invoices**	List View Record View Comments Contract Items Generation Errors Invoice Details Documents

Screen	Default navigation	Tab or pop-up name
Depots	**Work > Fuel Management > Depots**	List View Record View Comments Tanks Pumps Tank/Pump Documents Transactions
Deferred Maintenance	**Work > WO Planning > Deferred Maintenance**	List View Record View Parts
Employees	**Work > Setup > Employees**	List View Record View Comments Rates Availability Exceptions Addresses Documents Outstanding Issues Properties Qualifications Transactions Transfers Types

Screen	Default navigation	Tab or pop-up name
Facilities	**Work > Verticals > Hospitality > Facilities**	List View Record View Comments Events Costs PM Schedules Structure Actual Consumption Addresses Calibration Depreciation Design Consumption Documents Energy Star Ratings Fuel Costs Linear References Material Usage Meters Parts Associated Permits Purchase Orders Reliability Survey Resources Service Delivery Matrix Test Points Warranties
Findings	**Work > Inspections > Findings**	List View Record View Comments Classes Documents
Fleet Billing Codes	**Work > Additional Features > Fleet > Fleet Billing Codes**	List View Record View Comments Rates Documents
Fleet Bills	**Work > Additional Features > Fleet > Fleet Bills**	List View Record View Comments Billing Details Pool/Loaner Adjustments Assignment Adjustments Documents

Screen	Default navigation	Tab or pop-up name
Fleet Configuration	**Work > Additional Features > Fleet > Fleet Configuration**	Parameters Billing Schedules Exception Codes Vehicle Ticket Authorizations Fuel Maintenance
Fleet Cost Code Search & Replace	**Work > Additional Features > Fleet > Fleet Cost Code Search & Replace**	Cost Codes Errors
Fleet Customers	**Work > Additional Features > Fleet > Fleet Customers**	List View Record View Comments Cost Codes Billing Codes Billing History Addresses Documents
Fleet Markup Codes	**Work > Additional Features > Fleet > Fleet Markup Codes**	List View Record View Rates Comments Documents
Fleet Vehicle Tickets	**Work > Additional Features > Fleet > Fleet Vehicle Tickets**	List View Record View Comments Exceptions Billing Adjustments Documents
Formulas	**Work > Inspections > Formulas**	List View Record View Parameters Comments
Fuel Physical Inventory	**Work > Fuel Management > Fuel Physical Inventory**	List View Record View Comments Tanks
Fuel Issues	**Work > Fuel Management > Fuel Issues**	Fuel Issues
Fuel Receipts	**Work > Fuel Management > Fuel Receipts**	Fuel Receipts

Screen	Default navigation	Tab or pop-up name
Fuels	**Work > Fuel Management > Fuels**	List View Record View Comments Depot/Tank Documents Transactions
Generate Production Requests	**Work > Additional Features > Advanced Maintenance Planning > Generate Production Requests**	Parameters WO Preview Production Request Preview
Generate WOs	**Work > Process > Generate WOs**	Parameters Preview
Hazards	**Work > Permit to Work > Hazards**	List View Record View Comments Documents Precautions Where Used
Incident Requests	**Work > Verticals > Hospitality > Incident Requests**	List View Record View Comments WO Comments Documents
Information Requests	**Work > Service Request > Information Requests**	List View Record View Comments Documents
Isolation Points	**Work > Permit to Work > Isolation Points**	List View Record View Comments Documents Permit to Work

Screen	Default navigation	Tab or pop-up name
Job Plan	**Work > Job Plans**	List View Record View Instructions Qualifications Sales Prices Checklist Prices Plan Labor Plan Parts Plan Tools Estimated Costs Suppliers Documents eRecords
Lockout Boxes	**Work > Permit to Work > Lockout Boxes**	List View Record View Comments Documents
Material Lists	**Work > WO Planning > Material Lists**	List View Record View Comments Parts Documents
Maintenance Patterns	**Work > WO Planning > Maintenance Patterns**	List View Record View Comments Sequences Equipment Work Orders Documents
Mechanic's Workbench	**Work > Mechanic's Workbench**	Not applicable (Stand-alone)
Methods	**Work > Inspections > Methods**	List View Record View Comments Documents
Monitored Data	**Work > Inspections > Monitored Data**	List View Equipment Details Points Aspects Aspect Points Point Conditions Results

Screen	Default navigation	Tab or pop-up name
Operator Checklist	**Work > Additional Features > Operator Checklist**	Not applicable (Stand-alone)
Permits	**Work > Permit to Work > Permits**	List View Record View Permit Body Documents
Permit to Work	**Work > Permit to Work > Permit to Work**	List View Record View Comments Documents Safety LOTO Checklist Conflicts Event Log eRecords
Permit to Work Setup	**Work > Permit to Work > Permit to Work Setup**	List View Record View Comments Documents
Point Types	**Work > Inspections > Point Types**	List View Record View Comments Documents
PM Forecasting	**Work > WO Planning > PM Forecasting**	Parameters Preview Forecasting
PM Plans	**Work > WO Planning > PM Plans**	List View Record View PM Schedules Activities Equipment Comments Documents

Screen	Default navigation	Tab or pop-up name
PM Schedules	**Work > WO Planning > PM Schedules**	List View Record View Comments Activities Equipment Permits Work Orders Documents Resources Safety Sales Prices Jobs Plan Labor Plan Parts Estimated Costs Plan Tools Translations eRecords Breakdown Linear Work
PM Work Packages	**Work > WO Planning > PM Work Packages**	List View Record View Comments Equipment Employees Documents
Precautions	**Work > Permit to Work > Precautions**	List View Record View Comments Documents
Production Requests	**Work > Additional Features > Advanced Maintenance Planning > Production Requests**	List View Record View Comments Resources Work Orders Documents

Screen	Default navigation	Tab or pop-up name
Projects	**Work > Projects > Projects**	List View Record View Comments Budgets Work Orders Costs Documents Purchase Orders Sub-projects User Authorization
Project Budgets	**Work > Projects > Project Budgets**	List View Record View Comments Documents
Properties	**Work > Service Request > Properties**	Not applicable
Properties Healthcare	**Work > Verticals > Healthcare > Properties Healthcare**	List View Record View Comments Events Costs PM Schedules Structure Actual Consumption Addresses Calibration Depreciation Design Consumption Documents Energy Star Ratings Fuel Costs Linear References Material Usage Meters Parts Associated Permits Purchase Orders Reliability Survey Resources Service Delivery Matrix Test Points Warranties
Property Information	**Work > Service Request > Property Information**	Not applicable

Screen	Default navigation	Tab or pop-up name
Qualifications	**Work > Setup > Qualifications**	List View Record View Comments Documents
Release Individual PM WOs	**Work > Process > Release Individual PM WOs**	List View (editable)
Reservation Requests	**Work > Contract Management > Reservation Requests**	List View Record View Comments
Reservations	**Work > Contract Management > Reservations**	List View Record View Comments Adjustments Charge Definitions Documents
Review Reservation Requests	**Work > Contract Management > Review Reservation Requests**	Not applicable (Stand-alone)
Review Operator Checklist	**Work > Additional Features > Operator Checklist > Review Operator Checklists**	Not applicable (Stand-alone L/D)
Review Work Requests	**Work > Review Work Requests**	Not applicable
Revision Approval	**Work > Revision Control > Revision Approval**	List View Approvers Parent PMs
Revision Control History	**Work > Revision Control > Revision Control History**	List Only
Revision Control Setup	**Work > Revision Control > Revision Control Setup**	Work Orders Hazards Isolation Points Nonconformities Precautions Permits

Screen	Default navigation	Tab or pop-up name
Rooms	**Work > Verticals > Hospitality > Rooms**	List View Record View Comments Events Costs PM Schedules Structure Actual Consumption Addresses Calibration Depreciation Design Consumption Documents Energy Star Ratings Fuel Costs Linear References Material Usage Meters Parts Associated Permits Purchase Orders Reliability Survey Resources Service Delivery Matrix Test Points Warranties
Routes	**Work > WO Planning > Routes**	List View Record View Comments Equipment Documents Inspection Points
Service Codes	**Work > Service Request > Service Codes**	List View Record View Documents
Service Request Portal	Accessed via a special URL.	
Service Request Portal - Create Request	Accessed via a special URL.	

Screen	Default navigation	Tab or pop-up name
Service Requests	**Work > Service Requests**	List View Record View Comments Log Entries Book Hours Issue Parts Closing Book & Close Documents Work Order Details
Shifts	**Work > Setup > Shifts**	List View Record View Days Employees Comments Documents
Shutdowns	**Work > Projects > Shutdowns**	List View Record View Comments Equipment Documents
Standard WOs	**Work > WO Planning > Standard WOs**	List View Record View Comments Activities Children Documents Permits Safety Sales Prices Tools
Supervisors	**Work > Setup > Supervisors**	List View Record View Comments Documents

Screen	Default navigation	Tab or pop-up name
Systems Healthcare	**Work > Verticals > Healthcare > Systems Health-care**	List View Record View Comments Events Costs PM Schedules Structure Actual Consumption Addresses Calibration Depreciation Design Consumption Documents Energy Star Ratings Fuel Costs Linear References Material Usage Meters Parts Associated Permits Purchase Orders Reliability Survey Resources Service Delivery Matrix Test Points Warranties
Task Plan	**Work > WO Planning > Task Plans**	List View Record View Instructions Checklist Documents Prices Jobs Plan Labor Plan Parts Plan Tools Estimated Costs Qualifications Sales Prices Suppliers

Screen	Default navigation	Tab or pop-up name
Tools	**Work > Setup > Tools**	List View Record View Outstanding Issues Transactions Comments Documents
Trades	**Work > Setup > Trades**	List View Record View Rates Comments Documents Qualifications Supplier Rates
Unreturned Cores	**Work > Overview > Unreturned Cores**	List Only
Vehicles	**Work > Verticals > Hospitality > Vehicles**	List View Record View Comments Events Costs PM Schedules Structure Actual Consumption Addresses Calibration Depreciation Design Consumption Documents Energy Star Ratings Fuel Costs Linear References Material Usage Meters Parts Associated Permits Purchase Orders Reliability Survey Resources Service Delivery Matrix Test Points Warranties
Work Requests	**Work > Work Requests**	Not applicable

Screen	Default navigation	Tab or pop-up name
VMRS Codes	**Work > Setup > VMRS Codes**	List View Record View Comments Documents Translations Nonconformity Types
WO Daily Scheduling	**Work > WO Planning > WO Daily Scheduling**	Parameters Equipment Preview WO Activity Preview Employee Preview Daily Scheduling Shift Scheduling
WO Load Balancing	**Work > WO Planning > WO Load Balancing**	Parameters Preview Balance Load
WO Scheduling	**Work > WO Planning > WO Scheduling**	Not applicable
WO Quick Close	**Work > WO Quick Close**	Work Order Quick Close
WO Quick Entry	**Work > WO Quick Entry**	Not applicable
WO Update	**Work > Process > WO Update**	List View (editable)

Screen	Default navigation	Tab or pop-up name
Work Orders Healthcare	**Work > Verticals > Healthcare > Work Orders Healthcare**	List View Record View Comments Activities Book Labor Closing Parts Cost Summary Additional Costs Book Vendor Hours Calibration Children Customer Requests Documents Equipment Inspections Meter Readings Monitored Data Results Part Failures Permits Plan Tools Purchasing Qualifications Repair Parts Resources Schedule Labor Schedule Tools Service Request Details Survey Equipment Tools Usage

Screen	Default navigation	Tab or pop-up name
Work Orders	**Work > Work Orders**	List View
		Record View
		Comments
		Activities
		Book Labor
		Closing
		Parts
		Cost Summary
		Additional Costs
		Book Vendor Hours
		Calibration
		Checklist
		Children
		Customer Requests
		Documents
		Equipment
		Inspections
		Meter Readings
		Monitored Data Results
		Nonconformities
		Part Failures
		Permits
		Plan Tools
		Purchasing
		Qualifications
		Related Work Order History
		Related Work Orders
		Repair Parts
		Resources
		Safety
		Schedule Labor
		Schedule Tools
		Service Request Details
		Survey Equipment
		Tools Usage
		Jobs
		Plan Labor
		Repairs
		Linear Overview
		Part Failures

Screen	Default navigation	Tab or pop-up name
Work Orders Hospitality	**Work > Verticals > Hospitality > Work Orders Hospitality**	List View Record View Comments Activities Book Labor Closing Parts Cost Summary Additional Costs Book Vendor Hours Calibration Children Customer Requests Documents Equipment Inspections Meter Readings Monitored Data Results Part Failures Parts Associated Permits Plan Tools Purchasing Qualifications Repair Parts Resources Schedule Labor Schedule Tools Service Request Details Survey Equipment Tools Usage
Work Requests	**Work > Work Requests**	Not applicable

User

Basics

Starting the application

The application is a Web-architected, Internet-based application, accessible via Internet Explorer, Google Chrome, and Safari browsers. Additionally, your browser must be set up to allow cookies and enable JavaScript before accessing the login page.

To start the application:

1. Choose **Start > Programs > Internet Explorer** from the Windows taskbar.
2. Specify this information:

   Address
   Specify the URL provided by your system administrator.

   User ID
   Specify your user ID.

   Password
   Specify your password.
   Note: Users can change passwords at any time.

   Periodically, you are required to change your password.

3. Click **Log In**.

   If you have query rights for the **Start Center** home page, work orders, purchase requisitions, and service requests assigned to you are displayed. To see the record details, double-click the selected record.

   Note: To log out and return to the login page, click **Logout** on the header.

   If you want to bookmark the login page as a shortcut link, you may provide the User ID in the URL:

   http://YourServer/web/base/logindisp?userid=YourUserID. If your User ID contains a "+" symbol, then you must substitute "%2B" for the "+" symbol.

   If you have forgotten your password, click **Forgot Password**. Specify your **User ID**, and then click **Reset My Password**.

Navigating the user interface

Infor EAM includes several navigation options that allow you to quickly and easily find the pages and information you need. Navigate through the system by clicking icons, menus, buttons, tabs, and hyperlinks on each page.

Accessing options on the header

Access basic functions on the header drop-down, which is displayed in the left-hand pane on all pages. Additionally, click on the navigation tabs to access the major functional areas or modules within the system.

See the following descriptions when accessing options on the header:

Option	Function
Start Center	Displays the **Start Center home** page
My Account	Displays the **My Account** page, which allows you to view and change your e-mail address, system language, login password, and success message information
Help	Displays help topics covering system procedures and a link to the User's Guide
About	Displays system application information, such as application name, version number, schema name, and user ID
Logout	Logs out of the system

Accessing the menu bar

The system displays functions and menus that apply to a form or page on the menu bar. When you position your mouse over the navigation menus on the menu bar, the system displays a "drop-down" menu that lists the forms that apply to that navigation menu. Select an item from the drop-down menu to open the corresponding form.

Click the drop-down menu to view the screens currently in the history queue. This includes most recently viewed screens during a session, and the cached screen folder, with cached screens displaying alphabetically. The entire history is cleared when you log out and therefore won't be available when you log back in.

Using the toolbar

Access basic system functions on the toolbar. Hover the cursor over a button to view a pop-up description of the button's function.

See the following descriptions when accessing buttons on the toolbar:

Hover text/function	Shortcut
Previous Screen returns to the previous page	CTRL+Left Arrow or F11
Save Record saves the current record	CTRL+S or F10
New Record inserts a new record	CTRL+N or F6

Hover text/function	Shortcut
Delete Record deletes the record	CTRL+D or CTRL+F6
Next Record displays the next record	CTRL+Down Arrow
Previous Record displays the previous record	CTRL+Up Arrow
Copy Record copies the current record. See Copying records on page 320.	CTRL+F or F4
Reset Screen clears changes to the current record	CTRL+R
Print Record prints the current record	ALT+P
Print Preview displays a preview of the current report	
Help displays online help for the current page	ALT+H
Screen Designer displays the page in designer mode, for system administrators only	ALT+E
Exit screen designer mode returns the page to normal mode	CTRL+I
Preview Mode displays the layout of screen with hidden fields removed, and without saving changes on the screen/returning to normal mode	ALT+W
EPAK opens a link to Infor's Education Performance Accelerator Kit (`EPAK`), an end-user training and support application to help you get up and running quickly.	ALT+K
Expand Left closes the summary grid and displays the full record view layout.	ALT+Left
Split View restores the split view layout with a summary grid of records on the left-pane and a record view layout on the right-pane.	Ctrl+Home
Expand Right closes the record view and displays a full list view layout.	ALT+Right

Understanding tabs

Some forms within the system include multiple tabs. Each tab displays a page on the form. Some tabs are displayed by default, and others must be manually added to the form.

To add a tab to a form, click **More**, and then choose the tab to add. The added tab will not be saved by default after you log out of the system. Permanently adding a tab is a security function performed by your system administrator. Contact your system administrator for more information.

Understanding the message bar

The system uses the message bar at the top of the window to quickly display messages, errors, and options you must view or select after performing an action. The message bar can include any of the following message types:

Message type	Description
Error	Indicates an error (e.g., a requisition must contain line items or the record has been modified by another user)
Warning	Warns the user of an impending action (e.g., password expiration or overwriting an existing record)
Question	Requires the user to select an option before taking an action (e.g., enter a reason for rejection prior to rejecting a requisition or work request)
Success	Indicates the action was successfully completed (e.g., clicking Submit successfully created a requisition)
Information	Displays informational text that is not the result of a user's action (e.g., a system message)

Using the keyboard shortcuts

Keyboard shortcuts are keys or key combinations for functions within Infor EAM.

System keyboard shortcuts

The following keyboard shortcuts allow easy access to the system-level functions available on the header:

Function	Shortcut
My Account	CTRL+F9
Help	CTRL+H
About	CTRL+F10
Log Out	CTRL+Q
Opens first listing in the Main Menu	CTRL+M

Screen-level keyboard shortcuts

The following keyboard shortcuts allow easy access to screen-level functions:

Function	Shortcut
Next record	CTRL+Down Arrow
Previous record	CTRL+Up Arrow
Copy record	CTRL+F or F4
New record	CTRL+N (not supported for Chrome) or F6
Save record	CTRL+S or F10
Reset screen	CTRL+R
Back/Previous screen	CTRL+Left or F11
Delete record	CTRL+D or CTRL+F6
Help (toolbar button)	ALT+H
EPAK	ALT+K
Open lookup	F9
Screen-level help	F1
Print screen	CTRL+P
Open/close the multi-field search on List View and Record View screens	F7
Execute a multi-field search	F8
Open the Jump to Screen popup	CTRL+F2
Clear the filter values and reset the operators in the multi-field search	ALT+C

Screen designer keyboard shortcuts

Keyboard shortcuts are keys or key combinations for system functions. The following keyboard shortcuts allow easy access to screen designer functions while in designer mode:

Function	Shortcut
Save layout	CTRL+S
Open group selection	CTRL+G
Exit screen designer mode	CTRL+I

Date keyboard shortcuts

The following keyboard shortcuts allow easy access to enter dates. Position the cursor in the date field prior to entering the shortcut steps.

Function	Shortcut
Specify the current date	Press SPACEBAR
Specify a specific date or partial date in the date field	Press numeric keys to enter the desired date and then press TAB to exit the field. The date is evaluated and displays the closest match in the required format. For example, if youenter 070102, the system displays Jul/01/2002.

Note: Use the "+" and "-" keys to change the date when the cursor is in the date field. Press the "+" key to add one day to the date. Press the "-" key to subtract one day from the date.

Accessing right-click options

The system includes two types of right-click menu options: system-level and screen-level. Right-click menu options are available when inserting or updating records.

Screen-level options

Screen-level options are displayed at the top of the right-click menu. The screen-level options change based on which screen is being accessed. A right-click menu option is displayed for each button that appears on the screen.

System-level options

System-level options are displayed at the bottom of the right-click menu. System-level options are common functions that are available on most screens, such as audit trail. See the following table for more information on right-click functionality at the system level:

Feature	Function
Audit Trail	Monitors attribute changes to records. See "Auditing Attributes" in the *Infor EAM System Administrator Guide*.
Add to Screen Cache	Adds the name of the screen as a tab at the bottom of the application.
Remove from Screen Cache	Removes the name of the screen as a tab at the bottom of the application.

Updating fields

A field is a single topic of information in a record. Required fields (noted by a shaded color) must be completed for a record to be valid.

Right-click in a field within a grid to update selected rows. Updating fields in Infor EAM follows the standard Windows controls for selecting rows:

- **CTRL+CLICK**
  Individually selects and unselects rows.

- **SHIFT+CLICK**
  Selects all rows between the clicked row and the most recently selected row. Shift+Click also unselects all rows that do not meet the criteria above.

The header at the top of the form will not update for subsequent selections; it will always show the first record selected. Therefore, if the **List View** page has multiple records selected, the system remains on the record displayed in the header. The multi-selection is lost when you leave the page.

If you click off the record that is currently being displayed in the header, the system displays the top-most selected record in the header.

Note: The update fields feature is available only on the following List View pages: Work Orders, Parts, Equipment, Requisitions, Purchase Orders, and User ID.

To update fields:

1. Select the records to update.
2. Right-click on a selected record, and then select **Update Field**.
3. Specify this information:

   Field
   Select the field to update.
   Note: Not all fields are available for update in the right-click options. If a field is Protected or Hidden, it is not included in the list. In addition, some fields with associated special business rules, i.e., prompting the user with a yes/no question, are excluded.

   New Value
   Specify the new value for the field.

   Set Value to Null
   Select to set the field to null.

4. Click **Submit**.

Entering information into fields with the equipment lookup

The equipment lookup enables you to search for assets, positions, systems, and locations and retrieves them to fields and forms within the system. You can filter the list of records in the lookup based on the key fields and many attributes of the equipment. You can also view an equipment's hierarchy using the equipment lookup and retrieve equipment records to fields and forms within the system from the Structure Details.

Note: When invoked from some forms within the system, the equipment lookup enables you to retrieve multiple equipment records to forms at once.

Entering equipment with the equipment lookup

To enter equipment with the equipment lookup:

1. From any form containing the equipment lookup, click the equipment lookup icon.

   Note: Enter the first few characters of the value for which you are searching, and then click the equipment lookup icon.

   If you entered the first few characters of the piece of equipment and only one equipment record that begins with those characters exists in the database, the system automatically displays the equipment record on the **Structure** page. The system does not display any equipment records until you conduct a search.

2. Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing dataspy.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields and many attributes of the equipment, and then click **Run**. The system displays equipment records that are not Out of Service or Withdrawn.

3. Choose one of the following options:
   - Double click the row containing the equipment to retrieve.
   - Select for each equipment record to retrieve, and then click **OK**.
4. Click **OK**.

Viewing equipment hierarchies with the equipment lookup

View equipment hierarchies of parent/child relationships between equipment. Select records within the hierarchy to retrieve equipment forms and fields within the system.

To view equipment hierarchies with the equipment lookup:

1. From any form containing the equipment lookup, click the equipment lookup.
2. Enter the Dataspy and Quick Filter details to query for the equipment for which to view a hierarchy.
3. Select the record for which to view the equipment hierarchy, and then click the **Structure** tab.
4. Choose one of the following options as necessary:

   Display as Focal Point
   The system sets the focus of the **Structure** tab to the selected record.

   Show Details
   The system returns to the **Search** page and updates the Equipment list with only the selected record.

   Note: Click the **Search** tab to return to the **Search** page without selecting a specific record from the equipment hierarchy.

5. Select the record(s) to retrieve, and then click **OK**.

Entering custom fields

Further define records with custom fields.

Note: Define custom fields on the **Custom Fields** form and the **Associate Custom Fields** form. Contact your system administrator for more information.

To enter custom fields:

1. From any form, click the **Record View** tab.
2. Enter information in the fields as necessary.
3. Click **Save Record**.

Entering user defined fields

Enter user defined fields as an alternative to custom fields. User defined fields are stored in the parent table of each record (rather than in a separate table as with custom fields).

Note: Fields types available are text, date/time, number, and checkbox.

To enter user defined fields:

1. From any form containing user defined fields, click the **Record View** tab.
2. Enter information in the fields as necessary.
3. Click **Save Record**.

Defining options for user defined text fields

To define options for user defined text fields:

1. Click the **Record View** tab.
2. In Screen Designer mode, right-click in a user defined text field, and then select **User Defined Field Options**.
3. Specify this information:

   Lookup Type
   Select one of the following options:
   - **None**
   - **Code**
   - **Code and Description**
   - **Entity**

   Lookup Entity
   Specify the entity to be used for the lookup.
   Note: **Lookup Entity** is available only for **Lookup Types** of Entity.

   Minimum Value
   Specify the minimum value for the field.

   Maximum Value
   Specify the maximum value for the field.

4 Select the **Validate Against Lookup** check box to validate this field against the lookup.
5 Select the **Print UDF on Supported Reports** check box to print this field on reports with the Print UDF option.
6 Select the **Enable UDF for Add-ons** check box to enable this field for add-ons.
7 Click **Submit**.

Defining options for user defined date/time fields

To define options for user defined date/time fields:

1 Click the **Record View** tab.
2 In Screen Designer mode, right-click in a user defined date/time field, and then select **User Defined Field Options**.
3 Specify this information:

Minimum Value
Specify the minimum value for the field.

Maximum Value
Specify the maximum value for the field.

Display Time Element
Select to display the time element adjacent to the date.

4 Select the **Print UDF on Supported Reports** check box to print this field on supported reports.
5 Select the **Enable UDF for Add-ons** check box to enable this field for add-ons.
6 Click **Submit**.

Defining options for user defined number fields

To define options for user defined number fields:

1 Click the **Record View** tab.
2 In Screen Designer mode, right-click in a user defined number field, and then select **User Defined Field Options**.
3 Specify this information:

Minimum Value
Specify the minimum value for the field.

Maximum Value
Specify the maximum value for the field.

Number Type
Choose one of the following options:

Option
Number
Currency

Option
Integer

UOM Value
Specify the unit of measure for the field.

4 Select the **Print UDF on Supported Reports** check box to print this field on supported reports.
5 Select the **Enable UDF for Add-ons** check box to enable this field for add-ons.
6 Click **Submit**.

Defining options for user defined checkbox fields

To define options for user defined checkbox fields:

1 Click the **Record View** tab.
2 Enter information in the fields as necessary.
3 In Screen Designer mode, right-click in a user defined check box field, and then select **User Defined Field Options**.
4 Select the **Print UDF on Supported Reports** check box to print this field on reports with the Print UDF option.
5 Select the **Enable UDF for Add-ons** check box to enable this field for add-ons.
6 Click **Submit**.

Managing lists

The system often displays information in tabular format, such as list view pages, the **Asset Warranties** page containing a list of items, and any lookup. Select a row in a list to view record details or select data from a list view. You can also quickly sort, filter, re-arrange or resize fields if the system defaults do not suit your needs.

Selecting rows in a list

Select rows in a list to view the record associated with the row, to copy the row data from a lookup to fields on a page, or to specify records on which to perform an action

To select rows in a list:

1 Open any page or lookup containing a list of records.
2 Click anywhere in the row to select the row.
3 Choose one of the following options:

Option	Description
Perform an action on the selected row	Click the button corresponding with the action.

Option	Description
If the row is in a list view, view the details of the record associated with the row	Double-click the row.
If the row is in a lookup list view, copy the row data to fields on the original page	Double-click the row (or select the row, and then click **OK**).

Defining quick filters on forms

Filter a list of records on forms to display only those records that meet your specified criteria.

Note: The system applies the filter in addition to any filter criteria specified in a Dataspy that is applied to the list.
Note: To filter multiple fields simultaneously on the list view, click **Grid Menu**, and then select **Show Filter Row**. The system displays the filter row on the list view. Select the operators for multiple fields, click **Filter Menu**, and then click **Run Filter**. The system displays the records matching the filter criteria.

To define quick filters on forms:

1. Open any form containing a list of records.

   Note: On list views, the system displays the number of records that were located using the specified Dataspy on the filter bar.

2. Select the **Filter** field on which to filter from the first drop-down list.

   Note: For forms that include custom fields, the custom fields are displayed at the end of the filter drop-down list. Only custom fields associated to the entity of the screen AND associated to a class with an organization for which the user has query rights will be displayed. If more than one entity exists for the screen, then only the primary entity will be used.

   The field being queried, which is the first field of the three, defaults to the first column in the grid unless the first column is a non-data bound select checkbox. To change the default quick filter, modify the grid layout then save the changes.

   See Saving the list layout on page 320.

   The operator of the quick filter, which is the second field of the three, can default to Starts With or Contains. Set the value of the QUICKDEF install parameter to S or C.

3. Select an operator from the second drop-down list. See the following table for operator options:

Operator	Definition
Starts With	Search for items with a description that begins with the entered value.
Equals	Search for items with a value equal to the entered value.
Does Not Equal	Search for items with a description that does not equal the entered value.
Contains	Search for items with a description that contains the entered value.

Operator	Definition
Does Not Contain	Search for items with a description that does not contain the entered value.
Ends With	Search for items with a description that ends with the entered value.
Is Empty	Search for items with a description that has no entered value.
Is Not Empty	Search for items with a description that has any entered value.
Less Than	Search for items with a value less than the entered value.
Greater Than	Search for items with a value greater than the entered value.
Less Than or Equals	Search for items with a value less than or equal to the entered value.
Greater Than or Equals	Search for items with a value greater than or equal to the entered value.
Selected	Search for items where the checkbox is selected. This applies to checkbox fields only.
Not Selected	Search for items where the checkbox is not selected. This applies to checkbox fields only.
Either Selected or Not Selected	Search for items where the checkbox is either selected or not selected. This applies to checkbox fields only.

4 Enter the value for which to filter in the third field.

Note: If the field on which you are filtering is displayed on a **Record View** page, the third field in the quick filter will display according to that field type: text box, drop-down list, lookup, checkbox, or calendar.

5 Click **Run**.

Defining quick filters on lookups

Filter a list of records on lookups to display only those records that meet your specified criteria.

Note: The system applies the filter in addition to any filter criteria specified in a Dataspy that is applied to the list.

To define quick filters on lookups:

1 Open any lookup containing a list of records.

2 Select the **Filter** field on which to filter from the first drop-down list.

Note: For forms that include custom fields, the custom fields are displayed at the end of the filter drop-down list. Only custom fields associated to the entity of the screen AND associated to a class with an organization for which the user has query rights will be displayed. If more than one entity exists for the screen, then only the primary entity will be used.

3 Select an operator from the second drop-down list. See the following table for operator options:

Operator	Definition
Starts With	Search for items with a description that begins with the entered value.
Equals	Search for items with a value equal to the entered value.
Does Not Equal	Search for items with a description that does not equal the entered value.
Contains	Search for items with a description that contains the entered value.
Does Not Contain	Search for items with a description that does not contain the entered value.
Ends With	Search for items with a description that ends with the entered value.
Is Empty	Search for items with a description that has no entered value.
Is Not Empty	Search for items with a description that has any entered value.
Less Than	Search for items with a value less than the entered value.
Greater Than	Search for items with a value greater than the entered value.
Less Than or Equals	Search for items with a value less than or equal to the entered value.
Greater Than or Equals	Search for items with a value greater than or equal to the entered value.

4 Enter the value for which to filter in the third field.

Note: If the field on which you are filtering is displayed on a **Record View** page, the third field in the quick filter will display according to that field type: text box, drop-down list, lookup, checkbox, or calendar.

5 Click **Add Line** to add additional lines to the filter.

6 Click the **AND/OR** hyperlink to select one of the following join operators:

Option	Description
Include records that include all joined conditions	Select **AND**.

Option	Description
Include records that contain one or the other condition	Select **OR**.

7 Click **(** or **)** to add a parenthesis to the highlighted row. These parentheses are used when running a query to group statements together when mixing AND and OR statements.
8 Specify additional conditions by which to filter as necessary.
9 Select the **Default Dataspy** check box to make the Dataspy the default Dataspy for the form.
10 Click **Run**.

Note: You can also press **ENTER** to display the records matching the filter criteria.

Sorting lists

Sort a list of records by any column in the list in ascending or descending order.

To sort lists:

1 Open any page or lookup containing a list of records.
2 Choose one of the following options:

Sort the records in ascending (A-Z) order
Double-click the column header of the column by which to sort the list.

Sort the records in descending (Z-A) order
Double-click the column header of the column by which to sort the list, and then double-click the column header again.

Arranging columns in a list

Arrange the order in which columns in a list are displayed.

To arrange columns in a list:

1 Open any page or lookup containing a list of records.
2 Click and hold the column header of the column to move.
3 Holding the mouse button down, drag the header on top of the column header next to which you want the column to appear until the target column header is highlighted.

Note: If the column header is dragged from left to right, the column header is placed after the target column. If the column header is dragged from right to left, the column header is placed before the target column.

4 Release the mouse button. The column is arranged in the specified order.

Note: To save the order and sizes of the columns, click **Save Record** in the upper-right part of the list view.

Resizing columns in a list

Specify the widths of columns in a list.

To resize columns in a list:

1. Open any page or lookup containing a list of records.
2. Position your mouse over the right-hand border of the column to resize.
3. Click and hold the column border, and then drag the border in the desired direction to increase or decrease the width of the column.
4. Release the mouse button.

   Note: To save the order and sizes of the columns, click **Grid Menu** in the upper-right part of the list view. Select **Save Grid Layout**.

Saving the list layout

After arranging the columns in the list view, save the layout to be used each time you return to that screen.

To save the list layout:

1. Open the form for which to save the layout.
2. Modify the page layout as necessary.
3. Click **Grid Menu** in the upper-right part of the list view.
4. Click **Save Grid Layout**.
5. Click **OK**.

Copying records

Use the Copy Record toolbar button to copy information from one record to another record within the same form. Copying a record creates an editable copy of the record that contains the same base data. The **Copy Record** button is only available on forms that have List View and Record View pages, and it is only enabled on the **List View and Record View** pages.

Note: To copy a record, you must have insert rights for the organization of the record you are copying.

To copy records:

1. Open the form for which to copy records.
2. Select the record to copy, and then click **Copy Record**. The system copies values from the previously selected record to the new record, including custom fields, and displays the form in insert mode.

   Note: To maintain certain business and security rules, some displayed fields may not copy over to the new record. Verify all copied data before saving the record.
3. Modify the record as necessary.
4. Click **Save Record**.

Exporting records

Export records from to a Microsoft Excel file to extract information from the database without making an external connection, e.g., from outside of the system, to the database. The file can be viewed using Microsoft Excel.

Note: The export to Excel function exports a maximum of 64,000 records.

To export records:

1. Open the form from which to export records.

   Note: The system will export the results of the last query performed, even if you are not currently viewing those records (e.g., if you cleared the form or if this exceeds the limit of what is displayed on the grid).

2. Click **Grid Menu**.
3. Click **Save Grid to Excel**.
4. Save the file as necessary.

Displaying the total record count

All list views have the ability to display the total record count, even if this count exceeds the current maximum number of records that can be displayed in the list view.

To display the total record count:

1. Open the form for which to display the total record count.
2. Click **Show Total Record Count**.
3. Click **OK**.

Associating documents

Associate documents with records using the **Documents** page and specify whether the document attachments linked to work orders are copied and/or printed. For example, a technician who created an equipment record needs to attach a document to the record, such as schematics, drawings, warranties, etc. You may also associate documents to task plan jobs on the **Jobs** and **Documents** tabs of the **Task Plans** form.

The copy and print options displayed on the Documents popup change dynamically depending on the record to which you are linking a document. Documents can be of any file type. The documents being associated must have already been created using the **Documents** form.

Note: You can only print document attachments that are Adobe Acrobat Portable Document Format (.PDF) files for work orders.

To associate documents:

1. From any form, click the **Documents** tab.
2. Click **Add Document**.
3. Specify this information:

Document
Specify the document to associate.

Choose one or more of the following options as necessary:

Print with Work Order/Print with Purchase Order
Select to enable the option to print document attachments when you print the work order or purchase order. If selected, the .PDF attachments from the purchase order or work order are printed.

Print with Work Order is only displayed for document attachments associated with assets, systems, positions, categories, profiles, work orders, and preventive maintenance schedules. **Print with Purchase Order** is only displayed for documents associated with parts and purchase orders.

Copy to Work Order/Copy to Purchase Order
Select to enable the option to copy any document attachments associated with a part on a purchase order line to the purchase order or to copy any document attachments associated with a piece of equipment on a work order to the work order. If selected, the document attachments from the part, equipment, PM, or standard work order are copied to the purchase order or new work order.

Copy to Work Order is only displayed for document attachments associated with the OBJ, STWO, or PPM entities. **Copy to Purchase Order** is only displayed for document attachments associated with the PART entity.

Note: You can only select to copy a document attachment to a purchase order or work order when you originally create the purchase order or work order. After saving a purchase order or work order to the database, modifying the copy settings for document attachments for a part, equipment, PM, or standard work order will not roll down and affect any existing purchase orders or work orders. Any changes made to the copy settings for document attachments after initially saving them to the database will only affect any purchase orders or work orders for the part, equipment, PM, or standard work order when a new purchase order or work order is generated for the modified part, equipment, PM, or standard work order.

Choose one of the following options:

Copy Link
Select to copy the link to the document.

Copy Document
Select to make a copy the document and link the copy to the work order.

Print with Report
Select to enable the option to print document attachments when you print reports. If selected, the .PDF attachments from the report are printed.

Print with Report is not displayed for document attachments associated with assets, systems, positions, work orders, parts, purchase orders, or customer requests.

Note: Although the **Print with Report** check box is available on all entities, only some reports support the Print Attachments option.

4 Click **Save**.

Note: To view a document before you save the record, click **View Document**.

Uploading documents

Upload a document from your local system to the web server. The uploaded document is uploaded and a new document record is created. If the new document record is created from the Documents tab of a form, the new document record is associated to the selected record on the specific form. For example, a foreman may create a piece of equipment and attach a document such as a drawing, a warranty, or other schematic to the equipment by uploading the document to the equipment record.

To upload documents:

1. From any form, click the **Documents** tab.
2. Click **Create/Upload Document**.
3. Specify this information:

   Document Code
   Specify a unique code identifying the document, and then enter a description of the document in the adjacent field.

   Organization
   Specify the organization to which the document will belong.

   Choose one of the following options as necessary:

   Create File System Document
   Select to create a file system document.

   Upload Document
   Select to upload a document.

   File Name
   Specify the file name, or click **Browse** to find the document on your machine.

   File Path
   Specify the file path to the location where the document is saved on your computer.

   IDM Document Type
   Specify the document type if you are uploading it from the Infor Document Manager system.

   Effective Date
   Specify the date to make the document available in the system to users of this organization.

   Expiration Date
   Specify the date the document at which the document is no longer available to those users in the system.

   Title
   Specify the title of the document.

4. Click **Submit**.

Entering comments

Enter comments for most modules in the system using the **Comments** page. You can also specify whether the comment should print with the specified record.

Access the **Add/Edit Comments** page via the Add/Edit Comments link on certain forms. The procedures for entering comments are the same, regardless of how you access the **Add/Edit Comments** page.

Adding comments

Enter comments on records.

To add comments:

1. From any form which supports comments, select the record for which to add comments, and then choose one of the following options:

   Using the Comments tab
   Click the **Comments** tab. The **Comments** page is displayed. Click **Add Comment**. The Add/Edit Comments popup is opened with HTML Editor Capabilities.

   Using the Add/Edit Comments link
   Click **Add/Edit Comments** for a selected record on the details tab of a form that supports adding comments, for example, the **Activities** tab of the **Work Orders** form. The Add/Edit Comments popup is opened with HTML Editor Capabilities.

   Note: Set HTMLCOMM to ON to view the HTML Editor toolbar. Contact your system administrator for more information on installation parameters.

   HTML formatting is not supported in Cognos Reports. Comments are displayed as text without formatting.

2. Specify this information:

   Language
   Select the language of the comment.

   Comments
   Enter the comments on the form.
   Note: Format comments using the HTML Editor toolbar.

3. Optionally, select the **Print with Document** check box to indicate that the comments print on the associated report.
4. Click **Save**.

Modifying comments

Modify comments on records.

Note: The **Work Order Quick Close** form does not support modifying HTML formatted comments.

To modify comments:

1 From any form which supports comments, select the record for which to modify comments, and then choose one of the following options:

   Using the Comments tab
   Click the **Comments** tab. The system displays the **Comments** page. Click the comment to modify. At the bottom of the page, the system expands the Add/Edit Comments section with HTML Editor Capabilities.

   Using the Add/Edit Comments link
   Click **Add/Edit Comments**. The system displays the **Comments** page. Click **Expand/Collapse** on Add/Edit Comments. At the bottom of the page, the system expands the Add/Edit Comments section with HTML Editor Capabilities.

   Note: To view or edit comments entered in another language, select the desired **Language**. The system displays that language's **Comments**. If no comments were entered for the selected language, the system displays the comments for the user's default language.

2 Modify the existing comments as necessary.

3 Click **Save**.

   Note: On the **Comments** page, the system does not display a link for the original Created comment after the comment is modified. To preserve all comments, do not delete any previous comment text when modifying comments.

   To save a comment, click **Save Record**.

   To clear a comment, click **Clear Comment**.

   To delete a comment, click **Delete Comment**.

Viewing audits for comments

View audits in order to monitor changes in comments.

To view audits for comments:

1 Open any entity form.

2 Select the record for which to view the audit, and then click the **Comments** tab.

3 Click **View Audit Trail**.

4 View the audit information.

   Note: You can only view audit information if you have established audit control and changes have been made to the fields under audit. Contact your system administrator for more information.

   Recorded in Mobile indicates when comments are updated or deleted in Mobile. The date and time reflect updates in Mobile.

5 Click **Close**.

Entering description translations

Enter description translations for languages. For example, when an asset is created, the description becomes the record's description for every language. If the asset's description is entered in English, it will appear in English to all users.

Use the **Translations** tab to translate the description into specific languages. This feature only applies to multilingual installations.

Note: When you update a description on the **Record View** page of any entity record, if that description has previously been translated, the translation becomes invalid and the system unselects **Translated**.

To enter description translations:

1. From any form associated with an entity, select the record you wish to translate, and then click the **Translations** tab.
2. Select the description to translate.
3. Specify this information:

   Translated Description
   Specify the translated description for the language. The system automatically selects **Translated**.

4. Select the **Translated** check box to indicate that you have entered a translated description.
5. Click **Submit**.

Viewing electronic records and signatures

View electronic records and signatures for entities. The system stores information concerning snapshots and signatures, including the date and type of the snapshot or signature, name of the person who signed or updated the record, the type of the signature entered, and the new status of the record.

To view electronic records and signatures:

1. Open any form requiring electronic signatures for status changes.
2. Select the record for which to view the eRecord, and then click the **eRecords** tab.
3. View the snapshot and electronic signature information.

   Note: You can also print the electronic records directly from the eRecords page. Click **Print All eRecords** to print all records in the list for that entity, or click **Print Selected eRecord** to print only a specific record for the entity.

Associating addresses

Associate mail, invoice, and delivery addresses with records and functions. Enter contact information such as address, telephone, fax, and e-mail address.

To associate addresses:

1. From any form associated with an entity, select the record with which to associate or edit the address, and then click the **Addresses** tab.

2 Click **Add Address**.

3 Specify this information:

Address Type
Select one of the following options:

Mail
Select to create a mailing address.

Invoice
Select to create an invoice address.

Delivery
Select to create a delivery address.

Specify the appropriate contact information.

Full Address
Specify the full address as well as any comments.

4 Click **Submit**.

Associating parts

Associate parts with records and functions. For example, associate specific parts to an asset, position, system, or location. You can also modify the quantity of an existing part or remove a part from the **Parts Associated** page.

Note: Define parts on the **Parts** form.

To associate parts:

1 From any form associated with an entity, select the record with which to associate parts, and then click the **Parts Associated** tab.

2 Click **Add Part**.

3 Specify this information:

Part
Specify the part to associate with the record. The system automatically populates the part description, **Part Org.**,**Primary Manufacturer**, **Primary Manufacturer Part Number** and **Component Location**.
Note: Click **Stock Info** to view stock information.

Click **Substitutes** to view alternate part information.

Click **Suppliers** to view supplier information for the part.

Click **Manufacturers** to view manufacturer information.

Click **Where Used**to view information on where the part is used.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system automatically populates **Condition**.

Quantity
Specify the number of parts to associate with the record. This number must be greater than zero.

4 Enter additional comments as necessary.
5 Click **Submit**.

Using a Dataspy

A Dataspy is a named, predefined view of a list of records or set of data that can be used on any page, lookup, or data area that contains that same list of records.

A Dataspy consists of the following four basic components:

- **Filter**
  Contains the conditional statements that make up a filter. For example, a Dataspy might filter for all requisitions that have a**Status** "equal to" Approved, and a **Creation Date** "greater than" last Friday.

- **Sort**
  Specifies the order in which the records should be sorted. For example, a Dataspy might sort the requisitions so that the most recently created requisitions are displayed at the top of the list in descending order.

- **Layout**
  Specifies the fields that are displayed in the list and the order in which those fields should be displayed. For example, a Dataspy might specify that the **Requisition Description** column is displayed to the left of the **Requisition Number** column and that the **Storeroom** field is not displayed in the list.

- **Advanced**
  Specifies an additional Where clause used for filtering data. The Where clause is appended to the Where clause generated by the Dataspy Filter.

Note: You can also specify column order by arranging the columns in a list view.

If a custom field saved in a Dataspy is ever unassociated, then that custom field will no longer appear in the Dataspy nor will it impact the Dataspy. If the same custom field is ever associated again, the relationship in the Dataspy will automatically be restored.

Editing an existing Dataspy

Edit the values in an existing Dataspy.

Note: The system automatically includes a number of predefined public Dataspies. Only a system administrator can modify the public Dataspies.

To edit an existing Dataspy:

1. On any list view page, select the Dataspy to edit from the drop-down list on the filter bar, and then click **Edit**.

   Note: You can select a different Dataspy name from the drop-down list on the Dataspy editor header.

2. Edit the Dataspy criteria as necessary.

   Note: Click **Run** to apply the Dataspy to the list without saving changes.

   Select the **Default Dataspy** check box to save the selected Dataspy as the default.

3. Click **Save**. The system applies the Dataspy to the list view from which the Dataspy editor was launched.

   Note: You can only edit and save Dataspies that you created. If you edit a system-delivered Dataspy, the system goes into Copy mode.

Creating a new Dataspy

To create a new Dataspy:

1. Browse to the list view of the screen on which you are creating the new Dataspy.
2. Click **Edit** next to the Dataspy dropdown.
3. Click **New** at the top of the Dataspy popup.
4. Specify a unique name for the Dataspy in the text box.
5. Specify the Dataspy filter, sort, layout, and advanced layout criteria as necessary on the Filter, Sort, and Layout tabs.
6. Optionally, select the **Default Dataspy** check box to save the selected Dataspy as your default.
7. Click **Save**. The Dataspy is applied to the list view from which the Dataspy editor was launched.

   Note: Click **Run** to apply the Dataspy to the list without saving changes.

   Click **Cancel New** to cancel the creation of a new Dataspy and return to the previous view.

   You can also press **ENTER** to display the records matching the filter criteria.

Creating a copy of an existing Dataspy

Copy the values from an existing Dataspy into a new Dataspy and edit the criteria as necessary.

To create a copy of an existing Dataspy:

1. On any list view page, select the Dataspy to edit from the drop-down list on the filter bar, and then click **Edit**.
2. Click **Copy**.
3. Modify the title for the Dataspy in the text box as necessary.
4. Edit the Dataspy criteria as necessary.

   Note: Select **Default Dataspy** to save the selected Dataspy as the default.

5. Click **Save**. The Dataspy is applied to the list view from which the Dataspy editor was launched.

Deleting a saved Dataspy

To delete a saved Dataspy:

1. On any list view page, select the Dataspy to edit from the drop-down list on the filter bar, and then click **Edit**.
2. Click **Delete**.

   Note: You can only delete Dataspies that you created.

Specifying Dataspy criteria

Specify the filter, sort, layout, and advanced criteria when creating, editing, or copying a Dataspy. When the Dataspy is applied to a list, the system displays only the records that match the specified filter criteria in the sort order and layout specified.

Specifying Dataspy filter criteria

Select the fields, conditions, and values upon which to filter a list of records.

To specify Dataspy filter criteria:

1. On any list view page, select the Dataspy to edit from the drop-down list on the filter bar, and then click **Edit**.
2. Click **Filter** from the left-hand column of the Dataspy editor.
3. Select a field on which to filter from the first drop-down list.
4. Select an operator from the second drop-down list.

   See the following table for operator options:

Operator	Definition
Starts With	Search for items with a description that begins with the entered value.
Equals	Search for items with a value equal to the entered value.
Does Not Equal	Search for items with a description that does not equal the entered value.
Contains	Search for items with a description that contains the entered value.
Does Not Contain	Search for items with a description that does not contain the entered value.
Ends With	Search for items with a description that ends with the entered value.
Is Empty	Search for items with a description that has no entered value.

Operator	Definition
Is Not Empty	Search for items with a description that has any entered value.
Less Than	Search for items with a value less than the entered value.
Greater Than	Search for items with a value greater than the entered value.
Less Than or Equals	Search for items with a value less than or equal to the entered value.
Greater Than or Equals	Search for items with a value greater than or equal to the entered value.
Selected	Search for items where the checkbox is selected. This applies to checkbox fields only.
Not Selected	Search for items where the checkbox is not selected. This applies to checkbox fields only.

5 Enter a value for which to filter in the third field.

Note: Enter relative dates by specifying + or – with units in days. For example,"-1" is one day back, and last week would be >="-7".

6 Click the **AND/OR** hyperlink to select one of the following join operators:

Include records that include all joined conditions
Select **AND**.

Include records that contain one or the other condition
Select **OR**.

7 Click **(** or **)** to add a parenthesis to the highlighted row. These parentheses are used when running a query to group statements together when mixing AND and OR statements.

8 Enter additional conditions by which to filter as necessary.

Note: Click **Add Line** to add additional lines to the filter.

To remove a filter line, choose the blank selection from the first drop-down list.

Specifying Dataspy sort criteria

Select the order in which to sort a list of records.

To specify Dataspy sort criteria:

1 On any list view page, select the Dataspy to edit from the drop-down list on the filter bar, and then click **Edit**.

2 Click **Sort** from the left-hand column of the Dataspy editor.

3 Specify this information:

1st
Select the first field by which to sort the records.

Click to select one of the following sort orders:

Sort Ascending
Select to sort records either alphabetically or numerically by the selected field (ascending).

Sort Descending
Select to sort records in either reverse alphabetical or reverse numerical order by the selected field (descending).

4 Enter additional fields by which to sort as necessary.

Note: To remove sort criteria, choose the blank selection from the drop-down lists.

5 Click **Save**.

Specifying Dataspy layout criteria

Select the columns to display when the Dataspy is applied to a list of records, and then specify the order in which the fields will be displayed.

Additionally, the system allows you to specify the number of records that the system will retrieve before it retrieves another set of records from the database in a list view. This setting does not affect the height of a table (i.e., the number of rows that are shown without scrolling the table). This setting is important because it will affect the speed at which the system downloads and displays a list containing a large number of records.

For example, if the value is set at 100 (the default), the system will only download the first 100 records that match the criteria specified in the selected Dataspy. When you scroll to the end of the 100 records, the system will download and display the next 100 records that match the criteria specified in the Dataspy. If the value is set to 300, then the system will not display any of the records until it has downloaded all 300 records.

To specify Dataspy layout criteria:

1 On any list view page, select the Dataspy to edit from the drop-down list on the filter bar, and then click **Edit**.

2 Click **Layout** from the left-hand column of the Dataspy editor.

Available Fields lists all fields that are available but not visible in the list of records, while **Visible Fields** lists all fields displayed as columns in the list of records.

See the following table when selecting or ordering fields:

Function	Procedure
Add a field	Select the field in **Available Fields**, and then click **Add a field**.
Remove a field	Select the field in **Visible Fields**, and then click **Remove a field**.
Add all fields	Click **Add all fields**.

Function	Procedure
Remove all fields	Click **Remove all fields**.
Reorder fields	Select the field in **Visible Fields**, and then click either **Reorder up** or **Reorder down** to move the field up or down in the order.

3 Specify this information:

Number of data rows to retrieve
Enter the number of rows that the system will retrieve in the list view before it downloads another set of rows.

4 Click the field to select, and then see the table above when selecting or ordering fields.
5 Click **Save**.

Specifying Dataspy advanced criteria

To specify Dataspy advanced criteria:

1 On any list view page, select the Dataspy to edit from the drop-down list on the filter bar, and then click **Edit**.
2 Click **Advanced** from the left-hand column of the Dataspy editor.
3 Specify this information:

Where Clause
Enter an additional Where clause as necessary. The Where clause is appended to the Where clause generated by the Dataspy Filter. The Where clause will be appended with an "AND" statement if a Filter has been specified.

4 Click **Test Where Clause**.

Note: Click **Display SQL Statement** to view the entire SQL statement. The **SQL Statement** field is read-only.

Hiding global Dataspies

Choose to hide global Dataspies from selected user groups on specific screens or tabs.

To hide global Dataspies:

1 Select **Administration > Security > User Groups**.
2 Select the user group for which to hide Dataspies, and then click the **Screen Permissions** tab.
3 Select the screen or tab for which to hide Dataspies, and then click **Hide Global Dataspies**. The system automatically populates **Dataspy Name** and **Global Default**.
4 Select the **Hide Dataspy** check box to hide specific Dataspies from the selected user group.
5 Click **Submit**.

Viewing the **Start Center**

View inbox entries, KPIs, and charts on the **Start Center** page.

To view the **Start Center**:

1. Log in to Infor EAM.

   Note: To return to the **Start Center** from any other form, click **Start Center** on the header.

2. View the **Inbox**, **Chart Controls** and **KPIs** sections.

   Note: The system automatically recalculates the values of inbox entries and the KPI data that have **Auto Refresh** activated when you open the **Start Center** page.

   To manually refresh the inbox entries and KPIs, click **Refresh**.

Understanding the **Start Center** inbox

The inbox displays pending actions or activities (inbox entries) for users on the **Start Center** page. You can call screens necessary to complete actions or activities associated with inbox entries directly from the inbox. Inbox entries can either be user-group specific or public and can be assigned to specific user groups or defined as public entries that are displayed for all users.

Access the inbox by invoking the **Start Center**, or the system administrator can set up the inbox to open automatically when you log in to the system. Configure the inbox to refresh completely or selectively every time it is accessed.

The system administrator associates SQL select statements with inbox entries. These statements define inbox entries that query the database for the appropriate instances of an entry to retrieve to your inbox.

Depending on your system privileges, you can also modify the inbox by adding and/or deleting entries. You can also modify the order and sequence in which entries are displayed.

The system displays a description and value for each entry in the inbox. If a screen is selected for an entry during definition, the system administrator enters a Dataspy for the inbox entry to automatically query for and retrieve the records associated with an inbox entry to the called screen when it is invoked.

For example, the system administrator sets up an inbox entry to approve work orders for your company's maintenance manager. When the maintenance manager accesses the **Start Center**, the SQL statement defined for the work order approval inbox entry queries the system database and displays an inbox entry to approve work orders in the inbox. The inbox entry indicates that there are three outstanding work orders to approve. The maintenance manager calls the **Work Orders** form directly from the work order approval entry on the inbox by double-clicking, and the Dataspy defined for the screen automatically retrieves the three work orders requiring approval on the **Work Orders** form.

The Inbox includes three tabs and pages of information: Operations, Maintenance, and Management. You can modify the text that appears on the three **Start Center** Inbox tabs. Contact your system administrator for more information.

Setting up the **Start Center** inbox

Set up the **Start Center** Inbox to display inbox entries specific to your job. Specify the default inbox tab and modify the sequence in which inbox entries are displayed in the inbox. You can also delete inbox entries.

Specifying the default Start Center inbox tab

The **Start Center** Inbox contains three tabs and pages of information: Operations, Maintenance, and Management. Specify which of the **Start Center** Inbox tabs you wish to display by default whenever you access the **Start Center**.

To specify the default **Start Center** Inbox tab:

1. Open the **Start Center** page.
2. Select the inbox tab to set as the default.
3. Click **Save as Default**.

Adding entries to the Start Center inbox

Add entries to the **Start Center** inbox to display entries that are specific to your job.

To add entries to the **Start Center** inbox:

1. Open the **Start Center** page.
2. Click **Personalize**.
3. Click **Insert Inbox Entry**.
4. Specify this information:

   Sequence Number
   Enter the sequence in which the inbox entry will be displayed in the inbox.

   Inbox Code
   Enter the inbox entry to add to the inbox. The system automatically populates the inbox description.

   Folder
   Select the folder on which to place the inbox entry.

5. Select the **Auto Refresh** check box to enable the system to automatically refresh the inbox every time the **Start Center** is invoked.
6. Click **Submit**.
7. Click **Close**.

Modifying the sequence of inbox entries

Modify the sequence in which inbox entries are displayed in the inbox.

To modify the sequence of inbox entries:

1. Open the **Start Center** page.
2. Click **Personalize**.

3 Select the inbox entry for which to modify the display sequence, and then enter a new value for **Sequence Number**.
4 Click **Submit**.
5 Click **Close**.

Accessing screens from the **Start Center** inbox

Access screens associated with inbox entries directly from the inbox.

To access screens from the **Start Center** inbox:

1 Open the **Start Center** page.
2 Locate the inbox entry for which to call a screen, and then double-click the entry.

Note: The system automatically queries for and retrieves the records associated with the inbox entry to the called screen if you defined a Dataspy for the called screen when defining the inbox entry.

Understanding the **Start Center** KPIs

The **Start Center** displays key performance indicators (KPIs) and their scores. KPIs are user-defined parameters that measure productivity or efficiency. The system displays an icon and a score for each KPI on the **Start Center**. The **Start Center** enables you to view the status of your work environment with respect to the KPIs specific to your job, as well as your current score for each KPI. The scores for KPIs are calculated at regular intervals based on the KPI definition.

The system administrator defines and grants access to the KPIs. KPIs can either be user-group specific or public. Public KPIs can be displayed for all users.

Access KPIs on the **Start Center** or have the system administrator set up the Start Center to open automatically when you log on to Infor EAM. Depending on system privileges, you can configure the **Start Center** to display KPIs based on your preferences.

Note: The system only supports .gif files for the images displayed for KPIs on the **Start Center**.

Setting up the **Start Center** KPIs

Set up the KPIs specific to your job. Modify the sequence in which KPIs are displayed in the inbox. You can also delete KPIs.

Adding KPIs to the Start Center

Add KPIs to the **Start Center** to display the KPIs that are specific to your job.

To add KPIs to the **Start Center**:

1 Open the **Start Center** page.
2 Click **Personalize**.

3 Click **Insert KPI Entry**.
4 Specify this information:

   Sequence Number
   Specify the sequence in which the KPI will be displayed in the **Start Center**.

   KPI Code
   Specify the KPI to add to the **Start Center**. The system automatically populates the KPI description.

5 Select the **Auto Refresh** check box to enable the system to automatically refresh the KPI every time the **Start Center** is invoked.
6 Click **Submit**.
7 Click **Close**.

Modifying the sequence of KPIs

Modify the sequence in which KPIs are displayed on the **Start Center**.

To modify the sequence of KPIs:

1 Open the **Start Center** page.
2 Click **Personalize**.
3 Select the KPI for which to modify the display sequence, and then enter the new value for **Sequence Number**.
4 Click **Submit**.
5 Click **Close**.

Accessing screens from Start Center KPIs

Access screens associated with KPIs directly from the **Start Center**.

To access screens from **Start Center** KPIs:

1 Open the **Start Center** page.
2 Locate the KPI entry for which to call a screen, and then double-click the entry.

   A parent arrow in the KPI entry title indicates that the entry is a parent KPI. The arrow only appears when children have been added to the parent. The arrow does not automatically appear by selecting **Parent** during KPI setup.

   To access the children KPIs, click the parent arrow. The KPIs are refreshed and all child KPIs are displayed. Double-click the child KPI for which to call a screen.

   Note: The KPI entry to the called screen and the associated records are automatically queried and retrieved if you defined a Dataspy for the called screen when defining the KPI entry.

Managing your account

Change your e-mail address, system language, and/or login password as necessary.

Note: If you change your user password and have any report schedules in Infor EAM Advanced Reporting, you must renew your credentials in Infor EAM Advanced Reporting. Contact your system administrator for more information.

To manage your account:

1 Click **My Account** on the header.

2 Specify this information:

Success Msg. Timeout
Select the time frame for which you want the message bar to display success messages.

E-mail
Specify a new e-mail address as necessary.

Language
Select the language to use for your account.

Note: If you modify **Success Msg. Timeout** or **Language**, you must log out, close all browser sessions, and then log in to see the changes.

Current Password
Specify the password you used to log in.

New Password
Specify the new password.

Confirm Password
Re-enter the new password.

Note: If LDAP is enabled, the **Current Password**, **New Password**, and **Confirm Password** fields are not displayed.

3 Click **Save Record**.

Asset management

Understanding equipment

Pieces of equipment are entities for which you store data and create work orders. Equipment can be of many different types, but the four main types are locations, systems, positions, and assets.

Type	Description
Locations	Physical locations of systems, positions, and assets. For example, a pumping system is located in Room 104.

Type	Description
Systems	Collections of positions and/or assets that work together so that when one part goes down, all parts are affected. For example, if a pump stops working, you must turn off the entire water line to repair it.
Positions	Functions performed by a general kind of asset. For example, the pump that moves water from one tank to another is a functional position, which can be filled by any number of actual, physical pumps (assets). Positions are also called "functional positions."
Assets	Generally, physical objects. Assets are the base unit of equipment information and the smallest tracking unit for capital investments.

Locations, systems, positions, and assets form a hierarchy of equipment information, with locations at the top of the hierarchy and assets at the bottom. Data is shared among the levels of the equipment hierarchy. For example, data for a work order performed on an asset is also stored in the position, system, and location equipment to which the asset belongs. This data sharing allows you to track assets and their performance in detail and under differing conditions, to evaluate the performance of entire systems, and to assess the effect that locations and positions have on systems and assets.

For example, you might have a pump (PU-9476-96) working in a functional position (PUMP-03) in a system on the first floor (FLOOR-01). The pump fails, and you remove it from the system to repair it and place another pump (PU-4854-93) in that position. The work order data for the failed pump is stored not only with the pump equipment (PU-9476-96) but also with the position equipment (PUMP-03) and the location equipment (FLOOR-01). When the pump is repaired, you place it in a different functional position (PUMP-02) on the second floor (FLOOR-02). After the pump is in that position for a while, you can compare the following:

- the performance of PU-9476-96 to the performance of PU-4854-93 in position PUMP-03 in location FLOOR-01 and
- the performance of PU-9476-96 in position PUMP-03 at location FLOOR-01 to its performance in position PUMP-02 at location FLOOR-02.

Setting up initial equipment information

Set up initial equipment information before using the equipment module.

Setting up equipment categories

Categories provide a way to further organize pieces of equipment. For example, if a class is defined for motors, create a category for motor types and sizes.

Note: If you created custom attributes for equipment classes, those attributes roll down to the category level and are visible in the **Custom Fields** section of the **Record View** page.

To set up equipment categories:

1. Select **Equipment > Setup > Categories**.
2. Click **New Record**.
3. Specify this information:

   Category
   Specify a unique code identifying the category, and then specify a description of the category in the adjacent field.

4. Specify the **Equipment Class** and **Manufacturer**.
5. Click **Save Record**.

Setting up closing codes

The system contains four types of closing codes: action codes, cause codes, failure codes, and problem codes. Action codes describe the steps necessary to correct the problem. For example, a code can specify to add lubricant to a pump. Cause codes identify what caused the component or type of component to fail, in other words the root cause of the problem. Failure codes identify the reason the equipment failed. Finally, problem codes identify the observed equipment failure, such as a leak from a faucet or the overheating of a pump.

To set up closing codes:

1. Select **Equipment > Setup > Closing Codes**.
2. Click **New Record**.
3. Specify the **Closing Code**, **Type**, and **Group**.

   The closing code will display in a tree of closing codes in lookups grouped by selected type

4. Select the **Out of Service** check box to mark the closing code out of service so that the closing code will not display in lookups.
5. Select the **Valid for all Equipment Classes** check box to make the closing code available to associate with any equipment regardless of the class defined for the equipment. General closing codes apply to general terms.

   Note: If classes have been created for the closing code, you cannot select **General**.

6. Select the **Enable for Work Orders** check box to display closing codes for work orders.
7. Select the **Enable for Part Failures** check box to display this closing code for part failures.
8. Click **Save Record**.

Associating closing codes with classes

Associate closing codes with classes. For example, equipment with a class of HVAC can have different closing codes than equipment with a class of MOTOR. A closing code can be associated with multiple classes.

Note: You cannot associate classes with general closing codes.

To associate closing codes with classes:

1 Select **Equipment > Setup > Closing Codes**.
2 Select the closing code with which to associate classes, and then click the **Classes** tab.
3 Click **Add Class**.
4 Specify the **Class** to associate with the closing code. The system automatically populates the class description and **Class Org.**
5 Click **Submit**.

Defining closing code hierarchies

Define parent/child hierarchy details for closing codes.

To define closing code hierarchies:

1 Select **Equipment > Setup > Closing Code Hierarchy**.
2 Click **Add Relationship**.
3 Specify the **Parent Closing Code**, **Child Closing Code**, and **Equipment**.
4 Click **Submit**.

Setting up departments

A department is the center or area that is responsible for the maintenance of equipment, such as an asset, a position, a system, or a location. The department coordinates the work, assigns the appropriate crew, plans the work, and approves respective work orders.

When defining equipment, assign it to a department. The department can be modified if needed on work orders. When creating work orders for maintenance or repairs to equipment, the system rolls up the associated costs to the department of the work order. Set up a default store for each department as well as a default supervisor. When reserving parts for a work order, the system stores them in the specified store.

Note: You cannot delete departments if they have already been used elsewhere in the system.

To set up departments:

1 Select **Equipment > Setup > Departments**.
2 Click **New Record**.
3 Specify the **Organization**, **Department**, **Class**, **Default Supervisor**, and **Default Store**.
4 Specify this information:

   Screener
   Specify the user responsible for screening work requests for the department.

   Account Segment Value
   Specify the general ledger account code segment that represents the department in your accounting structure. See your chart of accounts for more information.

5 Select the **Out of Service** check box to indicate the department is no longer in use.

6 Click **Save Record**.

Associating tools with departments

Associate tools with departments for scheduling purposes. Once you have associated a tool with a department, the system allows you to schedule the tool on a work order for the department.

To associate tools with departments:

1 Select **Equipment > Setup > Departments**.
2 Select the department with which to associate a tool, and then click the **Tools** tab.
3 Click **Add Tool**.
4 Specify the **Organization** and the **Department** to which the tool belongs.
5 Specify this information:

   Quantity
   Specify the available quantity of the tool.

   Rate
   Specify the hourly rate for the tool.

   Hours
   Specify the number of hours the tool is available.

   Currency
   The system displays the base currency of the organization

6 Click **Submit**.

Creating equipment profiles

Create equipment profiles to use as equipment templates. After creating a profile, use it to quickly create equipment records that require the same information as is contained on the profile.

To create equipment profiles:

1 Select **Equipment > Setup > Profiles**.
2 Click **New Record**.
3 Specify the unique **Profile** code, and then specify the **Organization**, **Department**, **Status**,**Type**, **Class**, **Equipment Value**, **Meter Unit**, **Manufacturer**, **Revision**, **Model**, **Part**, and **Store**.
4 Select the **Out of Service** check box if the equipment is not in service.
5 Select the **GIS Profile** check box to flag the profile as a GIS profile.

   Note: Once you create a GIS profile, associate it with a GIS layer. GIS and Infor EAM use the GIS profile and layer information to create equipment records in the respective systems.

   See the *System Administrator's Guide*.

6 Specify this information:

   Variable 1, Variable 2, Variable 3, Variable 4, Variable 5, Variable 6
   Specify any additional information to be included on the equipment to define with this profile.

7 Click **Save Record**.

Defining details for risk matrix setup

Define consequence categories, probabilities, and risk levels for the risk matrix.

To define details for risk matrix setup:

1 Select **Equipment > Setup > Risk Matrix Setup**.
2 Click **New Record**.
3 Specify the unique **Code** for the consequence category, probability, or risk level and then specify a description in the adjacent field.
4 Specify the **RCM Project**, **Type**, **Rating/Threshold**, **Color** that will be used for risk levels, and **Icon** for the probability and risk levels.
5 Click **Save Record**. The system automatically populates **Created By** and **Date Created**.

Defining consequences for risk matrix setup

Define consequences for the Risk Matrix.

To define consequences for risk matrix setup:

1 Select **Equipment > Setup > Risk Matrix Setup**.
2 Select the consequence category for which to add consequences, and then click the **Consequences** tab.
3 Click **Add Consequence**.
4 Specify this information:

   Consequence Code
   Specify a unique code to identify the consequence and then specify a description of the consequence in the adjacent field. Click **Translations** to translate the description text into a different language.

   Severity
   Specify a value to identify the severity of the consequence.

   Icon
   Select an icon that will identify the Consequence. If Other is selected for **Icon**, select the **Icon Path**.

5 Click **Submit**. The system automatically populates **Created By** and **Date Created**.

Defining equipment

Define your organization's assets, positions, systems, and locations as equipment.

Note: You can only delete equipment records that do not have histories or other associated records.

If you have purchased the GIS integration, automatically define ESRI GIS features as you define Infor EAM assets, positions, or systems. In addition, view equipment on a GIS map from the Assets, Positions, or Systems forms.

See these references:

- Defining GIS features (Infor EAM) on page 1070
- Viewing GIS maps from equipment records on page 1098

As you define an equipment record, specify that it is subject to the United States Food and Drug Administration (FDA) Current Good Manufacturing Practices (cGMP) standards as necessary. Depending on your system configuration, the system creates electronic records or requires signatures for any work performed on cGMP equipment. Contact your system administrator for more information.

Create a large number of identical equipment records quickly with equipment profiles.

See Defining equipment using profiles on page 366.

Define linear equipment records for equipment that spans a length of space, for example a bridge.

See Defining linear equipment on page 364.

Define Vehicle Maintenance Reporting System (VMRS) equipment as necessary.

See Defining VMRS equipment on page 365.

Define equipment before associating parts or permits with that equipment or before setting up parent/child relationships.

See Defining equipment hierarchies on page 385.

Note: When the selected equipment is dependent on a parent, the equipment inherits its location from that parent. Equipment cannot be dependent on more than one parent.

When equipment is directly associated with a location, the relationship is automatically a dependent one.

Multiple system parents can exist for assets, positions, and systems. Therefore, this relationship cannot be established or maintained on the **Record View** pages of these forms.

Because equipment records are central to all functionality, the system allows you to perform a number of functions directly from the Assets, Positions, or Systems forms. Right-click to access the functionality. See the following table, which displays the functionality available from the Assets, Positions, and Systems forms and directs you to the section and chapter within this guide that provides instructions for use:

Right-Click Option	See
Create GIS Feature	Defining GIS features (Infor EAM) on page 1070
View GIS Map	Viewing GIS maps from equipment records on page 1098
View GIS Attributes	Identifying features (Infor EAM) on page 1090
Create WO	Defining regular work order headers on page 775 and Defining regular work order activities on page 781
Transfer Equipment	Transferring equipment between organizations on page 423
Linear Equipment Search	Searching for references on page 392

Right-Click Option	See
Calculate Reliability Ranking Values	Creating equipment rankings on page 458

Defining assets

Define your organization's assets as equipment.

The installation parameter ASSETASS determines whether assets are recognized at purchase order creation or upon receipt.

See "Defining installation parameters" in the *Infor EAM System Administrator Guide*.

To define assets:

1 Select **Equipment > Assets**.
2 Click **New Record**.
3 Specify the **Organization**, **Department**, **Type**, **Operational Status**.

   Note: Equipment cannot be made operational if regulatory items exist with repairs needed. The checklist items for the equipment must have a resolution of Repair Completed or Temporary Repair with a Follow-up WO-Activity or Deferred Maintenance.

4 Specify this information:

   Asset
   Specify a unique code identifying the asset, and then specify a description of the asset in the adjacent field.
   Note: If the AUTOANUM installation parameter is set to YES, the asset number is automatically assigned if the **Asset** code is not specified.

   Loaned to Department
   Specify the department to which the asset is loaned.

   PM WO Department
   Specify the department responsible for the PM work order.
   Note: If the Department for the PM Schedules and Maintenance patterns work orders are blank, the PM WO Department is used to generate works orders. Otherwise, the Department is used.

   Status
   Select the status of the asset. The default status values include these options:

Option	Description
Awaiting purchase	Interacts with the purchasing module. If assets are recognized at purchase order creation, then an asset must be created at time of purchase order generation. The ASSETASS installation parameter determines when assets are recognized: at receipt (R) or at purchase order creation (P).

Option	Description
In store	Reserved for new assets received into a firm's store. Select the **Status** value In store only when defining an asset in the inventory store.
Installed	Assigned when an asset is in place and operating within the business organization.
Withdrawn	Assigned when an asset is no longer available for use. This status is not available during initial asset creation. The system automatically populates **Withdrawal Date**.

5 Specify the **Class**, **Category**, **Cost Code**, **Profile**, **System Level**, **Assembly Level**, **Component Level**, **Commission Date**, **Equipment Value**, **Withdrawal Date**, **Sold/Scrap Date, Original Receipt Date**, **Latest Receipt Date**, **Original Install Date**, and **Latest Install Date**.

6 Specify this information:

Production
Select this check box if the asset is used in production.

Safety
Select this check box to observe safety precautions when working with this asset.

Out of Service
Select this check box if the asset is not used.

Prevent WO Completion
Select this check box to indicate that work orders for this asset should not be closed.

Current Workspace
Optionally, specify the current workspace of the asset.

Assigned To
Specify the person responsible for the asset.

Meter Unit
Specify the asset's primary unit of measure.

Criticality
Specify a criticality code to indicate the relative importance of the asset to the overall production of goods or services for your organization.
Note: **Criticality** proceeds to work orders when the asset requires maintenance.

State
Select the state of the asset.
Note: If you select CN pending, CN In Process, or CN Completed, a value for **Change Notice** must be specified. If you select Good or Defective, **Change Notice** is cleared.

Change Notice
Specify the change notice for the asset.

Note: If you specify or change the value for **Change Notice**, the system changes **State** to CN Pending if **State** is not populated. If you clear **Change Notice**, the **State** changes to Good.

cGMP
Select this check box to indicate that the equipment is subject to cGMP standards.

Dormant Start
Specify the date on which the dormant period for any PM work orders for the equipment begins.

Dormant End
Specify the date on which the dormant period for any PM work orders for the equipment ends.

Reuse Dormant Period
Select this check box to use the same specified dormant period for any PM work orders for the equipment on an annual basis.

Track Resources
Select this check box to track the resources directly related to this equipment.

Temperature Monitored
Select this check box if the equipment has temperature monitoring capabilities.

Set
Specify a set with which to associate the asset.

Set Position
Specify the position of the set.

Documoto Book ID
Specify a specific Documoto Book with which to associate the asset.

7 Specify the **Driver** and **Driver Phone Number** if the asset is a vehicle. Optionally, specify this information for the vehicle.

Accessible
Select this check box if the vehicle is handicap accessible.

Non-Smoking
Select this check box if the vehicle is a non-smoking vehicle.

8 Specify the **Manufacturer**, **Serial Number**, **Model**, and **Revision**.

9 Optionally, specify the **Hardware Version**, **Software Version**, **Purchasing Asset ID**, **Biomedical Asset ID**, **UMDNS Code**, **OEM Site / System ID**, **Vendor**, and **Coverage Type**.

10 Specify the **Part**, **Store**, **Bin**, and **Lot**.

Note: Only specify parts that are tracked by asset. You can specify a **Store** and **Bin** only if the equipment's **Status** is Awaiting purchase or In store.

11 Specify this information:

Vehicle
Select this check box if the asset is a vehicle.

Reservable Equipment
Select this check box if the asset can be reserved.

Vehicle Status
Specify the status of the vehicle.

Vehicle Type
Specify the vehicle type.

Rental Template
Specify the template used for the rental reservation.

Contract Equipment
Select the check box if the asset is contract equipment.

Contract Template
Specify the template used for the contract.

Customer
Specify the rental customer.

Availability Status
Specify the availability of the asset.

Issued To
Specify to whom the asset is issued.

Reservation Calendar Owners List
Specify the approval list for the Reservation Calendar Owner.

Reservation Calendar Owner
Specify the reservation calendar owner who can edit equipment reservations.

12 Specify the **Fleet Customer**, **Billing Code**, **Markup Code**, and **Vehicle Status**.

Note: If a **Billing Code** or a **Markup Code** are associated directly to the asset, the ticketing process will always assign these codes to the ticket, regardless of the **Billing Codes** associated with the fleet customer on the **Billing Codes** form.

The **Fleet Customer**, **Cost Code**, **Vehicle Status**, and **Issued To** values should be controlled primarily through the ticketing process for vehicles. The **Vehicle Status** must be Available to be issued through ticket.

13 Specify the **Calendar Group**, **Penalty Factor**, and **Minimum Penalty**.

14 Select the **Service Delivery Matrix** check box to restrict work orders for this equipment to a pre-defined service delivery matrix.

Note: Service Delivery Matrix must be selected for **Service Problem Code Validation** on the **Call Center Setup** tab.

15 Specify the **Parent Asset**, and then select the **Dependent** check box if the asset depends on the parent asset. Then select the **Cost Roll-up** check box if the costs should roll up to the parent asset.

16 Specify the **Primary System**, and then select the **Dependent** check box if the asset depends on the primary system. Then select the **Cost Roll-up** check box if the costs should roll up to the primary system.

17 Specify the **Position**, and then select the **Dependent** check box if the asset is depends on the position. Then select the **Cost Roll-up** if the costs should roll up to the position.

18 Specify the **Location**, **Equipment Length**, **Equip. Length UOM**, **Linear Ref. UOM**, **Ref. Precision**, **Geographical Ref.**, **Inspection Direction**, and **Flow**.

Note: The **Equipment Length Override** check box is automatically selected if the specified **Equipment Length** is different than the length calculated based on the **From Point** and **To Point**.

19 Specify this information:

Lockout / Tagout
Select this check box if the equipment complies with OSHA regulations on lockout/tagout procedures. This regulation ensures machines are properly shut down and that they do not start again until service or maintenance on the machine is completed.

Personal Protective Equipment
Select this check box if OSHA requires the use of personal protective equipment when operating the equipment to reduce exposure to hazards or injury.

Confined Space
Select this check box if the equipment is located in an area defined as a confined space as per OSHA regulations.

Statement of Conditions
Select this check box to indicate the system relates to the Statement of Conditions as required by The Joint Commission.

Building Maintenance Program
Select this check box to indicate the system equipment is inventoried in the building maintenance program.

HIPAA Confidentiality
Select this check box to indicate the system equipment contains confidential patient health information and the equipment must comply with regulations.

20 Specify this information:

Note: The values of the FCI details should be specified based on the planning budget and investment figures from a third party audit.

Cost of Needed Repairs
Specify the cost of necessary repairs. The system automatically populates the currency, and defaults **Eligible for Energy Star Label** to unselected.

Replacement Value
Specify the current replacement value for the equipment. The system automatically populates the currency.

Facility Condition Index
Specify the resultant FCI based on the maintenance details. `Cost of Needed Repairs/Current Replacement Value=FCI`

Floor Area
Specify the floor area, and then specify the unit of measure for the floor area.

Track Utility Bills
Select this check box to mark the asset as having capabilities to record utility bills.

Track Gas
Select this check box to set the equipment as GAS (Global Asset Sustainability) Tracked.
Note: If data exists on the **Design Consumption** or **Actual Consumption** tabs, the equipment must remain as GAS Tracked.

21 Specify the **Estimated Revenue**, **Region**, **Primary Use**, **Year Built**, and **Service Life (years)**.

22 Specify the **Ownership Type**, **Inventory Verification Date**, **Equipment Value**, **Purchase Order #**,**Purchase Date**, **Purchase Cost**, and **Disposal Type**.

23 Select the **Lock Reliability Ranking Values** check box to lock the reliability ranking values for the equipment on the Ranking Survey tab of the Equipment screen.

Note: If **Lock Reliability Ranking Values** is selected, the user is not allowed to modify the reliability survey answers and calculate reliability ranking values for the equipment. The selection of the equipment for update on the **Batch Update Equipment Ranking Values** tab is also prevented.

24 Specify this information:

Reliability Ranking
Specify the reliability ranking code for the equipment. The system automatically populates **Reliability Ranking Index**, **Reliability Ranking Score**, **Reliability Ranking Values Out of Sync**, **Reliability Ranking Values Last Calculated**, **Reliability Survey Last Updated**, and **Reliability Ranking Setup Last Updated**, after answering the reliability survey.

Target Power Factor
Specify the target power factor that has been determined for the asset.

Target Peak Demand (W)
Specify the target peak demand in watts for the asset.

Start Billing Period
Specify the date that the billing period begins. The Peak Demand measurements are relevant after this date.
Note: The Peak Demand alert updates this field based on the specified **Bill Every**, but manual changes may be required depending on the actual utility invoices received.

Bill Every
Specify the length of the interval of time to pass before the next bill is expected. Then select the unit of measure in the adjacent field.

Eff. Loss 1% Phase Imb.
Specify the efficiency loss per 1 percent imbalance.

Eff. Loss 2% Phase Imb.
Specify the efficiency loss per 2 percent imbalance.

Eff. Loss 3% Phase Imb.
Specify the efficiency loss per 3 percent imbalance.

Eff. Loss 4% Phase Imb.
Specify the efficiency loss per 4 percent imbalance.

Eff. Loss 5% Phase Imb.
Specify the efficiency loss per 5 percent imbalance.

Performance Manager
Specify the energy performance manager who is responsible for the equipment.

Electric Sub-meter Interval
Specify the length of the interval of time in minutes indicating how frequently the electric sub-meter is read.

Electric Usage Threshold
Specify the current in amps above which the equipment is considered running or on.

25 Click **Save Record**.

The system automatically populates **Equipment Configuration**, **Equipment Configuration Org.**, and **Equipment Configuration Revision**

Note: If a review is performed on the **Safety** tab, the system automatically populates **Safety Date Review Required** and **Safety Reviewed By**.

If a review is performed on the **Permits** tab, the system automatically populates **Permit Date Review Required** and **Permit Reviewed By**.

If a review is performed on the **LOTO** tab, the system automatically populates **LOTO Date Review Required** and **LOTO Reviewed By**.

Defining positions

Define your organization's functional positions as equipment.

To define positions:

1 Select **Equipment > Positions**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the position belongs if you use multi-organization security. The system automatically populates **Transfer Date** and **Org.**

Position
Specify a unique code identifying the position, and then specify a description of the position in the adjacent field.
Note: If the AUTOANUM installation parameter is set to YES, the system automatically assigns the position number if the **Position** code is not specified.

Department
Specify the position's department. The system automatically populates **GIS ID**, **Layer**, **Location X**, **Location Y**, **Map**, and **Map Org.**

Type
Specify the equipment type.

Operational Status
Specify the operational status of the position.
Note: Equipment cannot be made operational if regulatory items exist with repairs needed. The checklist items for the equipment must have a resolution of Repair Completed or Temporary Repair with a Follow-up WO-Activity or Deferred Maintenance.

Loaned to Department
Specify the department to which the\ position has been loaned.

PM WO Department
Specify the department responsible for the PM work order.
Note: If the Department for the PM Schedules and Maintenance patterns work orders are blank, the PM WO Department will be used to generate works orders. Otherwise, the Department will be used.

Status
The system defaults **Status** to Installed. This value cannot be changed.

4 Specify the **Class**, **Category**, and **Cost Code** for the position.

Note: If you specify a category for which calibration data has been defined, the system copies the calibration and test point data to the position.

5 Specify this information:

Production
Select this check box if the position is used in production.

Safety
Select this check box to observe safety precautions when working with this position.

Profile
Specify the profile on which to base this equipment record.

Out of Service
Select this check box if the position is not used.

Prevent WO Completion
Select this check box to indicate that work orders for this position should not be closed.

Current Workspace
Optionally, specify the current workspace of the position.

6 Specify the VMRS codes for the **System Level**, **Assembly Level**, and **Component Level**.

7 Specify this information:

Commission Date
Specify the installation date for the position.
Note: The **Commission Date** defaults to the current date when you create a position.

Assigned To
Specify the person responsible for the position.

Meter Unit
Specify the position's primary unit of measure.

Criticality
Specify a criticality code to indicate the relative importance of the position to the overall production of goods or services for your organization.

cGMP
Select this check box to indicate that the equipment is subject to cGMP standards.

Sold/Scrap Date
Specify the date on which the asset is sold or scrapped.

Dormant Start
Specify the date on which the dormant period for any PM work orders for the equipment begins.

Dormant End
Specify the date on which the dormant period for any PM work orders for the equipment ends.

Reuse Dormant Period
Select this check box to use the same specified dormant period for any PM work orders for the equipment on an annual basis.

Track Resources
Select this check box to track the resources directly related to this position.

Set
Specify a set with which to associate the position.

Set Position
Specify the position of the set.

8 Specify the **Original Receipt Date**, **Latest Receipt Date**, **Original Install Date**, and **Latest Install Date**.

9 Optionally, specify this information:

Checklist Filter
Select the checklist filter.

Size for Tolerance
Specify the size tolerance for the position.

Temperature Monitored
Select this check box if the equipment has temperature monitoring capabilities.

10 Specify this information:

Documoto Book ID
Specify a specific Documoto Book with which to associate the position.

Manufacturer
Specify the manufacturer of the position.

Serial Number
Specify the serial number of the position.

Model
Specify the model of the position.

Revision
Specify the revision of the position.

11. Optionally, specify the **Hardware Version**, **Software Version**, **Purchasing Asset ID**, **Biomedical Asset ID**, **UMDNS Code**, **OEM Site / System ID**, **Vendor**, and **Coverage Type**.
12. Specify this information:

Variable 1, Variable 2, Variable 3, Variable 4, Variable 5, Variable 6
Specify the variables of the position.

Calendar Group
Specify the calendar group for the position. The system automatically populates **Calendar Group Org.**

Penalty Factor
Specify the penalty factor for the position.

Minimum Deduction/Currency
Specify the minimum deduction allowed.

Asset
Specify the asset for the position.

Dependent
Select the check box if the position is dependent upon the Asset.

Cost Roll-up
Select the check box if costs should roll up to the Asset.

Location
Specify the location of the position.

Parent Position
Specify the parent position.

Dependent
Specify if the position is dependent upon the Parent Position.

Cost Roll-up
Select this check box if costs should roll up to the Parent Position.

13. Specify the **Equipment Length**, **Equip. Length UOM**, **Linear Ref. UOM**, **Ref. Precision**, **Geographical Ref.**, **Inspection Direction**, and **Flow**.

Note: The **Equipment Length Override** check box will be selected if the specified **Equipment Length** is different than the length calculated based on the **From Point** and **To Point**.

14 Specify this information:

Note: The values of the FCI details should be specified based on the planning budget and investment figures from a third party audit.

Cost of Needed Repairs
Specify the cost of necessary repairs. The system automatically populates the currency.

Replacement Value
Specify the current replacement value for the equipment. The system automatically populates the currency.

Facility Condition Index
Specify the resultant FCI based on the maintenance details. Cost of Needed Repairs/Current Replacement Value equals FCI.

Utility Bill Level
Select this check box to mark the asset as having capabilities to record utility bills.

GAS Tracked
Select this check box to set the equipment as GAS (Global Asset Sustainability) Tracked.
Note: If data exists on the **Design Consumption** or **Actual Consumption** forms, the equipment must remain as GAS Tracked.

Facility
Select this check box to add the facility record in the ENX Suite list of facilities.
Note: **Facility** is available for Oracle installations only.

Floor Area
Specify the floor area, and then specify the unit of measure for the floor area.

Estimated Revenue
Specify the estimated revenue the piece of equipment can generate.

Region
Specify the region for the equipment. The system automatically populates **Region Org.**

Country
Specify the country.
Note: **Country** is available for Oracle installations only.

Primary Use
Specify the primary use for the equipment.

Year Built
Specify the year built for the equipment.

Service Life (years)
Specify the service life of the equipment.

Lock Reliability Ranking Values
Select the check box to lock the reliability ranking values for the equipment on the Ranking Survey tab of the Equipment screen.
Note: If **Lock Reliability Ranking Values** is selected, the system will not allow the user to modify the reliability survey answers and calculate reliability ranking values for the equipment. The system also prevents the selection of equipment for update on the **Batch Update Equipment Ranking Values** form.

Reliability Ranking
Specify the reliability ranking code for the equipment. The system automatically populates **Reliability Ranking Index**, **Reliability Ranking Score**, **Reliability Ranking Values Out of Sync**, **Reliability Ranking Values Last Calculated**, **Reliability Survey Last Updated**, and **Reliability Ranking Setup Last Updated**, after answering the reliability survey.

Vehicle Type
Specify the vehicle type.

Reservable Equipment
Select this check box if the position can be reserved.

Contract Equipment
Select this check box if the position is contract equipment.

Contract Template
Specify the template used for the contract.

Customer
Specify the rental customer.

Availability Status
Specify the availability of the position.

Issued To
Specify to whom the position is issued.

Reservation Calendar Owners List
Specify the approval list for the Reservation Calendar Owner.

Reservation Calendar Owner
Specify the reservation calendar owner who can edit equipment reservations.

Rental Template
Specify the template used for the rental reservation.

Target Power Factor
Specify the target power factor that has been determined for the asset.

Target Peak Demand (W)
Specify the target peak demand in watts for the asset.

Start Billing Period
Specify the date that the billing period begins. The Peak Demand measurements are relevant after this date.
Note: The Peak Demand alert will update this field based on the specified **Bill Every**, but manual changes may be required depending on the actual utility invoices received.

Bill Every
Specify the length of the interval of time to pass before the system expects the next bill, and then select the unit of measure in the adjacent field.

Eff. Loss 1% Phase Imb.
Specify the efficiency loss per 1 percent imbalance.

Eff. Loss 2% Phase Imb.
Specify the efficiency loss per 2 percent imbalance.

Eff. Loss 3% Phase Imb.
Specify the efficiency loss per 3 percent imbalance.

Eff. Loss 4% Phase Imb.
Specify the efficiency loss per 4 percent imbalance.

Eff. Loss 5% Phase Imb.
Specify the efficiency loss per 5 percent imbalance.

Performance Manager
Specify the energy performance manager who is responsible for the equipment.

Electric Sub-meter Interval
Specify the length of the interval of time in minutes indicating how frequently the electric sub-meter is read.

Electric Usage Threshold
Specify the current in amps above which the equipment is considered running or on.

15 Optionally, specify this information:

Lockout/Tagout
Select this check box if the system equipment complies with OSHA regulations on lockout/tagout procedures. This regulation ensures machines are properly shut down and that they do not start again until service or maintenance on the machine is completed.

Personal Protective Equipment
Select this check box if OSHA requires the use of personal protective equipment when operating the equipment to reduce exposure to hazards or injury.

Confined Space
Select this check box if the equipment is located in an area defined as a confined space as per OSHA regulations.

Statement of Conditions
Select this check box to indicate the system relates to the Statement of Conditions as required by The Joint Commission.

Building Maintenance Program
Select this check box to indicate the system equipment is inventoried in the building maintenance program.

HIPAA Confidentiality
Select this check box to indicate the equipment contains confidential patient health information and the equipment must comply with regulations.

16 Specify the **Ownership Type**, **Inventory Verification Date**, **Equipment Value**, **Purchase Order #**,**Purchase Date**, **Purchase Cost**, and **Disposal Type**.

17 Click **Save Record**.

The system automatically populates **Equipment Configuration**, **Equipment Configuration Org.**, and **Equipment Configuration Revision**.

If a review has been performed on the **Safety** tab, the system automatically populates **Safety Date Review Required** and **Safety Reviewed By**.

If a review has been performed on the **Permits** tab, the system automatically populates **Permit Date Review Required** and **Permit Reviewed By**.

If a review has been performed on the **LOTO** tab, the system automatically populates **LOTO Date Review Required** and **LOTO Reviewed By**.

Note: Click **Linear Equipment Search** to locate linear equipment for the selected position.

Defining systems

Define your organization's systems as equipment.

To define systems:

1 Select **Equipment > Systems**.

2 Click **New Record**.

3 Specify the **Organization**, **System** and a description, **Department**, **Type**, and **Operational Status**.

Note: Equipment cannot be made operational if regulatory items exist with repairs needed. The checklist items for the equipment must have a resolution of Repair Completed or Temporary Repair with a Follow-up WO-Activity or Deferred Maintenance.

4 Specify this information:

Loaned to Department
Specify the department to which the system has been loaned.

PM WO Department
Specify the department responsible for the PM work order.
Note: If the Department for the PM Schedules and Maintenance patterns work orders are blank, the PM WO Department will be used to generate works orders. Otherwise, the Department will be used.

Status
The system defaults the Status to Installed, and this value cannot be changed. Specify the Equipment Details.

5 Specify the **Class**, **Category**, **Cost Code**, **Profile**, **System Level**, **Assembly Level**, and **Component Level**.

Note: If you specify a category for which calibration data has been defined, the system copies the calibration and test point data to the system.

6 Specify this information:

Production
Select this check box if the system is used in production.

Safety
Select this check box to observe safety precautions when working with this system.

Out of Service
Select this check box if the system is not used.

Prevent WO Completion
Select this check box to indicate that work orders for this system should not be closed.

Current Workspace
Optionally, specify the current workspace of the system.

Assigned To
Specify the person responsible for the system.

Meter Unit
Specify the system's primary unit of measure.

Criticality
Select a criticality code to indicate the relative importance of the system to the overall production of goods or services for your organization.

Dormant Start
Specify the date on which the dormant period for any PM work orders for the equipment begins.

Dormant End
Specify the date on which the dormant period for any PM work orders for the equipment ends.

Reuse Dormant Period
Select to use the same specified dormant period for any PM work orders for the equipment on an annual basis.

cGMP
Select this check box to indicate that the equipment is subject to cGMP standards.

Sold/Scrap Date
Specify the date on which the asset is sold or scrapped. Specify the following Tracking Details:

Documoto Book ID
Specify a specific Documoto Book with which to associate the part.

Track Resources
Select this check box to track the resources directly related to this equipment.

Set
Specify a set of equipment to associate with the system.

Set Position
Specify the position of the set of equipment.

7 Specify the **Original Receipt Date**, **Latest Receipt Date**, **Original Install date**, and **Latest Install Date**.

8 Optionally, specify this information:

Checklist Filter
Select the checklist filter.

Size for Tolerance
Specify the size tolerance for the system.

Temperature Monitored
Select this check box if the equipment has temperature monitoring capabilities.

9 Specify the **Manufacturer**, **Serial Number**, **Model**, and **Revision**.

10 Optionally, specify the **Hardware Version**, **Software Version**, **Purchasing Asset ID**, **Biomedical Asset ID**, **UMDNS Code**, **OEM Site / System ID**, **Vendor**, and **Coverage Type**.

11 Specify the variables of the system.

12 Specify the **Calendar Group**, **Minimum Penalty**, and **Penalty Factor**.

13 Select the **Service Delivery Matrix** check box to restrict work orders for this equipment to a pre-defined service delivery matrix.

14 Specify the **Location** and **RCM Level**

15 Specify the **Equipment Length**, **Equip. Length UOM**, **Linear Ref. UOM**, **Ref. Precision**, **Geographical Ref.**, **Inspection Direction**, **Linear Cost Weight**, and **Flow.**

Note: The **Equipment Length Override** check box will be selected if the specified **Equipment Length** is different than the length calculated based on the **From Point** and **To Point**.

16 Specify the **Cost of Needed Repairs**, **Replacement Value**, **Estimated Revenue**, **Region**, **Primary Use**, **Year Built**, and **Service Life (years)**.

Note: The values of the FCI details should be specified based on the planning budget and investment figures from a third party audit.

17 Specify this information:

Facility Condition Index
Specify the resultant FCI based on the maintenance details.

```
Cost of Needed Repairs/Current Replacement Value=FCI
```

Floor Area
Specify the floor area, and then specify the unit of measure for the floor area.

18 Select the **Utility Bill Level** check box to mark the asset as having capabilities to record utility bills.

19 Select the **Gas Tracked** check box to set the equipment as GAS (Global Asset Sustainability) Tracked.

Note: If data exists on the **Design Consumption** or **Actual Consumption** tabs, the equipment must remain as **GAS Tracked**.

20 Specify the **Lock Reliability Ranking Values** to lock the reliability ranking values for the equipment on the Ranking Survey tab of the Equipment screen.

Note: If **Lock Reliability Ranking Values** is selected, the system will not allow the user to modify the reliability survey answers and calculate reliability ranking values for the equipment. The system also prevents the selection of equipment for update on the **Batch Update Equipment Ranking Values** form.

21 Specify the **Reliability Ranking**.

The system automatically populates **Reliability Ranking Index**, **Reliability Ranking Score**, **Reliability Ranking Values Out of Sync**, **Reliability Ranking Values Last Calculated**, **Reliability Survey Last Updated**, and **Reliability Ranking Setup Last Updated**, after answering the reliability survey.

22 Specify this information:

Vehicle Type
Specify the vehicle type.

Vehicle Status
Specify the status of the vehicle.

Rental Template
Specify the template used for the rental reservation.

Contract Equipment
Select the check box if the asset is contract equipment.

Contract Template
Specify the template used for the contract.

Customer
Specify the rental customer.

Availability Status
Specify the availability of the system.

Issued To
Specify to whom the system is issued.

Reservation Calendar Owners List
Specify the approval list for the Reservation Calendar Owner.

Reservation Calendar Owner
Specify the reservation calendar owner who can edit equipment reservations.

Reservable Equipment
Select this check box if the system can be reserved.

23 Optionally, specify this information:

Lockout/Tagout
Select this check box if the system equipment complies with OSHA regulations on lockout/tagout procedures. This regulation ensures machines are properly shut down and that they do not start again until service or maintenance on the machine is completed.

Personal Protective Equipment
Select this check box if OSHA requires the use of personal protective equipment when operating the equipment to reduce exposure to hazards or injury.

Confined Space
Select this check box if the equipment is located in an area defined as a confined space as per OSHA regulations.

Statement of Conditions
Select this check box to indicate the system relates to the Statement of Conditions as required by The Joint Commission.

Building Maintenance Program
Select this check box to indicate the system equipment is inventoried in the building maintenance program.

HIPAA Confidentiality
Select this check box to indicate the system equipment contains confidential patient health information and the equipment must comply with regulations.

24 Specify the **Ownership Type**, **Inventory Verification Date**, **Equipment Value**, **Purchase Order #**,**Purchase Date**, **Purchase Cost**, and **Disposal Type**.

25 Click **Save Record**.

Note: Equipment Configuration, **Equipment Configuration Org.**, and **Equipment Configuration Revision** are automatically populated.

If a review has been performed on the **Safety** tab, the system automatically populates **Safety Date Review Required** and **Safety Reviewed By**. If a review has been performed on the **Permits** tab, the system automatically populates **Permit Date Review Required** and **Permit Reviewed By**.

If a review has been performed on the **LOTO** tab, the system automatically populates **LOTO Date Review Required** and **LOTO Reviewed By**.

Defining locations

Locations are the top level of the equipment hierarchy and, like other equipment, can have parents and children with many sublevels. For example, a facility can be a parent to children such as wings, floors, and levels.

Locations can also mean two different things. One location can tell you a piece of equipment's physical location, such as the pump in Boiler Room 2. Another location can be equipment itself such as Boiler Room 2. Keep in mind that equipment keeps its location until it is move. In other words, it can only be in one place at one time.

Note: Set up parent locations before setting up child locations. You cannot delete parent locations if child locations exist.

To define locations:

1. Select **Equipment > Locations**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the location belongs if you use multi-organization security.

   Location
   Specify a unique code identifying the location, and then specify a description of the location in the adjacent field.

   Calendar Group
   Specify the calendar group for the location. The system automatically populates **Calendar Group Org.**

4. Specify the **Department**, **Class**, **Cost Code**, **Penalty Factor**, **Minimum Deduction/Currency**, and **Parent Location**.
5. Specify this information:

   Safety
   Select this check box to observe safety precautions when working at this location.

   Out of Service
   Select this check box if the location is not used.

   Reservation Calendar Owners List
   Specify the approval list for the Reservation Calendar Owner.

   Reservation Calendar Owner
   Specify the reservation calendar owner who can edit equipment reservations.

   Current Workspace
   Optionally, specify the current workspace of the location.

   cGMP
   Select this check box to indicate that the equipment is subject to cGMP standards.

6 Click **Save Record**.

If a review has been performed on the **Safety** tab, the system automatically populates **Safety Date Review Required** and **Safety Reviewed By**.

If a review has been performed on the **Permits** tab, the system automatically populates **Permit Date Review Required** and **Permit Reviewed By**.

If a review has been performed on the **LOTO** tab, the system automatically populates **LOTO Date Review Required** and **LOTO Reviewed By**.

Defining linear equipment

Linear equipment occupies a length of space such as an interstate or bridge. Create work orders for specific points or segments of linear equipment records, allowing you to track work orders, costs, and events along the equipment.

After you define a linear equipment record, add linear references.

Note: You can edit **Equipment Length** or **Equip. Length UOM** for an existing equipment record as long as there are no linear references that fall outside of the newly specified length in the **Linear Ref. UOM**.

If you edit the length of a linear equipment record, the system may automatically edit associated PM records when installation parameter PMRVCTRL is set to No. If the new equipment length falls on or within the length of the PM, the system automatically updates the **To Point** of the PM record based on the new equipment length. If the new equipment length falls outside of the length of the PM, the system does not update the PM record.

To define linear equipment:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Click **New Record**.

3 Specify the information necessary to define the piece of equipment.

See "Defining Assets," "Defining Positions," and "Defining Systems."

4 Specify this information:

Equipment Length
Specify the length of the equipment.

Equip. Length UOM
Specify the unit of measure for the **Equipment Length**.

Linear Ref. UOM
Specify the unit of measure for linear references. The system populates the from and to point unit of measure for work orders based on the **Linear Ref. UOM**. Linear references can have a different UOM than the **Equipment Length**. For example, if the system is integrated with ESRI's GIS, the equipment's map units may be in feet, but linear references like mile posts may be defined in miles.

Ref. Precision
Specify the number of decimal places to include in linear reference measurements.
Note: If you do not specify a **Reference Precision**, the system automatically sets the precision to 0.

Geographical Ref.
Specify a geographical reference for the equipment.

Inspection Direction
Specify the typical direction in which an equipment inspection is performed.

Flow
Specify the typical direction in which the process flows.

For example, you can specify the traffic direction of a street or the direction in which oil flows through a pipe.

Linear Cost Weight
Specify a number for the weighted cost of the equipment. This weight attribute determines the percentage of the work order costs the equipment is assigned when costs roll up from the child to the parent.

For example, a railway asset in a city is shared by two different rail lines, and the maintenance costs of the railway asset must be applied to both lines. Without the weight attribute, the system would roll up all costs to both lines. If you want to split the costs evenly over both lines, you can enter a weight of 1 for both lines.

5 Click **Save Record**.

Defining VMRS equipment

Define equipment records as VMRS equipment as you specify the equipment information on the Assets, Positions, or Systems form. Before you can define VMRS equipment, you must define VMRS codes.

See "Defining VMRS Codes."

Once you define VMRS equipment records, track work orders and warranties associated to the piece of equipment based on the specified VMRS codes.

See "Associating VMRS Codes with Warranties."

To define VMRS equipment:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Click **New Record**.
3 Specify the information necessary to define the piece of equipment.
See "Defining Assets," "Defining Positions," and "Defining Systems."
4 Specify the **System Level**, **Assembly Level**, and **Component Level**.

The system automatically populates **VMRS Description** based on the **System Level**, **Assembly Level**, and **Component Level** combination.

Note: You cannot specify a **Component Level** unless you specified an **Assembly Level**.

5 Click **Save Record**.

Defining equipment using profiles

Before defining equipment records using profiles, create profiles.

See "Creating Equipment Profiles."

To define equipment using profiles:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2 Click **New Record**.
3 Enter the information necessary to define the piece of equipment.

   See "Defining Assets," "Defining Positions," and "Defining Systems."
4 Specify this information:

   Profile
   Specfiy the profile.

   The system automatically populates the description, **Department**, **Class**, **Category**, **Equipment Value**, **Meter Unit**, **Manufacturer**, **Model**, **Revision**, **Part**, **Variable 1** through **Variable 6**, and any custom fields on the **Record View** page.

   The system automatically populates **Part** and its description, **Part Org.**,**Quantity** and its unit of measure, and **Comments** on the **Parts Associated** page of the record.

5 Click **Save Record**.

Defining healthcare assets

Define your organization's healthcare equipment as assets. Assets and properties work together to create a system. When assets and properties are linked to define a system then the entire system is affected by actions or movements of one individual piece. For example, if one piece of equipment breaks down, the entire system must be taken offline.

To define healthcare assets:

1 Select **Equipment > Assets Healthcare**.
2 Click **New Record**.
3 Specify the **Organization** and a description, **Asset** and a description, **Department**, **Operational Status**, and **Type**.
4 Specify this information:

Loaned to Department
Specify the department to which the asset has been loaned.

PM WO Department
Specify the department responsible for the PM work order if different than Department.
Note: If the Department for the PM Schedules and Maintenance patterns work orders are blank, the PM WO Department will be used to generate works orders. Otherwise, the Department will be used.

Status
Specify the system status. The default status values include:

Option	Description
Awaiting purchase	Interacts with the purchasing module. If assets are recognized at purchase order creation, then an asset must be created at time of purchase order generation. The ASSETASS installation parameter determines when assets are recognized: at receipt (R) or at purchase order creation (P).
In store	Reserved for new assets received into a firm's store. Select the **Status** value In store only when defining an asset in the inventory store.
Installed	Assigned when an asset is in place and operating within the business organization.
Withdrawn	Assigned when an asset is no longer available for use. This status is not available during initial asset creation. **Withdrawal Date** is automatically populated.

Criticality Code
Specify a criticality code to indicate the relative importance of the equipment to the overall production of goods or services for your system.

Meter Unit
Specify the asset's primary unit of measure.

Assigned To
Specify the person responsible for the asset.

Safety
Select this check box to observe safety precautions when working with this equipment.

Temperature Monitored
Select this check box if it is necessary or required to monitor the equipment's temperature.

Out of Service
Select this check box if the asset is not used. **Withdrawal Date** is automatically populated.

Current Workspace
Optionally, specify the current workspace of the asset.

Reservation Calendar Owner
Specify the reservation calendar owner who can edit equipment reservations.

5 Specify the **Class**, **Category**, **Profile**, and **Cost Code**.

6 Specify the **Manufacturer**, **Model**, **Serial Number**, **Hardware Version**, **Software Version**, **Purchasing Asset ID**, **Biomedical Asset ID**, **Revision**, and **Vendor**.

7 Specify this information:

UMDNS Code
Specify the code identifying the asset in the Universal Medical Device Nomenclature System™ (UMDNS) which is a standard international nomenclature and computer coding system for medical devices.

OEM Site/System ID
Specify the site and/or system identification for service companies and original equipment manufacturer for the asset.

Coverage Type
Select the maintenance coverage type for the asset. Select Calendar to indicate that the warranty is based on number of days used or Usage to indicate that the warranty is based on actual usage.

8 Specify the **X Coordinate**, **Y Coordinate**, and **Z Coordinate** for which GIS features should appear.

9 Select the **Vehicle** check box if the asset is a vehicle.

10 Specify the **Part**, **Store**, **Bin**, and **Lot**

Note: Only specify parts that are tracked by the asset.

11 Specify this information:

Logout/Tagout
Select this check box if the asset equipment complies with OSHA regulations on lockout/tagout procedures. This regulation ensures machines are properly shut down and that they do not start again until service or maintenance on the machine is completed.

Personal Protective Equipment
Select this check box if OSHA requires the use of personal protective equipment when operating the equipment to reduce exposure to hazards or injury.

Confined Space
Select this check box if the equipment is located in an area defined as a confined space per OSHA regulations.

Statement of Conditions
Select this check box to indicate the asset's equipment relates to the Statement of Conditions as required by The Joint Commission.

Building Maintenance Program
Select this check box to indicate the asset equipment is inventoried in the building maintenance program.

HIPAA Confidentiality
Select this check box to indicate the asset equipment contains confidential patient health information and the equipment must comply with regulations.

12 Specify the **Parent Asset**, and then select the **Dependent** check box if the asset is dependent on the parent asset and select the **Cost Roll-up** check box if costs should roll up to the parent asset.

13 Specify the **Cost Roll-up**, and then select the **Dependent** check box if the asset is dependent on the property and select the **Cost Roll-up** check box if the costs should roll up to the parent property of the child asset.

14 Specify the **Ownership Type**, **Inventory Verification Date**, **Equipment Value**, **External PO No.**, **Purchase Date**, **Original Receipt Date**, **Latest Receipt Date**, **Original Install Date**, **Latest Install Date**, **Purchase Cost**, **Commission Date**, **Cost of Needed Repairs**, **Replacement Value**, **Disposal Type**, **Disposal Date**

15 Specify this information:

Facility Condition Index
Specify the resultant FCI based on the maintenance details. `Cost of Needed Repairs/Current Replacement Value=FCI`

Primary Use
Specify the primary use for the asset.

Year Built
Specify the year the asset was built.

Floor Area
Specify the floor area, and then specify the unit of measure for the floor area.

Service Life (years)
Specify the service life of the asset.

Risk Assessment
Specify the risk assessment code for the equipment.
Note: **Risk Assessment Index**, **Risk Assessment Score**, **Risk Assessment Values Out of Sync**, **Risk Assessment Values Last Calculated**, **Risk Assessment Survey Last Updated**, and **Risk Assessment Setup Last Updated** are automatically populated after answering the risk assessment survey.

Lock Risk Assessment Values
Select this check box to lock the reliability ranking values for the equipment on the Risk Assessment tab of the Equipment screen.
Note: If **Lock Risk Assessment Values** is selected, the system will not allow the user to modify the risk assessment survey answers and calculate risk assessment values for the equipment. The selection of equipment is prevented for update on the Batch Update Equipment Ranking Values form.

16 Click **Save Record**.

Defining healthcare properties

Define a property or a collection of properties and assets that work together to create a system. When assets and properties are linked to define a system then the entire system is affected by actions or movements of one individual piece. For example, if one piece of equipment breaks down, the entire system must be taken offline.

To define properties for healthcare:

1. Select **Equipment > Properties Healthcare**
2. Click **New Record**.
3. Specify the **Organization**, **Property** and a description, **Department**, **Operational Status**, **Type**, **Class**, **Category**, **Profile**, and **Cost Code**.
4. Specify this information:

   Loaned to Department
   Specify the department to which the property has been loaned.

   PM WO Department
   Specify the department responsible for the PM work order.
   Note: If the Department for the PM Schedules and Maintenance patterns work orders are blank, the PM WO Department will be used to generate works orders. Otherwise, the Department will be used.

   Status
   The system defaults **Status** to Installed. This value cannot be changed.

   Criticality
   Specify a criticality code to indicate the relative importance of the equipment to the overall production of goods or services for your property.

   Meter Unit
   Specify the equipment's primary unit of measure.

   Assigned To
   Specify the person responsible for the equipment.

   Safety
   Select this check box to observe safety precautions when working with this equipment.

   Temperature Monitored
   Select this check box if it is necessary or required to monitor the equipment's temperature.

   Out of Service
   Select this check box if the equipment is not used. The system automatically populates **Withdrawal Date**.

   Current Workspace
   Optionally, specify the current workspace of the property.

   Reservation Calendar Owner
   Specify the reservation calendar owner who can edit equipment reservations.

5 Specify the **Manufacturer**, **Model**, **Serial Number**, **Hardware Version**, **Software Version**, **Purchasing Asset ID**, **Biomedical Asset ID**, and**Vendor.**

6 Specify this information:

UMDNS Code
Specify the code identifying the asset in the Universal Medical Device Nomenclature System™ (UMDNS) which is a standard international nomenclature and computer coding system for medical devices.

OEM Site/System ID
Specify the site and/or system identification for service companies and original equipment manufacturer for the property.

Coverage Type
Select the maintenance coverage type for the equipment. Select Calendar to indicate that the warranty is based on number of days used or Usage to indicate that the warranty is based on actual usage.

7 Specify the **X Coordinate**, **Y Coordinate**, and **Z Coordinate** for which GIS features should appear.

8 Specify this information:

Lockout/Tagout
Select this check box if the property equipment complies with OSHA regulations on lockout/tagout procedures. This regulation ensures machines are properly shut down and locked so that they do not start again until service or maintenance on the machine is completed.

Personal Protective Equipment
Select this check box if OSHA requires the use of personal protective equipment when operating the equipment to reduce exposure to hazards or injury.

Confined Space
Select this check box if the equipment is located in an area defined as a confined space as per OSHA regulations.

Statement of Conditions
Select this check box to indicate the property relates to the Statement of Conditions as required by The Joint Commission.

Building Maintenance Program
Select this check box to indicate the property equipment is inventoried in the building maintenance program.

HIPAA Confidentiality
Select this check box to indicate the property equipment contains confidential patient health information and the equipment must comply with regulations.

9 Specify the **Parent Property**, and then select the **Dependent** check box if the property is dependent on the parent property and select the **Cost Roll-up** check box if costs should roll up to the parent property.

10. Specify the **Asset** to categorize as a child of the property in the parent/child hierarchy, and then select the **Dependent** check box if the asset is dependent on the property and the **Cost Roll-up** check box if the costs should roll up to the parent property of the child asset.
11. Specify the **Location**, **Ownership Type**, **Inventory Verification Date**, **Equipment Value**, **Purchase Order #**, **Purchase Date**, **Purchase Cost**, **Original Receipt Date**, **Latest Receipt Date**, **Original Install Date**, **Latest Install Date**, **Commission Date**, **Cost of Needed Repairs**, **Replacement Value**, **Disposal Type**, and **Disposal Date**.
12. Specify this information:

    Facility Condition Index
    Specify the resultant FCI based on the maintenance details. `Cost of Needed Repairs/Current Replacement Value=FCI`

    Primary Use
    Specify the primary use for the equipment.

    Year Built
    Specify the year the equipment was built.

    Floor Area
    Specify the floor area, and then specify the unit of measure for the floor area.

    Service Life (years)
    Specify the service life of the equipment.

    Risk Assessment
    Specify the risk assessment code for the equipment.
    Note: The system automatically populates **Risk Assessment Index**, **Risk Assessment Score**, **Risk Assessment Values Out of Sync**, **Risk Assessment Values Last Calculated**, **Risk Assessment Survey Last Updated**, and **Risk Assessment Setup Last Updated**, after answering the risk assessment survey.

    Eligible for Energy Star Label
    Select this check box if the facility is eligible for the Energy Star label.

    Lock Risk Assessment Values
    Select this check box to lock the reliability ranking values for the equipment on the Risk Assessment tab of the Equipment screen.
    Note: If **Lock Risk Assessment Values** is selected, the system will not allow the user to modify the risk assessment survey answers and calculate risk assessment values for the equipment. The system also prevents the selection of equipment for update on the **Batch Update Reliability Ranking Values** tab.

13. Click **Save Record**.

    Note: To create a work order for the property, right-click on the form, and then click **Create WO**.

Defining healthcare systems

Define a system consisting of a collection of properties or assets that work together to create a system. When assets and properties are linked to define a system then the entire system is affected by actions or movements of one individual piece. For example, if one piece of equipment breaks down, the entire system must be taken offline.

To define systems for healthcare:

1. Select **Equipment > Systems Healthcare**
2. Click **New Record**.
3. Specify the **Organization**, **System** and a description, **Department**, **Operational Status**, **Type**, **Class**, **Category**, **Profile**, and**Cost Code**.
4. Specify this information:

   Loaned to Department
   Specify the department to which the system has been loaned.

   PM WO Department
   Specify the department responsible for the PM work order.
   Note: If the Department for the PM Schedules and Maintenance patterns work orders are blank, the PM WO Department will be used to generate works orders. Otherwise, the Department will be used.

   Status
   The system defaults the Status to Installed, and this value cannot be changed.

   Criticality
   Specify a criticality code to indicate the relative importance of the equipment to the overall production of goods or services for your system.

   Meter Unit
   Specify the equipment’s primary unit of measure.

   Current Workspace
   Optionally, specify the current workspace of the system.

   Assigned To
   Specify the person responsible for the equipment.

   Safety
   Select this check box to observe safety precautions when working with this equipment.

   Temperature Monitored
   Select this check box if it is necessary or required to monitor the equipment's temperature.

   Out of Service
   Select this check box if the asset is not used. The system automatically populates **Withdrawal Date**.

   Reservation Calendar Owner
   Specify the reservation calendar owner who can edit equipment reservations.

5 Specify the **Manufacturer**, **Model**, **Serial Number**, **Hardware Version**, **Software Version**, **Purchasing Asset ID**, **Biomedical Asset ID**, **Revision**, and **Vendor**.

6 Specify this information:

UMDNS Code
Specify the code identifying the asset in the Universal Medical Device Nomenclature System™ (UMDNS) which is a standard international nomenclature and computer coding system for medical devices.

OEM Site/System ID
Specify the site and/or system identification for service companies and original equipment manufacturer for the system.

Coverage Type
Select the maintenance coverage type for the asset. Select Calendar to indicate that the warranty is based on number of days used or Usage to indicate that the warranty is based on actual usage.

7 Specify the **X Coordinate**, **Y Coordinate**, and **Z Coordinate** for which the GIS features should appear.

8 Specify this information:

Lockout/Tagout
Select this check box if the system equipment complies with OSHA regulations on lockout/tagout procedures. This regulation ensures machines are properly shut down and that they do not start again until service or maintenance on the machine is completed.

Personal Protective Equipment
Select this check box if OSHA requires the use of personal protective equipment when operating the equipment to reduce exposure to hazards or injury.

Confined Space
Select this check box if the equipment is located in an area defined as a confined space as per OSHA regulations.

Statement of Conditions
Select this check box to indicate the system relates to the Statement of Conditions as required by The Joint Commission.

Building Maintenance Program
Select this check box to indicate the system equipment is inventoried in the building maintenance program.

HIPAA Confidentiality
Select this check box to indicate the system equipment contains confidential patient health information and the equipment must comply with regulations.

9 Specify the **Ownership Type**, **Inventory Verification Date**, **Equipment Value**, **Purchase Order #**, **Purchase Date**, **Purchase Cost**, **Original Receipt Date**, **Latest Receipt Date**, **Original Install Date**, **Latest Install Date**, **Commission Date**, **Cost of Needed Repairs**, **Replacement Value**, **Disposal Type**, and **Disposal Date**.

10 Specify this information:

Facility Condition Index
Specify the resultant FCI based on the maintenance details. `Cost of Needed Repairs/Current Replacement Value=FCI`

Primary Use
Specify the primary use for the equipment.

Year Built
Specify the year the equipment was built.

Floor Area
Specify the floor area, and then specify the unit of measure for the floor area.

Eligible for Energy Star Label
Select if the facility is eligible for the Energy Star label.

Service Life (years)
Specify the service life of the equipment.

Risk Assessment
Specify the reliability ranking code for the equipment.
Note: The system automatically populates **Risk Assessment Index**, **Risk Assessment Score**, **Risk Assessment Values Out of Sync**, **Risk Assessment Values Last Calculated**, **Risk Assessment Survey Last Updated**, and **Risk Assessment Setup Last Updated**, after answering the risk assessment survey.

Lock Risk Assessment Values
Select this check box to lock the reliability ranking values for the equipment on the Risk Assessment Survey tab of the Equipment screen.
Note: If **Lock Risk Assessment Values** is selected, the system will not allow the user to modify the risk assessment survey answers and calculate risk assessment values for the equipment. The system also prevents the selection of equipment for update on the Batch Update Risk Assessment Values form.

11 Click **Save Record**.

Creating warranties

Define warranty documents to set up supplier and/or manufacturer information for the warranty and specify general warranty information. Specify the duration of the warranty and the percentages indicating how much the warranty covers for different material and labor expenses.

You may view documents previously associated with the warranty. Click **View Document** to open and view the document.

To set up warranties:

1 Select **Equipment > Warranty > Warranties**.
2 Click **New Record**.
3 Specify the **Organization**, **Warranty** and description, **Warranty Type**.

4 Specify this information:

Control Number
Specify the control number to track the warranty through the manufacturer or supplier.

5 Specify the **Manufacturer**, **Supplier**, **Class**, **Agreement Type**, **Agreement Start Date**, **Agreement End Date**

6 Select the **On-site Repair** check box to indicate the warranty covers an on-site repair.

7 Select the **Loaner Provided** check box to indicate the warranty provides loaner equipment.

8 Specify this information:

Renewal Alert Email
Specify an email address to which to send an email message alert when the warranty approaches the expiration or agreement end date.

Start Date Basis
Select Commission Date, Original Receipt Date, Latest Receipt Date, Original Install Date, Latest Install Date, or Agreement Start Date to indicate at which date the warranty coverage should begin.

9 Specify the **Default Duration** and **Default Renewal Threshold**.

10 Specify this information:

Labor %
Specify the percentage of labor costs covered by this warranty.

Hired Labor %
Specify the percentage of hired labor costs covered by this warranty.

Services %
Specify the percentage of service costs covered by this warranty.

Stock Items %
Specify the percentage of stock material costs covered by this warranty.

Direct Purchases %
Specify the percentage of direct purchase material costs covered by this warranty.

Tools %
Specify the percentage of tool costs covered by this warranty.

11 Specify the **Fixed Labor Rate**, **Fixed Labor Amount**, **Fixed Stock Amount**, **Max. Labor Amount/Claim**, and **Max. Stock Amount/Claim**.

12 For the document details, specify the **File** name, **File Type**, **Revision Number**, **Revision Date**, **File Location**, and number of **Pages**.

13 Select the **Exclude PM Work Order** check box to exclude preventive maintenance work orders from being covered by this warranty.

14 Select the **Part List Required for Warranty Claim** check box to indicate that a part list is required before it will be covered by this warranty.

15 Select the **RMA Required** check box to require a return merchandise authorization coverage for this warranty.

16 Click **Save Record**.

Associating parts to warranties

To associate parts to warranties:

1 Select **Equipment > Warranty > Warranties**.
2 Select the warranty with which to associate parts, and then click the **Parts** tab.
3 Specify this information:

   Part
   Select the part to associate with the warranty.

   Warranty Period
   Specify the number of days that the part is under warranty once the part is issued.

   Reimbursement Type
   Specify if the warranty covers a cash reimbursement or a replacement of the part.

4 Select **Active** if the part is currently active.
5 Click **Submit**.

Associating components with warranties

Associate components like VMRS codes with warranties based on system level and assembly level, and specify costs associated with the warranty.

To associate components with warranties:

1 Select **Equipment > Warranty > Warranties**.
2 Select the warranty with which to associate a component, and then click the **Components** tab.
3 Specify the **System level**, **Assembly level**, and **Component level**.

   Note: You can specify the System level or the System level and the Assembly level. If you only specify the System level, the warranty will be associated with all assemblies and components in the selected system. If you only specify the System level and the Assembly level, the warranty will be associated with all components in the selected assembly.

4 Optionally, select the **Use Cost Coverage Values on Header** check box to automatically populate the cost coverage fields with information from the **Warranty** screen. Otherwise, you can manually populate these fields. The cost coverage fields include:

   Labor %
   The percentage of labor costs covered by this warranty.

   Hired Labor %
   The percentage of hired labor costs covered by this warranty.

   Services %
   The percentage of service costs covered by this warranty.

Stock Items %
The percentage of stock material costs covered by this warranty.

Direct Purchases %
The percentage of direct purchase material costs covered by this warranty.

Tools %
The percentage of tool costs covered by this warranty.

Fixed Labor Rate
Specify the fixed labor rate costs covered by this warranty

Fixed Labor Amount
Specify the fixed labor amount covered by this warranty.

Fixed Stock Amount
Specify the fixed stock amount covered by this warranty.

Max. Labor Amount/Claim
Specify the maximum labor amount per claim covered by this warranty.

Max. Stock Amount/Claim
Specify the maximum stock amount per claim covered by this warranty.

5 Click **Submit**.

Associating VMRS codes with warranties

Associate VMRS codes with warranties to track warranty information for vehicle components. If you do not associate any VMRS codes with a warranty, the warranty covers all components of referenced vehicles.

The system allows you to associate multiple VMRS codes with each warranty.

Define VMRS codes before associating them with warranties.

See Defining VMRS codes on page 763.

To associate VMRS codes with warranties:

1 Select **Equipment > Warranty > Warranties**.
2 Select the warranty with which to associate VMRS codes, and then click the **VMRS Codes** tab.
3 Click **Add VMRS Code**.
4 Specify the **System Level**, **Assembly Level**, and **Component Level**.

Note: You cannot specify an **Assembly Level** unless you specified a **System Level**. You cannot specify a **Component Level** unless you specified an **Assembly Level**.

The system automatically populates **Description** based on the **System Level**, **Assembly Level**, and **Component Level** combination.

5 Click **Submit**.

Printing warranty claim vs. settlement chart

Before you can set the parameters to generate the warranty claim vs. settlement chart, you must update the system Status of the warranty claim to Response Received. The system does not display this status as an option until the warranty claim has been given a system Status of Approved.

To print warranty claim vs. settlement chart:

1. Select **Equipment > Warranty > Warranties**.
2. Select the warranty for which to generate the warranty claim vs. settlement chart, and then click the **Warranty Claim vs. Settlement Chart** tab.
3. Specify the **Start Date** and **End Date**.
4. Click **Submit**.
5. Click **Print**.

Creating warranty claims

Create warranty claims to recoup faulty parts or material and labor costs incurred when warranty-related repair work has to be performed in-house.

Note: The system does not display the work order costs on the warranty claim unless you specified that the piece of equipment listed on the work order activity is under warranty.

See these references:

- "Defining regular work order headers"
- "Associating warranties with equipment"

Associate your warranty claim with a piece of equipment, a work order, or an activity on a work order to track warranty claim costs.

The system automatically assigns the **Status** of Unfinished to new claims. After creating and specifying all of the information for the claim, update the claim status to indicate its progress throughout the claim process.

To create warranty claims:

1. Select **Equipment > Warranty > Warranty Claims**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the warranty claim belongs if you use multi-organization security.

   Claim
   Specify a description of the claim in the adjacent field. The system assigns a claim number after you save the record.
   Note: If you do not specify a description, the system automatically populates the description defined on the work order with which you associate this warranty claim.

   Work Order
   Specify the work order with which to associate the warranty claim.

The system automatically populates **Equipment** based on the information provided on the **Work Orders** page and **Serial Number**, **Commission Date**, **Part Details**, and **VMRS Code Details** based on the equipment record.

The system automatically populates **WO Labor**, **WO Hired Labor**, **WO Services**, **WO Stock Items**, **WO Direct Purchases**, **WO Tools**, **WO Claim Amount**, and **Total Claim Amount** based on the warrantable costs for the selected work order.

Note: If the selected **Work Order** is a multiple equipment or MEC work order, then the system automatically populates **Equipment** with the equipment on the work order, and it is protected. The system enables you to create warranty claims for the parent multiple equipment work order or any related work order(s).

See "Adding Equipment To Work Orders To Split Work Order Costs."

Equipment
Specify the piece of equipment with which to associate the warranty claim. The system automatically populates **Serial Number**, **Commission Date**, **Part Details**, and **VMRS Code Details**.

If no **Equipment** is selected, the system displays all work orders, including MEC work orders.

If an **Equipment** is selected, then the system displays only the work orders for which the work order equipment is the same as the equipment on the claim.

Status
Select the status of the claim if you are authorized to do so. Changing the status of a warranty claim may affect additional system checks and field changes:

Option	Description
Approved	The system verifies that an attached work order has a system status of Completed. If the work order does not have a system status of Completed, the system verifies whether you want to continue. Click **Yes** to change the status to Approved. Any future costs added to or subtracted from the work order will not reflect on the warranty claim.
Canceled	The system protects all fields on the **Claims** form except **Status**.
Completed	The system protects all fields on the **Claims** form except **Status**.
Response received	The system allows you to specify Settlement Details. See "Entering Settlement Details for Warranty Claims."
Unfinished	The system refreshes **WO Labor**, **WO Hired Labor**, **WO Services**, **WO Stock Items**, and **WO Direct Purchases** based on an attached work order each time the unfinished claim record is selected for display on the **Record View** tab.

RMA Number
Specify the return material authorization (RMA) number.

Top Parent
Specify the highest-level parent of the equipment associated with this warranty claim.

Top Parent Usage
Specify the usage value of the highest-level parent piece of equipment.

4 Specify the **Commission Date**, **Commissioning WO**, **Warranty**, **Usage**, **UOM**,**Class**, **Date Filed**, and **Date Reported**.
5 Click **Save Record**.

Viewing warranty claims for equipment

View the warranty claims associated with assets, positions, and systems.

To view the warranty claim for a piece of equipment:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2 Select the equipment for which to view warranty claim lines, and then click the **Warranty Claims** tab.
3 View the warranty claims for the equipment.
4 Optionally, click the **Claim** hyperlink to view details about the warranty claim.

Entering settlement details for warranty claims

Enter settlement details for a warranty claim after the claim has been settled. Enter monetary values according to the amount of money you are able to recoup through the claim process. The system automatically calculates **WO Cost Settlement** based on the monetary values you enter in **Labor**, **Hired Labor**, **Stock Items**, and/or **Direct Purchases**. If you specified a percentage to be recouped on the **Warranty** form, the system calculates **WO Cost Settlement** based on the percentage.

Before you can enter settlement details, the system status of the warranty claim must be Response Received. The system does not display this status as an option until the warranty claim has been given a system status of Approved.

To enter settlement details for warranty claims:

1 Select **Equipment > Warranty > Warranty Claims**.
2 Select the claim for which to enter settlement details, and then click the **Record View** tab.
3 Specify this information:

Status
Select Response received as the status of the warranty claim. The system enables Settlement Details.

Date Resolved
Specify the date the warranty claim was resolved.

Labor
Specify a monetary value for labor.

Hired Labor
Specify a monetary value for hired labor.

Services
Specify a monetary value for services.

Stock Items
Specify a monetary value for stock items.

Direct Purchases
Specify a monetary value for direct purchases.

Tools
Specify a monetary value for tools.

WO Cost Settlement
Specify a monetary value for the cost settlement of the work order.

Other Settlement
Specify a monetary value for expenses not accounted for in WO Cost Settlement. The system automatically populates **Total Settlement**.

4 Click **Save Record**.

Associating activities with warranty claims

Associate activities and jobs to warranty claims and have their corresponding cost lines associated to claim lines. The activities tab cannot be modified if the Warranty Claim Status is Approved, Response Received, Completed, or Cancelled.

To associate activities and jobs to warranty claims:

1 Select **Equipment > Warranty > Warranty Claims**.
2 Select the warranty claim with which to associate activities and jobs, and then click the **Activities** tab.
3 Select the **Activity** and **Job** to associate with the warranty claim.
4 Click **Submit**.

Adding claim lines to warranty claims

Add claim lines to warranty claims that are associated to a work order but need more description of the claim.

Note: You cannot edit this screen if the warranty claim status is changed to Approved, Response Received, Completed, or Cancelled.

You cannot delete claim line records if the **System** check box is selected.

To add claim lines:

1. Select **Equipment > Warranty > Warranty Claims**.
2. Select the warranty to which to add claim lines, and then click the **Claim Lines** tab.
3. Click **Add Claim Line**.
4. Specify information for the claim line, such as the **Activity**, **Job**, **Type**, **Description**, **Amount**, and **Notes**.
5. Optionally, clear the **Include on Claim** check box exclude the claim line and cost amount on the warranty claim.
6. Click **Submit**.
7. Optionally, click **Recalculate System Records** to recalculate all claim line amounts where the **System** check box is selected.

Evaluating equipment

Evaluate equipment to present a side-by-side comparison of potential equipment and existing equipment. Equipment evaluations allow you to compare the cost of retaining existing equipment versus the capital costs and resulting savings of acquiring the potential equipment.

Creating equipment evaluations

Create records to represent potential new equipment that will be evaluated as possible replacements for existing equipment.

To create equipment evaluations:

1. Select **Equipment > Procurement Evaluation > Equipment Evaluations**.
2. Click **New Record**.
3. Specify the **Organization**, **Description**, **Evaluation Status**, **Potential Manufacturer**, **Potential Model Number**, **Estimated Cost of Materials**, **Major Group**, **Group**, **Individual**, **Priority**, and **Additional Information.**
4. Specify this information:

   Commodity-1
   Select a commodity. The system automatically populates **Commodity-1 UOM**.
   Note: If **Commodity-1** is blank, the system protects **Design Consumption Rate-1** and **Design Usage UOM-1**.

Once **Commodity-1** is populated, the system enables **Design Consumption Rate-1** and **Design Usage UOM-1**.

Design Consumption Rate-1
Specify a design consumption rate. The system automatically populates **Design Consumption Rate UOM**.

Design Usage UOM-1
Select a unit of measure.

5 Specify the **Manufacturer**, **Model Number**, **Class**, **Category**, **Equipment Type**, and **Equipment Status**.
6 Select the **Gas Tracked** check box if the equipment is GAS tracked.
7 Select the **Include Out of Service Equipment** check box if the equipment evaluation will include out of service equipment.
8 Click **Save Record**.

Note: To populate the equipment list with equipment matching the search criteria, click **Create/Refresh Equipment List**. The system deletes records from the Equipment Equivalency page with **Status** of Not Evaluated, and then refreshes the equipment list.

Evaluating equipment equivalency

Select records of existing equipment for which to compare to potential equipment.

To evaluate equipment equivalency:

1 Select **Equipment > Procurement Evaluation > Equipment Evaluations**.
2 Select an evaluation record for which to create an equipment equivalency, and then click the **Equipment Equivalency** tab.
3 Select one or more equipment records to be evaluated for the potential equipment.
4 Click **Mark as Equivalent**.

Note: To add equipment records for which to evaluate, click **Add Equipment**. Select the equipment to add, and then click **OK**. The system inserts the new record into the Equipment Equivalency list, and updates **Equipment Status** to Not Evaluated.

To delete equipment records, select the equipment records for which to delete, and then click **Delete Selected Equipment**.

To designate equipment records as not equivalent, select the equipment records for which to designate as not equivalent, and then click **Mark as Not Equivalent**.

To designate equipment records as not evaluated, select the equipment records for which to designate as not evaluated, and then click **Mark as Not Evaluated**.

Evaluating cost analysis for equipment

Select potential equipment records from which capital planning requests may be created. Capital planning requests provide capital expenditure information based on forecasted labor costs, forecasted material costs, and expected cost avoidance.

To evaluate cost analysis for equipment:

1. Select **Equipment > Procurement Evaluation > Equipment Evaluations**.
2. Select a record for which to evaluate equipment, and then click the **Cost Analysis** tab.
3. Select one or more records for equipment that is considered for replacement.
4. Click **Create Capital Planning Requests**. The system creates capital planning requests for each potential equipment record selected. The system automatically populates **Capital Planning Request**.

   Note: To refresh cost data for selected equipment records, select the records, and then click **Refresh Cost Data for Selected Record**.

Creating equipment hierarchies

Define parent/child relationships among equipment to link costs and meter readings.

Defining equipment hierarchies

Define parent/child relationships among equipment. Define parent records before child records. If you add a third level, the child becomes a parent, and the added piece of equipment is its child.

Note: Equipment hierarchies must be consistent with the hierarchy rules described in Understanding Equipment on page 338 earlier in this chapter. For example, a system cannot be the parent of a location because locations are at the top of the hierarchy of equipment information. Assets, however, are the exception to this rule. Although assets are at the bottom of the hierarchy of equipment information, an asset can be the parent of a position.

To define equipment hierarchies:

1. Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
2. Select the equipment for which to define a hierarchy, and then click the **Structure** tab.
3. Query for the equipment for which to define a hierarchy by specifying the **Dataspy** and **Filter**.
4. Choose one of the following options:

Option	Description
Define a parent for a piece of equipment	Drag and drop the equipment record from the grid to the Add Parent drop point in the Structure Details.

Option	Description
Define a child for a piece of equipment	Drag and drop the equipment record from the grid to the selected parent equipment record in the Structure Details. The system indicates the piece of equipment is a child with the blue flag icon.

Note: Drag and drop an equipment record from the grid to the blue flag icon next to an existing record. The system adds the record from the grid as a sibling immediately below the record next to the blue flag icon.

5 Click **Save Record**.

Reorganizing equipment hierarchies

Drag and drop equipment records within an equipment hierarchy to reorganize its structure.

To reorganize equipment hierarchies:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to reorganize a hierarchy, and then click the **Structure** tab.

3 Choose one of the following options:

Option	Description
Change the order in which child equipment records appear	Drag and drop an equipment record from its current location in the Structure Details to the blue flag icon next to the sibling record under which you want the equipment to appear.
Move a piece of equipment under a new parent	Drag and drop the equipment record from its current location in the Structure Details to its new parent record. The system will begin rolling up cost and meter data for the equipment record to its new parent.

4 Click **Save Record**.

Specifying preferences for equipment hierarchies

Specify preferences for equipment hierarchy.

The Structure Preferences screen is only accessible through the **Structures** tab of the **Assets** screen. However, the preferences specified on this screen also affect the **Structure Details** tab for Equipment and the **Structure** tab on the **Positions**, **Systems**, **Locations**, **Equipment Lookup**, and **Equipment Configuration** screens.

To specify preferences for equipment hierarchy:

1 Select **Equipment > Assets**.
2 Select the asset for which to specify equipment hierarchy preferences, then click the **Structure** tab.
3 Click **Actions** and then click **Structure Preferences**.
4 Select which fields to make visible on the **Structure** tab.
5 Select to sort **By Sequence** or **By Name**.
6 Specify the following options:

Show Icons
Select to show icons.

Show VMRS Codes
Select to show VMRS codes associated with the equipment.

Show Parts
Select to show parts associated with the equipment.

Show Workspaces
Select to show workspaces associated with the equipment.

7 Click **Save**.

Viewing equipment hierarchies

The system displays the hierarchical structure of a piece of equipment.

To view equipment hierarchies:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to view the hierarchy, and then click the **Structure** tab.
3 Specify the **Dataspy** and **Filter** to query for the equipment for which to define a hierarchy.
4 View the equipment hierarchy on the left side of the form under Structure Details.
- A number, such as `2003001`, followed by the equipment type, such as `A`, `P`, indicates that this is the highest level for that equipment type.
- A plus sign (+) indicates that the equipment may have children, but they are not displayed. To display an equipment's children, click the plus sign.
- A minus sign (–) indicates that the equipment has children and the children are visible. Click the minus sign to hide the children.
- Click on a piece of equipment to make it active; the equipment then becomes highlighted in blue. The children of the active row on the hierarchical area (on the left) are shown in detail on the right side of the form.
- To change the focus of the Structure Details, select an equipment record in the tree view, and then click**Display as Focal Point**. The system updates the Structure Details.

- To view the record details, select an equipment record in the tree view, and then click **Go to Selection**. The system displays the **Record View** page for the selected equipment.

5 Select one of the following options to change the focal point of the screen:
   - Click **Move to Top Level Asset** to move the focal point to the highest level asset.
   - Click **Move to Top Level Position** to move the focal point to the highest level position.
   - Click **Move to Top Level System** to move the focal point to the highest level system.

6 If segments, routes, and structures are synchronized, there are limitations for adding and deleting equipment structure records.

   If the organization option SRSTSYNC is set to I or ID, you cannot create equipment structure records if the following conditions exist:
   - The parent **Linear Equipment Type** is set to Right of Way, the child is set to Route, and no corresponding record exists on the **Routes** tab.
   - The parent **Linear Equipment Type** is set to Route, the child is set to Segment, and no corresponding record exists on the **Segments** tab.

   Additionally, if the organization option SRSTSYNC is set to D or ID, you cannot delete equipment structure records if the following conditions exist:
   - The parent **Linear Equipment Type** is set to Right of Way, the child is set to Route, and a corresponding record exists on the **Routes** tab.
   - The parent **Linear Equipment Type** is set to Route, the child is set to Segment, and a corresponding record exists on the **Segments** tab.

Unlinking equipment

Unlink equipment records from the Structure Details tree view by unlinking the equipment record from other equipment records.

To unlink equipment:

1 Select one of the following:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**

2 Select the equipment for which to unlink the structure, and then click the **Structure** tab.

3 Select the parent or child equipment record to unlink, and then click **Un-Link**.

Toggling cost rollup

Roll up costs and history to a particular parent piece of equipment for assets, positions, and systems only.

To toggle cost rollup:

1 Select one of these options:
   - **Equipment > Assets**

- **Equipment > Positions**
- **Equipment > Systems**

2 Select the equipment for which to toggle cost rollup, and then click the **Structure** tab.

Note: If an equipment record has a toggle equipment cost icon next to it, the equipment's costs do not roll up to the parent equipment. Toggle the cost rollup to modify the equipment record.

3 Select the parent or child equipment record for which to toggle cost rollup, and then click **Toggle Cost Rollup**.

Viewing the parents of assets, positions, or systems

View a list of all immediate parents defined for equipment.

To view a list of parent equipment:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the equipment for which to view parents, and then click the **Structure** tab.

3 Select the equipment record for which to view parents, and then click **Show Parents**.

4 Select the **Dependent** check box if the child is dependent on the parent.

Note: You can only select **Dependent** for one parent. You can also specify that no parent is **Dependent**.

When the selected equipment is an asset, position, or system, and a location is listed as a parent of the equipment, the **Dependent** check box is unchecked for all parents listed.

Selecting the check box for one of the other parents listed will result in the removal of the direct relationship with the location.

5 Click **Submit**.

Viewing the parent of a location

View the immediate parent location of another location.

To view the parent location:

1 Select **Equipment > Setup > Locations**.

2 Select the equipment for which to view the parent, and then click the **Structure** tab.

3 Select the location record for which to view the parent, and then click **Show Parents**.

4 The **Dependent** check box is always selected when both the parent and the child are locations. You cannot change the setting of the **Dependent** checkbox in this case.

5 Click **Submit**.

Replacing child equipment

Replace child equipment record in the equipment hierarchy with another child equipment record.

To replace child equipment:

1 Select **Equipment > Process > Child Equipment Replacement**.

2 Specify this information:

Parent Equipment
Specify the parent equipment of the child equipment to be replaced. The system automatically populates the equipment description and **Organization**.

Child Equipment
Specify the child equipment to be replaced in the hierarchy. The system automatically populates the equipment description,**Organization**, **Status**, **Class**, **Category**, **Location**, **Department**, **Manufacturer**, **Serial Number**, and **Model**.

New Equipment
Select a new child equipment to replace the old child. The system automatically populates the equipment description, **Organization**, **Status**, **Class**, **Category**, **Location**, **Department**, **Manufacturer**, **Serial Number**, **Model Number**, **Store**, **Bin**, and **Lot**.

3 Select the **Core Return** check box to designate the child equipment a repairable spare.

4 Select the **Withdraw/Scrap** check box to withdraw or scrap the child equipment.

5 Select the **Return to Storeroom** check box to return the child equipment to the storeroom.

Note: If you selected **Return for Repair** or **Return to Storeroom**, specify **Store** and **Bin**.

6 Select one of the options for the cost details:

Option	Description
Apply Structure Change Cost to Parent	Select to apply the cost of the equipment structure change to the parent equipment.
Apply Structure Change Cost to Child	Select to apply the cost of the equipment structure change to the child equipment.

7 Select the **Create New WO** check box to create a new work order for the child equipment replacement.

8 Specify the **Work Order Org.** and **Standard WO**.

9 Select one of the options for work order details:

Option	Description
Create WO Before Structure Change	Select to create the work order before the equipment structure change.
Create WO After Structure Change	Select to create the work order after the equipment structure change.

10 Click **Replace**.

Note: To detach the child equipment from the hierarchy without replacing it with another child equipment, click **Detach**.

Creating work orders

You can create a work order for any piece of equipment or location in the hierarchy.

See "Defining regular work order headers."

To create work orders:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Locations**

2 Select the equipment for which to create a work order, and then click the **Structure** tab.

3 Select the equipment record for which to create a work order, and then click **Create WO**.

4 Specify this information:

   WO Description
   Specify the description of the work order.
   Note: If you leave this field blank and select a **Problem Code**, the system will populate the **Problem Code** as the **Work Order Description**.

   WO Organization
   Specify the organization to which the equipment or location belongs.

   Type
   Select one of the options for the type of work order:

Option	Description
Breakdown	Select to create a work order in response to an equipment breakdown or failure.
Preventative maintenance	Select to create a preventive maintenance work order.
Project	Select to create a work order as part of a project.
Work	Select to create a general work order.

   Status
   Select one of the options for the status of the work order:

Option	Description
Released	Select to create a work order for release.
Work Request	Select to create a work order request.

5 Specify the **Priority**, **Problem Code**, **Class**, **Department**, **Location**, **Cost Code**, **Sched. Start Date**, **Sched. End Date**, **Assigned To**, **Standard WO**, **Trade**, **Task Plan**, **Material List**, **Activity Start Date**, **Activity End Date**, **Estimated Hours**, and **People Required**.

Note: The system automatically populates the work order description, **Type**, **Class**, **Problem Code**,**Priority**, and **Scheduled End Date** if available. The system also copies the standard work order activities to the current work order. If the standard work order is a template, the system creates child work orders as defined on the standard work order.

6 Click **Submit**.

7 Specify this Linear Reference Details information:

Note: The system only displays Linear Reference Details if the equipment record for which to create the work order is a linear equipment record.

From Point
Specify the starting point or from point on the linear equipment record from which to perform the work order.

Ref. Description
Specify a description for the **From Point**.

Geographical Ref.
Specify a geographical reference for the **From Point**.

To Point
Specify the ending point or to point on the linear equipment record to which to perform the work order.

Ref. Description
Specify a description for the **To Point**.

Geographical Ref.
Specify the geographical reference to the **To Point** .

8 Click **Submit**.

Associating references with linear equipment

Associate linear references with linear equipment and specify the point or segment at which the reference is located.

See "Defining Linear Equipment."

Linear references enable you to dynamically segment work orders and equipment costs based on meaningful reference descriptions.

Searching for references

Select an equipment record, and then search for linear references or linear equipment records within a defined linear distance of the equipment record.

Note: The system cannot accurately calculate the point of intersection of two linear equipment records unless you define the point of intersection as a linear reference on each equipment record. For example, if you add Main St. as a linear reference on Washington Ave. but do not add Washington Ave. as a

reference on Main St., the system assumes that Washington Ave. crosses Main St. at point 0 on Main St.

See "Adding References to Linear Equipment.".

To search for references:

1 Select one of these options: .
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**

2 Select the asset, position, or system from which to begin your search, and then click the **Record View** tab.

   Note: The selected equipment record must be a linear equipment record or a linear reference.

   See these references:
   - "Defining Linear Equipment"
   - "Adding References to Linear Equipment"

3 Right-click, and then select **Linear Equipment Search**.

   The system automatically populates **Originating Point** with the midpoint of the equipment record. For example, the midpoint is the length of the equipment record divided by 2 and rounded to the defined precision of the equipment record. The system automatically populates the Search Parameters with the class of the equipment record for which you are searching for linear references.

   Note: If the equipment record on which you are basing your search does not contain a **Linear Reference UOM**, the system protects and populates **Originating Point** with 0 and the **Linear Distance** unit of measure with Feet.

4 Specify this information:

   Originating Point
   Specify the point on the **Originating Equipment** from which to begin your search.

   Linear Distance
   Specify the distance from the **Originating Point** of the **Originating Equipment** within which to search.

   UOM
   Specify the unit of measure for the specified **Linear Distance**.

5 Specify filter criteria, and then click **Run**.

   The system displays linear references that fall on or within the specified distance and meet the filter criteria. The system calculates each linear reference's distance from the **Originating Point** in the unit of measure of the **Linear Distance** and displays the linear distance in the list.

   Note: The system displays each linear reference's linear parent, linear parent organization, and linear parent description if the linear parent equipment also falls on or within the specified distance. The linear parent is the linear equipment record on which the equipment record is a reference.

6 Select a linear reference, and then click **Go To**.

   Note: The system cannot display the **Record View** page of a Linear reference system or Point of Interest because they are not defined as equipment records.

Click the **Structure** tab to view equipment hierarchy information.

Adding references to linear equipment

Add linear references to linear equipment records. A linear reference is a point or line along a linear equipment record and serves as a reference point.

Note: If two linear equipment records intersect, you must define the point of intersection as a linear reference on each equipment record. For example, if Main St. and Washington Ave. intersect, define Main St. as a linear reference on Washington Ave.'s equipment record and define Washington Ave. as a linear reference on Main St.'s equipment record. If you do not define the point of intersection as linear references on both equipment records, the system will calculate linear distance incorrectly when searching for equipment.

To add references to linear equipment:

1. Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Systems**
   - **Equipment > Positions**
2. Select the asset, system, or position for which to add a linear reference, and then click the **Linear References** tab. The system automatically populates **Equipment Length** and the unit of measure in the adjacent field.
3. Click **Add Reference**.
4. Specify this information:

   Type
   Select one of these options:

Option	Description
Linear reference system	Select to indicate that this reference denotes the measurement system by which to locate a point, line, or piece of equipment along the linear equipment record. Mile markers on an interstate are one example.
Related equipment	Select to indicate that this reference denotes equipment that is located along the linear equipment record. Exit ramps along an interstate are one example. Related equipment must be specified to display the reference on the map on the **Linear Overview** tab. **Note:** If you select Related equipment, the system enables **Equipment**.

Option	Description
Point of interest	Select to indicate that this reference denotes any point along the linear equipment record that is important to track, but is not defined as an equipment record within the system. Road signs are one example.

Note: Reference types are linked to the LRTP entity for which you must define your reference type codes. Depending on your system configuration, the codes listed below are not the codes that appear in the dropdown. Contact your system administrator for more information.

Class
Specify the class of the linear reference. This is required for the linear reference to display on the map on the **Linear Overview** screen.

Equipment
Specify the equipment record to add as the reference if you selected Related equipment as the **Type**. The system automatically populates **Ref. Description**, **Equipment Org.**, and **Geographical Reference**.

Ref. Description
Specify a description of the reference.

From Point
Specify the point on the linear equipment record from which to begin the reference.

To Point
Specify the point on the linear equipment record to end the reference.

Geographical Reference
Specify a geographical reference point for the reference.

Inspection Direction
Specify the typical direction in which an equipment inspection is performed.

Flow
Specify the typical direction in which the process flows.

For example, you can specify the traffic direction of a street or the direction in which oil flows through a pipe.

Apply to Children
Select this check box to have the linear references of this record applied to all of the child records.

Point Reference
Select this check box if the linear reference is a single point. For example, a signal light on a track would be a Point Reference that exists at one specific place. After you click the check box, the To Point is updated to match the From Point.

Apply to Route/ROW
Optionally, select this check box to apply the linear reference to a route or right of way.

5 Select the **Display on Overview** check box to display the reference on the map on the **Linear Overview** tab.
6 Click **Submit**.

Splitting linear reference records

Split a linear reference record into different segments. Enter the split point where the record must be split and a description for the segments.

To split a linear reference record:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2 Select the asset to modify, and then click the **Linear References** tab.
3 Select a linear reference record to split, and then select **Split**.
4 Specify the **Date Effective**, **Split Point**, **Description Segment 1**, and **Description Segment 2**.
5 Select **Submit**.

   Note: You can also split a linear reference record into three parts. Select the linear reference to split, and then select **Insert Inside**. Specify the **Date Effective**, **From Point**, **To Point**, and **Description**.

   For example, dirt was the original surface of a 12 mile long road. After January 1st, gravel is used to cover mile 4, 5, and 6. For this example, specify January 1 as the **Date Effective**, specify 4 as the **From Point**, specify 7 as the **To Point**, and specify that the dirt is being replaced with gravel for the **Description**.

Viewing linear overview for equipment

View linear reference types for equipment. The **Linear Overview** tab displays a line graph for information found in the **Linear References** tab, including linear reference types, points of interest, related equipment, and related parts of the linear equipment.

When the tab is loaded the system will attempt to display a map showing the selected header equipment and any related equipment. You must have the GIS module installed to view the map. All equipment to be displayed on this map must have a GISOBJID and be integrated to the GIS. You must also select **Show Block** in Screen Designer mode. On the **Linear References** tab of the equipment, the **Type** must be specified as Related Equipment and the equipment must have a specified **Class**. The **Display on Overview** preference must be selected on the **Linear Overview** tab as well.

To view linear overview for equipment:

1 Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**

2 Select the asset for which to view the linear overview, and then click the **Linear Overview** tab.

3 Optionally, click the **Select Preference** drop down to select a user preference for viewing the screen.

See Editing linear overview preferences on page 397.

4 Specify this information:

Range Selector
Click the **Range Selector** button and select the range to view by placing the sliders on the view from points and view to points.
Note: For example, to view the linear overview of equipment between the values 50 and 100, place the first slider at 50 and the second at 100.

Effective
Specify the effective date for the linear overview.
Note: The system defaults this to the system date. If you change the effective date, the system refreshes the View From Point and the View To Point.

5 View the linear overview for the selected asset.

Note: Rest on a record to view the reference description, range, effective dates, inspection direction, flow, relationship type, equipment, equipment description, part, part description, part condition, and work orders. When resting on work orders, checklists, and inspection results, the system will display the first 10 fields of the selected dataspy.

6 Select **Zoom In** or **Zoom Out** to view a smaller or larger section of the range.

Editing linear overview preferences

Edit preferences for **Linear Overview**.

To edit the preferences:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the equipment for which to change the preferences for the linear overview, and then click the **Linear Overview** tab.

3 Select **Preferences** to specify the display options.

4 Select an existing preference to edit or click **Copy** to create a new preference.

5 Specify the features and classes to include.

6 Specify the route types and segment types to include.

7 Specify these options for the Filters:

Default Filter
Specify the default filter for the linear overview display.

Default Color
Optionally, specify the default color display for the records if no specific color is specified.

Include Related Equipment in Applied Filter
Select to include any related equipment in the filtered display.

Hide Routes
Select to hide routes from the linear overview display.

Hide Segments
Select to hide segments from the linear overview display.

Group Segments under Default Type
Select to group all segments, regardless of their type, under one type.

Default Preference
Select to make the preference the default preference for the linear overview display.

8 Click **Save**.

Defining linear direction setup

Define a linear direction for linear equipment. A linear equipment could increase from north to south, meaning the starting point is in the north and the ending point is in the south. Once that is determined, offsets can only be recorded in the direction of the equipment or in the opposite direction.

The selection for north and south does not mean the linear equipment must always travel north to south. This selection is only used to identify the general direction.

To define a linear direction and the related opposite direction:

1 Select **Equipment > Linear Direction Setup**.
2 Click **New Record**.
3 Specify the **Direction** and **Opposite Direction**.
4 Click **Save**.

Adding routes to equipment

Routes are pieces of equipment that together form a larger piece of linear equipment, also known as a right of way. For example, a railroad track may consist of two routes, one track going north and one track going south. Routes are made of smaller segments.

See *Adding segments to equipment*.

To add routes to linear equipment right of way:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the linear equipment for which to add routes, and then click the **Routes** tab.

Note: The selected equipment must have the Linear Equipment Type defined as Right of Way.

3 Specify this information:

Equipment
Specify the equipment associated with the route.

From Point
Specify the point from which to start the route.

Date Effective
Specify the effective date for the relationship between the route and the equipment.

Date Expired
Specify the expiration datefor the relationship between the route and the equipment.

Route Identifier
Optionally, specify a route identifier.

Overview Sequence
Optionally, specify a sequence number for the route when displayed on the linear overview.

Note: The **Route Identifier** and **Overview Sequence** number are used to determine the order of routes on the **Linear Overview** tab.

4 Click **Submit**.

Note: When you create a route on this screen and the organization option SRSTSYNC is set to I or ID, the system will also create a structure record. When you delete a record on this screen and the organization option SRSTSYNC is set to D or ID, the system will also delete the related structure record.

Adding segments to equipment

Segments are pieces of equipment that are part of routes. Segments can be a variety of lengths or a specific point. For example, a railroad track may consist of a straight segment of 500 feet, a curved segment of 300 feet, and a switch of 60 feet.

To identify equipment as a segment, specify the **Linear Equipment Type** as Segment. The linear equipment to which segments are associated must have the **Linear Equipment Type** defined as Route.

To add segments to equipment:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the linear equipment for which to add segments, and then click the **Segments** tab.

Note: The selected equipment must have the Linear Equipment Type defined as Route.

3 Specify this information:

Equipment
Specify the equipment associated with the segment.

From Point
Specify the point from which to start the segment.

Date Effective
Specify the effective date for the relationship between the route and the right of way.

Date Expired
Specify the expiration date for the segment.

Branch Point
Select this check box if the segment is a branch point.

4 Click **Submit**.

Note: When you create a segment on this screen and the organization option SRSTSYNC is set to I or ID, the system will also create a structure record. When you delete a record on this screen and the organization option SRSTSYNC is set to D or ID, the system will also delete the related structure record.

Adding right of ways to routes

Add right of ways to routes. The header linear equipment to which these right of way parents are associated must be defined as a route, therefore the **Linear Equipment Type** must be equal to **System Type** Route.

To add right of ways to routes:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the route for which to add right of ways, and then click the **Route Parents** tab.

3 Specify this information:

Equipment
Specify the equipment associated with the right of way.

From Point
Specify the point from which to start the route on the route.

Date Effective
Specify the effective date for the relationship between the route and the right of way.

Date Expired
Specify the expiration date for the relationship between the route and the right of way.

Route Identifier
Optionally, specify the route identifier.

Overview Sequence
Optionally, specify a sequence number for the route when displayed on the linear overview.

4 Click **Submit**.

Note: When you create a right of way on this screen and the organization option SRSTSYNC is set to I or ID, the system will also create a structure record. When you delete a record on this screen and the organization option SRSTSYNC is set to D or ID, the system will also delete the related structure record.

Adding routes to segments

Add routes to linear equipment segments. The header linear equipment to which these route parents are associated must be defined as a segment, therefore the **Linear Equipment Type** must be equal to **System Type** Segment.

To add routes to segments:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the segment for which to add routes, and then click the **Segment Parents** tab.

3 Specify this information:

Equipment
Specify the equipment associated with the route.

From Point
Specify the point from which to start the segment.

Date Effective
Specify the effective date for the relationship between the segment and the route.

Date Expired
Specify the expiration date for the relationship between the segment and the route.

Branch Point
Select this check box if the segment is a branch point.

Branch Direction
If the segment is a branch point, specify a direction for the branch.

4 Click **Submit**.

Note: When you create a route on this screen and the organization option SRSTSYNC is set to I or ID, the system will also create a structure record. When you delete a record on this screen and

the organization option SRSTSYNC is set to D or ID, the system will also delete the related structure record.

Defining meter information

A physical meter is a tangible device, such as a car odometer, that measures a particular usage of a piece of equipment. Physical meters have limits on how much usage you can track before the meter resets to zero. Define physical meters on the **Meters** form.

Logical meters record the accumulative usage of a piece of equipment throughout its operational life. In the system, the meter due value of a preventive maintenance work order is always based on a logical meter. Use logical meters to monitor equipment usage. Plan preventive maintenance in response to logical meter levels. Define logical meters on the **Meters** page of the **Assets**, **Positions**, **Systems**, or **Locations** form.

Defining physical meters

To define physical meters:

1. Select **Equipment > Setup > Meters**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the meter belongs if you use multi-organization security.

   Meter
   Specify a unique code identifying the meter, and then specify a description of the meter in the adjacent field.

   Meter Unit
   Specify the meter's unit of measure.

   Maximum Value
   Specify the maximum value the meter can reach before it exceeds its physical count limit and resets to zero. Leave **Maximum Value** blank if the meter cannot reset to zero when it reaches its physical count limit.

   Last Value
   Specify the last meter reading as necessary.

   Class
   Specify the class of the meter. The classes shown belong to the MET entity.

   Note: When defining a physical meter, **Service Point** is a read-only field. You can specify the **Service Point**of a piece of equipment when editing a meter record.
4. Click **Save Record**.

Defining logical meters

Define logical meters by linking meters with equipment.

To define logical meters:

1 Select one of these options: .
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
2 Select the equipment with which to link a meter, and then click the **Meters** tab.
3 Click **Add Meter**.
4 Specify this information:

   Unit of Measure
   Specify the unit of measure for the logical meter.

   Type of Meter
   Select one of the following meter types:

Option	Description
Standalone	Select so that the equipment will not receive meter readings based on its established parent equipment meters of the same UOM, nor will it send meter readings to any of its established child equipment meters of the same UOM.
Parent	Select to send the equipment's meter readings down to child equipment. If you have parent/child relationships among equipment, specify meter readings for the parent piece of equipment only when adding meter readings.
Child	Select to enable the child equipment to receive usage information from a higher-level piece of equipment. The child equipment's unit of measure (UOM) must match that of the parent.
Parent & Child	Select to receive meter readings based on entries made for its parent equipment meters of the same UOM, and it will send meter readings to its children.

   Total Usage
   Specify the total usage of the logical meter. The system automatically updates **Usage Since Install** and **Usage Since Last WO**.

   Usage Since Install
   Specify the usage of the logical meter since the last change in the equipment hierarchy.

Est. Daily Usage
Specify the estimated amount of the daily usage.

Readings for Calc.
Specify the number of readings used to calculate the average daily usage. The system automatically updates **Avg. Daily Usage**.

Physical Meter
Specify the code of the physical meter, if any.

Last Reading Date
Specify the date of the last meter reading.

5 Select the **Up/Down Meter** check box to allow new meter readings to be less than the last meter readings. If this check box is not selected, an error message will be displayed when you specify a new meter reading that is less than the last meter reading.

6 Click **Submit**.

Entering meter readings for logical meters

To enter meter readings for logical meters:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to enter meter readings, and then click the **Meters** tab.

3 Select the meter for which to enter a reading, and then click **Enter Meter Reading**.

Note: You can enter a reading for a date that is earlier than the last reading date. The value for the new reading must be between the prior and subsequent readings. For example, if there are previous readings for August and October, you can enter a new reading for September. If the reading in August was 100 and the reading in October was 200, then the reading entered for September must be between 100 and 200.

4 Specify this information:

Entry Type
Choose one of the entry types:

Option	Description
Reading	Specify the current meter reading for **Value**.
Difference	Specify the difference between the last reading and the current reading for **Value**.
Date/Time	Specify the date and time of the meter reading.
Value	Specify the meter reading value.

Date/Time
Specify the date and time for the meter reading.

New Value
Specify the new value for the meter reading.

Work Order
Specify the work order. The system automatically populates **Related Work Order** if a related work order exists.

5 Click **Submit**.

Viewing meter history

To view meter history:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to view meter history, and then click the **Meters** tab.
3 Select the meter, and then click **View Meter History**.
4 View the meter history details and then click **Cancel**.

Deleting meter readings from history

You may only delete the most recent meter reading.

To delete meter readings from history:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to delete meter readings from history, and then click the **Meters** tab.
3 Select the meter, and then click **View Meter History**.
4 Select the meter reading to delete, and then click **Delete Reading**.
5 Click **Cancel**.

Entering batch meter readings

Enter meter readings or meter differences on the **Batch Meter Readings** form.

Note: In some cases, the default UOM is a parent meter attached to one or more Child ("Receiving") meters of the same UOM. In such cases, the new meter reading must roll down the hierarchy.

See "Creating equipment hierarchies.".

To enter batch meter readings:

1. Select **Equipment > Process > Batch Meter Readings**.
2. Specify this information:

   Equipment
   Specify the equipment for which to enter meter readings. The system automatically populates **Equipment Org.** if you selected **Equipment**.

   UOM
   Specify the unit of measure.

   Meter
   Specify the meter code.

   Difference
   Select to calculate the difference between the last meter reading and the current reading.
   Note: The system calculates **Difference** by adding the new value entered to the last meter reading.

   Date/Time
   Specify the date and time of the meter reading.
   Note: The date entered must occur between the date of the last meter reading and the current date. The system automatically populates the current date.

   New Value
   Specify the meter reading value.

   Work Order
   Specify the work order. The system automatically populates **Related Work Order**.

3. Click **Update Meters**.

   Note: The system updates the meter readings unless an error message is generated. In this case, the system lists the error in the **Error Message** field, and the row remains in the grid to be edited.

Associating warranties with equipment

Associate warranty documents with specific pieces of equipment or with other equipment. Define warranty terms based on equipment usage or by date.

One or more warranty coverage records may be established for a piece of equipment for tracking purposes to ensure that stipulations of the warranty are adhered to both internally and externally. In general, there are two types of warranty coverage records that can be tracked for equipment: calendar-based and usage-based. Warranty coverage records can be associated with an asset, position, or system.

Calendar-based coverage records require a duration value expressed in days. The start and expiration of this type of warranty for a given piece of equipment is expressed in terms of calendar dates. Usage-based warranty coverage records require a duration value expressed in some unit of measure other than days. The warranty's unit of measure has to be defined as a logical meter for the equipment. The start and expiration of this type of warranty for a given piece of equipment is expressed in terms of usage.

Note: If you are using the COVDURUP installation parameter, you may modify the **Duration** field of any warranty coverage record.

If you are using the COVDUPAC installation parameter, equipment can only have one active warranty coverage at any given time.

Adding calendar-based warranty coverage to equipment

Note: To manage warranties from the perspective of the warranty record, select **Equipment > Warranty > Warranties**.

To add calendar-based warranty coverage to equipment:

1. Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2. Select the equipment for which to add a warranty, and then click the **Warranties** tab.
3. Click **Add Warranty Coverage**.
4. Specify this information:

   Warranty
   Specify the warranty document to associate with the equipment.

   Coverage Type
   Select Calendar to indicate that the warranty is based on number of days used.

   Duration
   Specify the length of the warranty, in days.

   Threshold
   Specify the number of days prior to expiration at which the system should notify you that the warranty is about to expire.

   Start Date
   Specify the start date of the warranty.

   Expiration Date
   Specify the **Expiration Date**. **Expiration Date** is automatically populated based on **Start Date** plus **Duration**. Modify the **Expiration Date** as necessary.
   Note: **Duration** is automatically adjusted if you modify the **Start Date** or **Expiration Date**.

   Active
   Select to indicate that the warranty is currently active.

Duration UOM
Specify the usage length of the warranty and the usage unit of measure. **Last Value** is automatically populated with the most recent meter reading of this equipment record and unit of measure. If there is no meter reading, **Last Value** is populated with the **Total Usage** of the equipment record and unit of measure.

Threshold UOM
Enter the amount of usage quantity prior to expiration at which the system should notify you that the warranty is about to expire.

Starting Usage
Enter the amount of usage that occurred prior to the warranty start date.

Expiration Usage
Enter the amount of usage at which the warranty expires. This field is automatically populated based on **Starting Usage** plus **Duration UOM**. Modify the **Expiration Usage** as necessary.

5 Click **Submit**.

Adding usage-based warranty coverage to equipment

Note: To manage warranties from the perspective of the warranty record, select **Equipment > Warranty > Warranties**.

To add usage-based warranty coverage to equipment:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the equipment for which to add a warranty, and then click the **Warranties** tab. The system automatically populates **Coverage Type**, **Active**, **Date Entered**, and **Entered By**.

3 Click **Add Warranty Coverage**.

4 Specify this information:

Warranty
Specify the warranty document to associate with the equipment. The system automatically populates the warranty description, **Duration**, **Threshold**, **Manufacturer**, and **Supplier**.

Coverage Type
Select Usage to indicate that the warranty is based on actual usage.

Active
Select to indicate that the warranty is currently active.

Duration UOM
Specify the usage length of the warranty and the usage unit of measure. The system automatically populates **Last Value** with the most recent meter reading of this equipment record and unit of measure. If there is no meter reading, the system populates **Last Value** with the **Total Usage** of the equipment record and unit of measure.

Threshold UOM
Specify the amount of usage quantity prior to expiration at which the system should notify you that the warranty is about to expire.

Starting Usage
Specify the amount of usage that occurred prior to the warranty start date.

Expiration Usage
Specify the amount of usage at which the warranty expires. The system automatically populates this field based on **Starting Usage** plus **Duration UOM**. Modify the **Expiration Usage** as necessary.

5 Click **Submit**.

Viewing the nonconformities analysis chart

The nonconformity analysis chart displays a breakdown of nonconformities by severity, intensity, importance, or condition index.

To view the nonconformity analysis chart for equipment:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the equipment for which to view the nonconformities analysis, and then click the **Nonconformities Analysis** tab.

3 Specify this information:

Chart Type
Select the type of chart to display.

Group By
Select to group nonconformities by severity, intensity, importance, or condition index.

Start Date
End Date
Specify the date range for which to view nonconformities.

4 Click **Submit**.

Generating the OEE metrics report

Shows the overall efficiency of equipment based on the availability, performance, and quality of the equipment.

To generate the OEE metrics report:

1 Select one of these options:.

- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the asset, position, or system for which to display the OEE metrics report, and then click the **OEE Metrics** tab.

3 Specify this information:

Type
Choose one of the following options:

Option	Description
OEE Summary	Select to display the availability, performance, quality, and overall equipment efficiency charts
Selected vs. Prior	Select to display a chart comparison of the availability, performance, quality, and overall equipment efficiency for a selected date range versus a prior date range.

Availability
Specify a threshold value for the availability of the equipment.

Performance
Specify a threshold value for the performance of the equipment.

Quality
Specify a threshold value for the quality of the equipment.

Red Max. Limit (%)
Specify the maximum value for the red limit. The system defaults the value to 50.

Yellow Max. Limit (%)
Specify the maximum value for the yellow limit. The system defaults the value to 75.

Green Max. Limit (%)
Specify the maximum value for the green limit. The system defaults the value to 100.

Start Date
End Date
Specify the date range for which to generate the report.

4 Click **Submit**.

Viewing open repairs for assets

View information about internal and external requisitions, purchase orders, and work orders that have been a part of the asset's repair. This tab will only display details for external repairs when the associated PO Line has not yet been fully received.

To view repair information for an asset:

1 Select **Equipment > Assets**.
2 Select the asset for which to view open repair details, and then click the **Open Repairs** tab.
3 View the requisitions and purchase orders that have not yet been fully received.

Releasing work orders for equipment

Release work orders for equipment. The system displays PM work orders that are awaiting execution and all work orders that have a status of released. You can specify which work orders should be released by specifying the **WO Status** of the work orders.

To release open work orders:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Locations**
2 Select the equipment for which to release work orders, and then click the **Open Work Orders** tab.
3 Select one or more work orders to release.
4 Specify this information:

   WO Status
   Specify Released to release the selected work orders.

   New Scheduled Start Date
   Optionally, specify a new scheduled start date for the selected work orders.

5 Click **Update WOs**.

Adding parts associated to equipment

Associate parts to assets, positions, systems, or locations.

To add parts associated to equipment:

1 Select one of these options: **Equipment > Assets**.
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
   - **Equipment > Setup > Categories**
2 Select the equipment, work order, or part for which to add associated parts, and then click the **Parts Associated** tab.
3 Specify the **Part** to associate and the **Condition**, **Quantity**, **System Level**, **Assembly Level**, **Component Level**, **Component Location**, and **Comments** of the part associated.

Note: Condition can only be specified if the part is tracked by a condition.

4 Click **Submit**.

Associating permits with equipment

Associate permits with equipment records.

Note: You must first define permits on the **Permits** form.

See Defining permits on page 722.

To associate permits with equipment:

1 Select one of the following: **Equipment > Assets**.
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
   - **Equipment > Setup > Profiles**
   - **Equipment > Setup > Categories**
2 Select the equipment for which to associate permits, and then click the **Permits** tab.
3 Click **Add Permit**.
4 Specify the **Permit** to associate with the equipment and the **PTW Type** for the permit type.
5 Specify the **Type of Work** and **Priority** to attach to the created permit to work, the **Risk** the permit poses, and the **Isolation Type** required on the lockout/tagout procedure of equipment associated with the permit to work.
6 Click the **Auto Create PTW** check box to automatically create a permit to work.
7 Click the **Apply to Children** check box to have the permit details applied to all child records.
8 Click the **Mandatory** check box to indicate that the permit is mandatory to complete work.
9 Click the **LOTO Required** check box to require a lockout/tagout permit.
10 Click the **Delete Pending** check box to delete the pending permit record during the next review.
11 Click **Submit**.

Associating ERP resources to equipment

Associate ERP resources to selected equipment to communicate equipment downtime for any resources impacted when the selected equipment is taken down for unplanned maintenance work.

A resource is a line of products, equipment, or materials used to complete a job.

Note: **Track Resources** must be selected on the Record View page of the selected equipment to associate resources.

If the selected equipment **Status** is Withdrawn, the system will not add or modify resources.

To associate ERP resources to equipment:

1 Select **Equipment > Assets**.

   Select **Equipment > Positions**.

   Select **Equipment > Systems**.

2 Select the equipment with which to associate ERP resources, and then click the **Resources** tab.

3 Click **Add Resource**.

4 Specify this information:

   Resource
   Specify the resource to associate to the selected equipment. The system automatically populates **Accounting Entity**, **Name**, and **Type**.

   Cool-down Time (Hours)
   Specify the time it takes in hours for the resource line to cool down before use performing maintenance work.

   Warm-up Time (Hours)
   Specify the time it takes in hours for the resource line to warm up before normal use.

   Active
   Select to designate this resource line as active.

5 Click **Submit**.

   Note: To delete a resource association, select the resource record to delete, and then click **Delete Resource**. The system deletes the resource if the resource is not indirectly related to the selected equipment by parent equipment.

   To associate multiple resources, click **Select Resources**. The system displays the Resources popup. Select the resources to associate to the selected equipment, and then click **Submit**.

   To copy resources from parent equipment to the selected equipment, click **Copy Resources**.

   To view the resource history for the selected equipment, click **View Resource History**.

Adding PM schedules to equipment

View and modify the list of PM schedules for equipment like assets, positions, or systems on the **PM Schedules** tab of the respective Equipment form.

Add a new PM schedule to the equipment record, change the due date, deactivate an existing PM schedule, and delete a PM schedule altogether from the list of existing PM schedules for the equipment. When adding a new PM schedule to an equipment record, the **Work Order Org.** will default to the organization of the equipment if the organization is not common. If the organization is common, you must choose the specific organization for which to generate PM work orders.

PM revision control cannot be active because changing equipment PM schedule relationships demands a new revision of the PM schedule. If PM revision control is active, the **PM Schedule** tab is for informational purposes only.

Note: If you edit the length of a linear equipment record, the system may automatically edit associated PM records when installation parameter PMRVCTRL is set to No. If the new equipment length falls on

or within the length of the PM, the system automatically updates the **To Point** of the PM record based on the new equipment length. If the new equipment length falls outside of the length of the PM, the system does not update the PM record.

To add PM schedules to equipment:

1. Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2. Select the equipment for which to add a PM schedule, and then click the **PM Schedules** tab.
3. Click **Add PM**.

   The system automatically populates **Work Order Org.**, **Department**,**Location**, **Loc. Org.**, **Cost Code**, **Dormant Start**, **Dormant End**, **Reuse Dormant Period**, and **Assigned To** if available.

   Note: If the system does not automatically populate **Work Order Org.**, you must specify a **Work Order Org.** to activate the other fields on the form.

   The system automatically populates **Date of Last Work Order** with the **Due Date** of the current work order for the PM. If the work order is a duplicate PM, the system displays the latest date.
4. Specify the **PM**, **Department**, **Location**, **Route**, **WO Class**, **Cost Code**, **Assigned To**, and **Supervisor**.
5. Specify this information:

   Perform Every
   Specify the length of the interval of time to pass before the system generates the next PM routine work order, and then select the unit of measure in the adjacent field.

   Due Date
   Specify the due date of the first work order.
   Note: Each work order determines the due date of the following work order. If you update the **Due Date** on the **PM Schedules** tab, the system updates the work order **Due Date** so that this due date is later than the last work order completion date. The system adds the interval to the specified **Due Date** on the **PM Schedules** tab until a date later than the last completion date is reached. Future due dates are accepted without validation.

   Dormant Start
   Specify the date on which the dormant period for any PM work orders for the equipment begins.

   Dormant End
   Specify the date on which the dormant period for any PM work orders for the equipment ends.

   Reuse Dormant Period
   Select to use the same specified dormant period for any PM work orders for the equipment on a yearly basis. The system automatically updates the specified **Dormant Start** and **Dormant End** dates to future dates after the dormant period for the equipment has elapsed. Additionally, the specified dormant period will be the default dormant period for any new PM equipment records.

   Test Point Set
   Specify the test point set for calibration of the equipment.

Note: If the work order is a calibration work order, the system copies the test points for the specified equipment record to the work order when it is released. The system copies the test points related to the selected **Test Point Set**.

Include Nonconformities
Select to include new observations for re-inspection for existing nonconformities.

Due Nonconformities Only
Select to include only new observations created for nonconformities that are due for inspection.
Note: The inspector will not see nonconformities on the work order that are present but not due for inspection. The inspector may be confused if he finds nonconformities during the inspection that were not on the list, which may lead to duplicate nonconformities

PM Type
Select one of these options:

Option	Description
Fixed	Select to issue the PM based on a fixed schedule such as based on date or reading when the last PM was originally due.
Variable	Select to issue the PM based on a variable schedule such as based on the date or reading on which the last PM was completed.
Duplicate	Select to allow multiple PM work orders to be open at the same time. **Note:** Selecting Duplicate as the PM type enables you to create an exception to the rule that a PM equipment may have only one work order for the PM work order at a time.

Date Deactivated
Specify a date beyond which to discontinue generation of future PM Work Orders.

Meter Interval
Specify the length of the interval of time indicating how frequently the PM is to be performed, and then specify the unit of measure for the meter interval.

Meter Due
Specify the reading due value for the first work order.
Note: Each work order determines the due reading of the following work order. If you update **Meter Due** on the **PM Schedules** tab, the system updates the work order **Meter Due**so that this due reading is higher than the reading on the last work order completed. The system adds the interval to the specified **Meter Due** on the **Equipment** tab until a reading higher than the reading on the last work order completed is reached. Future due readings are accepted without validation.

Meter # 2 Interval
Specify the length of the interval of time indicating how frequently the PM is to be performed, and then specify the unit of measure for the meter interval.

Meter # 2 Due
Specify the reading due value for the first work order.
Note: Specify more than one meter interval for a PM. For example, change the oil in a truck every 3,000 miles, according to **Meter Interval** and change the oil in the same truck after 720 hours of running time according to **Meter #2 Interval**. You must specify a value for Meter Interval to specify a value for **Meter #2 Interval**.

Perform On
Specify the week of the month and the day of the week on which to perform the work on the equipment, such as the second Tuesday of the month due. Select **Last** to handle scenarios in which there are five weeks in a month. The system sets the due date to the last week of the month.
Note: **Perform On** is only available for duplicate PMs, and is not available for daily or weekly frequencies.

6 Specify the Linear Reference Details.

See "Defining standard work order headers."

7 Click **Submit**.

Printing the PM repair costs chart for equipment

Print the PM work order repair costs chart report for equipment. The report displays a chart that breaks down total PM costs by cost type. The report also contains a detail section that lists individual PM work orders and the costs associated for selected equipment.

To print the PM repair costs chart for equipment:

1 Select **Equipment > Assets**.
2 Open the **Assets** form.
3 Click the **PM Repair Costs Chart** tab.
4 Specify the **Start Date** and **End Date**.
5 Click **Submit**.
6 Click **Print**.

Defining functions for RCM Project and equipment

Define functions for an equipment as part of the RCM assessment or RCM analysis for that equipment. The **RCM Level** for the equipment must be set before defining a function. You can also edit and delete functions on the **Functions** popup. After defining functions, use the **Functional Failures** popup to define functional failures for functions.

To define functions for RCM Project and equipment:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**

- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to define functions, and then click the **RCM** tab.

3 Click **Add/Edit Functions**.

4 Specify this information:

Description
Specify a description of the function. Click **Translations** to translate the description text into a different language.

Sequence
Specify the sequence number for the functional failure to order the failures in the tree. If the sequence is not specified, the sequencing is listed in alphabetical order by the description.

Note
Specify note details as necessary.

5 Click **Submit**.

Defining functional failures for functions

Define functional failures for previously defined functions of an equipment as part of the RCM assessment or RCM analysis for that equipment. You can also edit and delete functional failures on the **Functional Failures** popup. When you delete functional failures, all associated children are deleted.

To define functional failures for functions:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Location**

2 Select the equipment for which to define functional failure details, and then click the **RCM** tab.

3 Click **Add/Edit Functional Failures**.

4 Specify this information:

Function
Select the function.

Description
Specify a description of the functional failure. Click **Translations** to translate the description text into a different language.

Probability
Select the probability of the failure.

These are defined on the Risk Matrix screen. The probability is protected for the Risk Analysis but can be specified for the Risk Assessment.

Sequence
Specify the sequence number for the functional failure to order the failures in the tree. If the sequence is not specified, the sequencing is listed in alphabetical order by the description.

Note
Specify note details as necessary.

5 Click **Submit**.

Editing consequences for functional failures

Edit consequences for previously defined functional failures defined for an equipment as part of the RCM assessment or RCM analysis for that equipment.

To edit consequences for functional failures:

1 Select one of these options: .
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to edit functional failure consequences, and then click the **RCM** tab.
3 Click **Edit Functional Failure Consequences**.
4 Select a **Functional Failure** for which to edit consequences.
5 Specify this information:

Consequence
Select the consequence for the functional failure.

Sequence
Specify the sequence number for the consequence.

Note
Specify note details as necessary.

6 Click **Submit**.

Defining failure modes

Define failure modes of equipment as part of the RCM analysis for that equipment. When you delete failure modes, the associated functional failures will also be deleted.

To define failure modes:

1 Select one of these options: .
- **Equipment > Assets**
- **Equipment > Positions**

- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to define failure modes, and then click the **RCM** tab.

3 Click **Add/Edit Failure Modes**.

4 Specify this information:

Description
Specify a description of the failure mode. Click **Translations** to translate the description text into a different language.

Probability
Select the probability of the failure.

These are defined on the Risk Matrix screen. The probability is protected for the Risk Analysis but can be specified for the Risk Assessment.

Sequence
Specify the sequence number for the functional failure to order the failures in the tree. If the sequence is not specified, the sequencing is listed in alphabetical order by the description.

Note
Specify note details as necessary.

5 Click **Submit**.

Defining functional failures for failure modes

Define functional failures for previously defined failure modes of equipment as part of the RCM analysis for that equipment. You can also edit and delete functional failures for failure modes on the **Functional Failures for Failure Modes** popup.

To define functional failures for failure modes:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the equipment for which to define functional failures for failure modes, and then click the **RCM** tab.

3 Click **Add/Edit Functional Failures for Failure Modes**.

4 Specify the **Failure Mode**, **Functional Failure**, **Sequence** number, and **Note** details.

5 Click **Submit**.

Viewing RCM for equipment

View the Reliability Centered Maintenance (RCM) for equipment. Functions, functional failures, and consequence categories are displayed on this screen. If you set the **RCM level** as Risk Analysis, failure modes and associated functional failures are also displayed on this screen.

To view RCM for equipment:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
2 Select the piece of equipment for which to view the RCM, and then click the **RCM** tab.
3 Select **Action** and then select**Expand All** to view all of the details or the functions and failure modes.

   Note: You can also expand Functions or Failure Modes individually to view specific details.
4 Select **Action** and then select **Collapse All** to close the details for the functions and failure modes.
5 Optionally, select **Action** and then select one of these actions:

Option	Description
Add/Edit Functions	Define functions for a RCM Project and equipment combination.
Add/Edit Functional Failures	Define functional failures for previously defined functions of a RCM Project and equipment combination.
Edit Functional Failure Consequence	Edit consequences for previously defined functional failures of a RCM Project and equipment combination.
Add/Edit Failure Modes	Define failure mode details for a RCM Project and equipment combination. **Note:** You can only add and edit failure modes if the RCM level is specified as Risk Analysis.
Add/Edit Functional Failure for Failure Modes	Define functional failures for previously defined failure modes of a RCM Project and equipment combination. **Note:** You can only add and edit functional failures for failure modes if the RCM level is specified as Risk Analysis.

Selecting equipment rankings for equipment

Select one or more equipment rankings for equipment. For example, you can determine one ranking based on safety and another ranking based on environmental impact.

To select an equipment ranking for equipment:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**

- **Equipment > Systems**

2 Select the equipment for which to select equipment rankings, and then click the **Rankings** tab.

3 Specify this information:

Equipment Ranking
Select an equipment ranking to associate with the equipment.
Note: You can select only one equipment ranking of type Condition Index and one equipment ranking of type Facility Condition Index. You can select as many equipment rankings of type Reliability Index as needed.

Lock Ranking Values
Select this check box to prevent ranking values from being calculated.

Default
Select this check box to make this equipment ranking the default ranking for the equipment. The data of this ranking is also available on the Record View of the equipment.
Note: Only one equipment ranking of type Reliability Index can be selected as the default equipment ranking.

Refresh Every
Specify how often the equipment ranking should be calculated. For example, you can specify that the equipment ranking should be calculated every 30 days. This is only available if calculated questions are included in the survey.

Next Refresh
Specify the date that the equipment ranking should be calculated.

Refresh Sequence
Specify the order in which this equipment ranking should be calculated. For example, if you specify 1 for this equipment ranking and 2 for another equipment ranking, this equipment ranking will be calculated first.

4 Click **Submit**.

5 Optionally, click **Calculate Ranking Values** to calculate the Equipment Ranking Score.

Associating service codes with equipment

To associate service codes with equipment:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Locations**
- **Equipment > Assets Healthcare**
- **Equipment > Properties Healthcare**
- **Equipment > Systems Healthcare**
- **Equipment > Work Orders Healhcare**

- **Equipment > Facilities**
- **Equipment > Rooms**
- **Equipment > Vehicles**

2 Select the equipment with which to associate service codes, and then click the **Service Codes** tab.
3 Click **Add Service Code**.
4 Specify the one or more service codes to associate with the equipment.
5 Select the **Apply Service Code to Children** check box to apply the service code to all of the children of the equipment.
6 Select the **Skip this Level** check box to not associate the service code to the equipment on this level.
7 Click **Submit**.

Associating suppliers with equipment

To associate suppliers that service equipment:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Locations**

2 Select the equipment with which to associate suppliers, and then click the **Suppliers** tab.
3 Click **Add Suppliers**.
4 Specify a supplier to associate with the equipment.
5 Select the **Apply Supplier to Children** check box to apply the supplier to all of the children of the equipment.
6 Select the **Skip this Level** check box to not associate the supplier to the equipment on this level.
7 Click **Submit**.

Viewing suppliers and services associated with equipment

View the suppliers and their associated services for equipment, and exclude a service from a supplier if that service is not available from that supplier for that equipment.

To view suppliers and their associated services for equipment:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Locations**
- **Equipment > Assets Healthcare**
- **Equipment > Properties Healthcare**

- **Equipment > Systems Healthcare**
- **Equipment > Facilities**
- **Equipment > Rooms**
- **Equipment > Vehicles**

2 Select the equipment for which to view suppliers and their associated services, and then click the **Supplier Service Codes** tab.

3 View the suppliers and their services.

4 Select the **Exclude** check box to exclude the supplier and service combination for that equipment.

5 Click **Submit**.

Transferring equipment between organizations

Transfer equipment between organizations within your company if you use multi-organization security.

You can only transfer equipment records with a system **Status** of Installed. You cannot transfer equipment records with any other **Status**. In addition, you cannot transfer any equipment record that meets the following criteria:

- It is flagged as Out of Service.
- It is associated with a change notice.
- It has work orders with a system **Status** of Work Requested or Released.
- It has work orders with a system **Status** of Bypassed or Awaiting Execution and for which there are open purchase orders, purchase requisitions, or items being held in store.
- It has a parent record within an equipment hierarchy.
- It has a child record that has a second parent record.
- It has a child record that belongs to a different organization.
- It has non-superseded PM work orders and PM Revision Control is On.
- It has a child equipment record that already exists in the new organization.
- It already exists in the new organization, but its children do not.
- It already exists in the new organization with a system **Status** of Awaiting Purchase, Installed, In Store.

Note: You can transfer an equipment record that has child records in an equipment hierarchy; however, the child equipment records must meet the same criteria as noted above.

Understanding equipment transfer

See the following list of processing rules that the system follows when an equipment record is transferred between organizations:

- The system maintains a record of the equipment in the originating organization with a system **Status** of Withdrawn, flags the equipment record as Out of Service, and automatically populates the equipment record's **Transfer Date**.
- The system transfers child equipment records and retains the equipment hierarchy in the new organization.

- The system creates an event record of the transfer in both the originating organization, for which the event type is ATT, and new organization, for which the event type is ATF. The system maintains the event history of the equipment record in the originating organization, and then copies the event history to the equipment record in the new organization.
- The system automatically converts currency-based fields from the currency of the originating organization to the currency of the new organization if an exchange rate exists.
- The system completes any PM work orders associated with the transferred equipment that have a system **Status** of Awaiting Execution or Bypassed. The system adds a comment to the work order to indicate it was automatically completed because of the organization transfer.
- The system automatically copies depreciation setup data defined on the **Depreciation** page of the Assets, Positions, or Systems form, and then recalculates the depreciation of the equipment record within the new organization based on the **Commission Date** of the equipment record.
- The system removes the transferred equipment record from any shutdown lists on which it is referenced.

The system automatically copies equipment information defined on the **Record View** page of the Assets, Positions, or Systems form to the equipment record within the new organization.

Note: The system only copies information that is valid within the equipment record's new organization. If the equipment record contains information that is not valid within the new organization, the system completes the transfer without copying the invalid information.

See the following list of additional data that is copied during the transfer if applicable:

- Addresses
- Calibration data (except for **Next Cal. Due**)
- Comments
- Custom Fields
- Depreciation setup data
- Documents
- Equipment Details for Monitored Equipment
- Logical Meters
- Parts Associated
- Permits
- Physical Meters that belong to common organizations
- Test Point Data
- Translations
- Warranties

The system does not automatically copy all data associated with an equipment record during the transfer. See the following list of data that the system does not copy to the equipment record within the new organization:

- Account Details
- Electronic signatures
- Electronic records
- Audit trail information
- Preventive Maintenance records
- Inspections data

- Physical Meters that belong to specific organizations

Transferring equipment

To transfer equipment:

1. Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2. Select the equipment record to transfer, and then click the **Record View** tab.
3. Right-click, and then select **Transfer Equipment**. The system automatically populates the Equipment Details and the Current Org. Details.
4. Specify this information:

   Organization
   Specify the organization to which to transfer the equipment. The system enables **Status** and automatically populates **Department**, **Part**, **Cost Code**, and **Manufacturer** if the information defined on the equipment record is valid within the new **Organization**.

5. Specify the **Status**, **Department**, **Part**, **Cost Code**, and **Manufacturer**.
6. Click **Transfer**.

Creating equipment configurations

Create equipment configurations to use as equipment templates. After creating an equipment configuration, use it to quickly define assets, positions, and systems that require the same information as is contained on the equipment configuration template.

To create equipment configurations:

1. Select **Equipment > Equipment Configuration > Equipment Configurations**.
2. Click **New Record**.
3. Specify this information:

   Equipment Configuration
   Specify a unique code identifying the equipment configuration, and then specify a description in the adjacent field.

   Status
   Select the equipment configuration status.

   Organization
   Specify the organization to which the equipment configuration belongs if you use multi-organization security.

   Department
   Specify the equipment's department.

Class
Specify the class of the equipment.

Category
Specify the category for the equipment.

Cost Code
Specify the equipment's cost code.

Equipment Value
Specify the value of the equipment (generally, purchase price).

Assigned To
Specify the person responsible for the equipment.

Meter Unit
Specify the meter unit of the equipment to define with this equipment configuration.

Criticality
Specify a criticality code to indicate the relative importance of the equipment to the overall production of goods or services for your organization.

Dormant Start
Specify the date on which the dormant period for any PM work orders for the equipment begins.

Dormant End
Specify the date on which the dormant period for any PM work orders for the equipment ends.

Reuse Dormant Period
Select to use the same specified dormant period for any PM work orders for the equipment on an annual basis.

Production
Select if the equipment is used in production.

Safety
Select to observe safety precautions when working with this equipment.

cGMP
Select to indicate that the equipment is subject to cGMP standards.

Prevent non-PM WO Completion
Select to prevent non-PM WO completion.

System Level
Specify the EMRS codes identifying the system level for the equipment.

Assembly Level
Specify the EMRS codes identifying the assembly level for the equipment.

Component Level
Specify the EMRS codes identifying the component level for the equipment.

Vehicle
Select if the equipment is a vehicle.

Component Location
Specify the component location for the equipment.

Alias
Specify an alias for the equipment.

Out of Service
Select to prevent the equipment configuration from being displayed in the lookups.

Manufacturer
Specify the equipment's manufacturer.

Model
Specify the equipment's model number.

Model Revision
Specify the equipment’s model revision number.

Part
Specify the part to associate with this equipment configuration. The system automatically populates **Part Org.** You cannot specify a part if **Equipment Type** is position or system.

Equipment Type
Specify the equipment object type for the equipment.

Equipment Prefix
Specify a unique prefix code for the equipment.

Equipment Suffix
Specify a unique suffix code for the equipment.

Sequence Length
Specify the sequence length that will be used when **Auto Number** is unselected.

Equipment Status
Specify the default status you want generated with the equipment.

Create as Specific
Select to indicate that the organization of the equipment during the generation process will be set to a specific organization.

Auto Number
Select to have the system automatically assign the next available equipment number as the new equipment number. **Sample Code** is automatically cleared.

Commissioning WO
Specify the commissioning WO.

Key 1 through Key 6
Specify additional information that can be used to identify the configuration if you use the data collection interfaces.

Equipment Length
Specify length of the equipment.

Equipment Length UOM
Select the unit of measure (UOM) for the length of the equipment.

Linear Reference UOM
Select the unit of measure (UOM) for the linear reference.

Reference Precision
Select the reference precision for the linear reference.

Geographical Reference
Specify the geographical reference for the linear reference

Rental Equipment
Select to indicate that the equipment is rental equipment.

Rental Template
Specify the template to associate with the rental equipment.

Contract Equipment
Select to indicate that the equipment is contract equipment.

Contract Template
Specify the template to associate with the contract equipment.

Customer
Specify the customer code.

Calendar Group
Specify the calendar group for the equipment.

Penalty Factor
Specify the penalty factor for the equipment.

Minimum Penalty
Specify the minimum penalty amount that must be met before a penalty can be deducted from the maintenance fee.

Service Delivery Matrix
Select to restrict work orders for the equipment to a pre-defined service delivery matrix.

Replacement Value
Specify the current replacement value for the equipment.

Utility Bill Level
Select to mark the equipment as having capabilities to record utility bills.

GAS Tracked
Select to set the equipment as GAS (Global Asset Sustainability) Tracked.

Floor Area
Specify the floor area, and then specify the unit of measure for the floor area.

Estimated Revenue
Specify the estimated revenue the piece of equipment can generate.

Region
Specify the region for the equipment.

Primary Use
Specify the primary use for the equipment.

Year Built
Specify the year built for the equipment.

Service Life (years)
Specify the service life of the equipment.

Lock Reliability Ranking Values
Select to lock the reliability ranking values for the equipment on the **Reliability Survey**tab of the **Equipment**screen.

Reliability Ranking
Specify the reliability ranking code for the equipment.

Target Power Factor
Specify the target power factor that has been determined for the equipment.

Target Peak Demand (W)
Specify the target peak demand in watts for the equipment.

Start Billing Period
Specify the date that the billing period begins. The Peak Demand measurements are relevant after this date.

Bill Every
Specify the length of the interval of time to pass before the system expects the next bill, and then select the unit of measure in the adjacent field

Eff. Loss 1% Phase Imb.
Specify the efficiency loss per 1 percent imbalance.

Eff. Loss 2% Phase Imb.
Specify the efficiency loss per 2 percent imbalance.

Eff. Loss 3% Phase Imb.
Specify the efficiency loss per 3 percent imbalance.

Eff. Loss 4% Phase Imb.
Specify the efficiency loss per 4 percent imbalance.

Eff. Loss 5% Phase Imb
Specify the efficiency loss per 5 percent imbalance.

Performance Manager
Specify the energy performance manager who is responsible for the equipment.

Electric Sub-meter Interval
Specify the length of the interval of time in minutes indicating how frequently the electric sub-meter is read.

Electric Usage Threshold
Specify the current in amps above which the equipment is considered running or on.

Revision Reason
Specify the reason for revision.

4 Click **Save Record**.

Associating child equipment with equipment configurations

Associate child equipment with equipment configurations if you want to break down the configuration structure of the parent. Child equipment records may also have children of their own. Create equipment configurations before associating child equipment with equipment configurations. If the equipment configuration status is not Unfinished, you cannot associate child equipment with equipment configurations.

To associate child equipment with equipment configurations:

1 Select **Equipment > Equipment Configuration > Equipment Configurations**.
2 Select the equipment configuration for which to associate child equipment, and then click the **Configurations Associated** tab.
3 Click **Add Configuration**.
4 Specify this information:

Configuration
Specify the equipment configuration. The system automatically populates the description, **Configuration Org.**, **Revision**, **Description**, and **Status**.

System Level
Specify the VMRS codes identifying the system level for the equipment configuration.

Assembly Level
Specify the VMRS codes identifying the assembly level for the equipment configuration.

Component Level
Specify the VMRS codes identifying the component level for the equipment configuration

Note: The system automatically populates the **EMRS Description**.

Component Location
Specify the component location for the equipment.

5 Select the **Use Approved Revision** check box to indicate that the current approved revision should always be used for the equipment configuration.
6 Select the **Dependent** check box to generate the child as a dependent of the parent.
7 Select the **Cost Roll-up** check box to roll costs collected for equipment up the tree and to have the charges applied to the parents of the equipment.
8 Click **Submit**.

Viewing equipment configuration hierarchies

View structure details for equipment configuration hierarchies. The structure will display equipment configuration records, component locations, and system, assembly, and component levels. Select equipment configuration or part records within the hierarchy to retrieve the forms within the system.

To view equipment configuration hierarchies:

1 Select **Equipment > Equipment Configuration > Equipment Configurations**.
2 Select the record for which to view the equipment configuration hierarchy, and then click the **Structure** tab.
3 View the equipment configuration hierarchy.

Defining PM Schedules for equipment configurations

Define PM Schedule details to attach to equipment generated based on the equipment configuration. The equipment configuration header record system status must be Unfinished to define PM Schedules for equipment configurations.

To define PM schedules for equipment configurations:

1 Select **Equipment > Equipment Configuration Equipment Configuration**.
2 Select the equipment for which to define PM schedules for equipment configurations, and then click the **PM Schedules** tab.
3 Click **Add PM**.
4 Specify the **PM Schedule**, **PM Type**, **WO Class**, **Dormant Start**, **Dormant End**, and **Test Point Set**.
5 Specify this information:

Perform Every
Specify the length of time to elapse before the system releases the PM work order, and then select the unit of measure for the PM period in the adjacent field.

Meter Interval
Specify the length of the interval and the unit of measure for the first meter that prompts the release of the PM work order on usage of the equipment.

Meter #2 Interval
Specify the length of the interval and the unit of measure for the second meter that prompts the release of the PM work order on usage of the equipment.

Perform On
Specify the week of the month on which to perform the work on the equipment.

Perform On Day
Specify the day of the week on which to perform the work on the equipment.

6 Select the **Use PM Schedule Setup** check box to use the PM Schedule setup.
7 Select the **Reuse Dormant Period** check box to use the same specified dormant period for the PM on a yearly basis. If you select **Reuse Dormant Period**, the system automatically updates the specified **Dormant Start** and **Dormant End** dates after the dormant period has elapsed.
8 Click **Submit**.

Associating maintenance patterns with equipment configurations

Associate maintenance patterns with equipment configurations. The equipment configuration header record system status must be Unfinished to define PM Schedules for equipment configurations.

To associate maintenance patterns with equipment configurations:

1 Select **Equipment > Equipment Configuration > Equipment Configurations**.
2 Select the equipment configuration for which to associate maintenance patterns, and then click the **Maintenance Patterns** tab.
3 Specify this information:

Maintenance Pattern
Specify the maintenance pattern to associate with the equipment. The system automatically populates the maintenance pattern description and **Maintenance Pattern Org.**

Initial Sequence
Specify the sequence number that the pattern will use to create the first work order.

Test Point Set
Specify the test point set for the calibration of the equipment.

Dormant Start
Dormant End
Specify the date on which the dormant period for the equipment begins and the date on which it ends.

4 Select the **Reuse Dormant Period** check box to use the same specified dormant period for the equipment on a yearly basis.
5 Click **Submit**.

Defining logical meters for equipment configurations

If the equipment configuration status is not Unfinished, you cannot define logical meters for equipment configurations.

To define logical meters for equipment configurations:

1 Select **Equipment > Equipment Configuration > Equipment Configurations**.
2 Select the equipment configuration with which to link a meter, and then click the **Meters** tab.
3 Click **Add Meter**.
4 Specify this information:

UOM
Specify the unit of measure for the logical meter.

Type of Meter
Select one of the meter types:

Option	Description
Standalone	Select so that the equipment will not receive meter readings based on its established parent equipment meters of the same UOM, nor will it send meter readings to any of its established child equipment meters of the same UOM.
Parent	Select to send the equipment's meter readings down to child equipment. If you have parent/child relationships among equipment, specify meter readings for the parent piece of equipment only when adding meter readings.
Child	Select to enable the child equipment to receive usage information from a higher-level piece of equipment. The child equipment's unit of measure (UOM) must match that of the parent.
Parent & Child	Select to receive meter readings based on entries made for its parent equipment meters of the same UOM, and it will send meter readings to its children.

5 Click **Submit**.

Adding calendar-based warranty coverage to equipment configurations

If the equipment configuration status is not Unfinished, you cannot add calendar-based warranty coverage.

Note: To manage warranties from the perspective of the warranty record, select **Equipment > Warranty > Warranties**.

To add calendar-based warranty coverage to equipment configurations:

1 Select **Equipment > Equipment Configuration > Equipment Configurations**.
2 Select the equipment configuration for which to add a warranty, and then click the **Warranties** tab. The system automatically populates **Date Entered**,and **Entered By**.

3 Click **Add Warranty Coverage**.

4 Specify this information:

Warranty
Specify the warranty document to associate with the equipment configuration. The system automatically populates the warranty description, **Duration UOM**, **Threshold UOM**, **Manufacturer**, and **Supplier**.

Coverage Type
Select Calendar to indicate that the warranty is based on number of days used.

Duration
Specify the length of the warranty in days.

Threshold
Specify the number of days prior to expiration at which the system should notify you that the warranty is about to expire.

Active
Select to indicate that the warranty is currently active.

5 Click **Submit**.

Adding usage-based warranty coverage to equipment configurations

If the equipment configuration status is not Unfinished, you cannot add usage-based warranty coverage.

Note: To manage warranties from the perspective of the warranty record, select **Equipment > Warranty > Warranties**.

To add usage-based warranty coverage to equipment configurations:

1 Select **Equipment > Equipment Configuration > Equipment Configurations**.

2 Select the equipment configuration for which to add a warranty, and then click the **Warranties** tab. The system automatically populates**Date Entered** and **Entered By**.

3 Click **Add Warranty Coverage**.

4 Specify this information:

Warranty
Specify the warranty document to associate with the equipment configuration. The system automatically populates the warranty description, **Duration**, **Threshold**, **Manufacturer**, and **Supplier**.

Coverage Type
Select Usage to indicate that the warranty is based on actual usage.

Active
Specify to indicate that the warranty is currently active.

Duration UOM
Specify the usage length of the warranty and the usage unit of measure.

Threshold UOM
Specify the amount of usage quantity prior to expiration at which the system should notify you that the warranty is about to expire.

5 Click **Submit**.

Generating equipment using equipment configurations

Generate equipment quickly in a central location using equipment configurations.

To generate equipment using equipment configurations:

1 Select **Equipment > Equipment Configuration > Equipment Generation**.
2 Click **New Record**.
3 Specify the **Session** description, **Organization**, **Configuration**, **Equipment Department**, **Commission Date**, **Equipment Status**, **Store**
4 Specify this information:

Generate Count
Specify the number of equipment you want to generate from the selected configuration.

5 Select the **All Specific** check box to indicate that the equipment will be generated in the specific organization of the session. If **All Specific** is not selected, the equipment will be generated in the organization of the selected configurations and its children.
6 Specify the **Equipment Location**, **Equipment Cost Code**, **Equipment Assigned To**, **Bin**, and **Lot**.
7 Select the **Top Level Only** check box to generate equipment records for the top-level of the equipment configuration structure only.
8 Select the **All Dependent** check box to generate an equipment structure where all of the children are dependent on their parent.
9 Select the **All Cost Roll-up** check box to generate an equipment structure where all of the children roll up their costs to their parent.
10 Select the **Create Commissioning WO** check box to create a commissioning work order.
11 Specify the **Commissioning WO Status**, **Commissioning WO Department**, **Commissioning WO Location**, **Commissioning WO Cost Code**, **Commissioning WO Assigned To**, and **Commissioning WO Assigned By**.
12 Specify this information:

Due Date Reference
Specify a due date to offset the due date for the equipment.

For example, if the PM frequency is 1 month, the first due date will be one month after the **Due Date Reference**.

13 Select the **Comments** check box to copy the comments added to the equipment configuration.
14 Select the **Documents** check box to copy the documents attached to the equipment configuration.
15 Select the **Custom Fields** check box to copy the custom fields added to the equipment configuration.

16 Select the **PM Schedules** check box to copy the PM schedules added to the equipment configuration.
17 Select the **Maintenance Patterns** check box to copy the maintenance patterns added to the equipment configuration.
18 Select the **Safety** check box to copy the safety data added to the equipment configuration.
19 Select the **Permits** check box to copy the permits added to the equipment configuration.
20 Select the **Meters** check box to copy the meters added to the equipment configuration.
21 Select the **Parts Associated** check box to copy the parts associated with the equipment configuration.
22 Select the **Warranties** check box to copy the warranties added to the equipment configuration.
23 Select the **Depreciation** check box to copy the depreciation data added to the equipment configuration.
24 Select the **Calibration** check box to copy the calibration data added to the equipment configuration.
25 Select the **Test Points** check box to copy the test points added to the equipment configuration.
26 Click **Save Record**. The system automatically populates **Created By**, **Date Created**, and **Updated By**.

Defining equipment details for equipment generation

Define details for the equipment on all levels in the structure. Details relate to equipment attributes such as department, cost code, and the person assigned to the equipment. You can assign different attributes to the children and the parent equipment.

To define equipment details for equipment generation:

1 Select **Equipment > Equipment Configuration > Equipment Generation**.
2 Select the record for which to define equipment details, and then click the **Details** tab.
3 Specify the **Equipment Location**, **Equipment Department**, **Equipment Cost Code**, and **Equipment Assigned To**.
4 Click **Submit**.
5 Click **Create/Refresh Preview** if the tab is empty.

Previewing equipment generations

Preview a list of equipment that will be created during the equipment generation session. After verifying the equipment data, click **Generate Equipment** to have the record added to the database.

To preview equipment generations:

1 Select **Equipment > Equipment Configuration > Equipment Generation**.
2 Select the record for which to preview for the equipment generation, and then click the **Preview** tab .
3 View the equipment data.
4 Click **Create/Refresh Preview** if the tab is empty.
5 Click **Generate Equipment**.

Tracking asset depreciation

Depreciation enables you to calculate equipment depreciation expense, which is the value of the wear and deterioration of a piece of equipment based on an accounting period and the useful life of the piece of equipment.

Note: The system does not roll up depreciation costs within an equipment hierarchy. Maintain individual depreciation records for all assets, positions, or systems for which you need to maintain depreciation data.

The system provides four depreciation methods for your equipment.

Create depreciation types based on the agency to which the depreciation data must be reported. For example, create depreciation types for generally accepted accounting practices (GAAP) and/or a local, federal, state, or international government agency.

Note: Depreciation types are linked to the DETP entity for which you must define your depreciation type codes. Contact your system administrator for more information.

For all depreciation methods and types, the system can calculate depreciation data based on months or fiscal years of the asset's organization. The system begins calculating the depreciation of a piece of equipment on its **Commission Date** and continues calculating the equipment's depreciation until the piece of equipment reaches its **Sold/Scrap Date** or its end of life date.

Note: The system calculates an asset's end of life date based on the following equation:

```
End of Life Date = Commission Date + (Est. Useful Life – 1 day)
```

Specify the **Commission Date** and **Sold/Scrap Date** on the Assets, Positions, or Systems form.

See these references:

- "Defining assets"
- "Defining positions"
- "Defining systems"

Specify the **Est. Useful Life**on the **Depreciation** page of the **Assets** form.

See "Entering depreciation data."

Base depreciation calculations on an estimated useful life of days, weeks, months, quarters, or years. Regardless of the unit of measure you select, the system calculates a daily depreciation expense upon which all depreciation and book value calculations are based. The system calculates the annual depreciation expense based on the depreciation method you select, and then calculates a daily depreciation expense.

See "Understanding depreciation methods and daily calculations."

Once the system calculates a piece of equipment's daily depreciation expense, it can calculate periodic depreciation expenses and book values.

See "Understanding periodic depreciation and book value calculations."

Understanding depreciation methods and daily calculations

Not all calendar years consist of 365 days because some are leap years that consist of 366 days. Therefore, a daily depreciation expense must be calculated upon which periodic depreciation expense and book values are calculated.

The annual depreciation rate is calculated based on the depreciation method you select, and then calculates the daily depreciation rate based on the following equation:

```
Daily Depreciation Rate = Annual Depreciation Rate / Number of Days in the
Year
```

Specify the depreciation method that the system should use to calculate the annual depreciation expense on the **Depreciation** page of the Assets, Positions, or Systems form.

See Entering depreciation data on page 442.

Four asset depreciation methods are provided: Straight Line, Sum of Years Digits, Double Declining Balance, and Units of Output.

Note: The ASDEPTYP installation parameter determines the default depreciation method for the system; however, you can also set the depreciation method on the organization or equipment level. Setting the depreciation method at the organization level supersedes the setting of the ASDEPTYP installation parameter. Setting the depreciation method at the equipment level supersedes the setting of ASDEPTYP and/or the depreciation method specified for the organization.

Calculating straight line depreciation

Straight Line depreciation, the most commonly used method, calculates depreciation based on the principle that an asset loses an equal amount of value each fiscal year.

The system calculates annual Straight Line depreciation expense based on the following equation:

```
(Original Value - Residual Value) / Estimated Useful Life = Annual Depreci
ation Expense
```

Calculating sum of years digits depreciation

Sum of Years Digits depreciation is an accelerated depreciation method, which assumes that assets incur greater depreciation during the early years of the asset's life.

To calculate the Sum of Years Digits depreciation, the system must first calculate the Sum of Years Digits and the remaining years of life.

The system calculates the Sum of Years Digits using the following equation:

```
Est. Useful Life in Years x [(Est. Useful Life in Years + 1) / 2] = Sum of
Years Digits
```

Using this equation, the Sum of Years Digits for an asset with an expected useful life of five years is calculated as follows:

```
5 years x [(5 years + 1) / 2] = 15 years
```

Note: Quickly determine the Sum of Years Digits value by adding together the numbers representing the years of an asset's useful life. For example, if an asset is expected to have a useful life of five years, the digits representing that useful life are 1, 2, 3, 4, and 5. To determine the Sum of Years Digits value, add the digits: 1 + 2 + 3 + 4 + 5 = 15.

The system determines an asset's remaining years of life based on its expected useful life. For example, for an asset whose expected useful life is five years, the remaining years of life is 5 for the first year, 4 for the second year, 3 for the third year, etc.

The system then calculates the Sum of Years Digits depreciation based on the following equation:

```
(Original Value - Residual Value) x Remaining Years of Life / Sum of Years
Digits = Annual Depreciation Expense
```

Calculating double declining balance depreciation

Double Declining Balance depreciation is the most accelerated method of depreciation. Using the Double Declining Balance method, an asset depreciates twice the rate of the Straight Line depreciation method rate each year.

To calculate the Double Declining Balance depreciation, the system must first calculate the annual Straight Line depreciation rate.

The system calculates the annualized Straight Line depreciation rate based on the following equation:

```
1 / Est. Useful Life in Years = Annual Straight Line Depreciation Rate
```

The system then calculates the Double Declining Balance depreciation expense based on the following equation:

```
Book value x (2 x Annual Straight Line Depreciation Rate) = Annual Depreci
ation Expense
```

Calculating units of output depreciation

The Units of Output method is also known as the productive output, units of production, or units of activity method. It calculates depreciation based on equipment output during a period of time, while considering the equipment’s estimated lifetime units of output. Companies commonly use the Units of Output method when usage varies dramatically from period to period.

Note: The Units of Output method cannot project depreciation over the remaining asset life. The Units of Output must be entered before the system can calculate period depreciation.

To calculate Units of Output depreciation, the system must calculate a depreciation cost per unit based on this equation:

```
(Original Value – Residual Value) / Estimated Lifetime Output = Depreciation
Expense per Unit
```

The system then calculates the units of output depreciation expense for a period based on this equation:

```
Depreciation Expense per Unit x Units of Output = Depreciation Expense
```

Understanding periodic depreciation and book value calculations

The system calculates depreciation expenses based on a depreciation period, a generic term that refers to an organization's fiscal years or calendar month. Select to view depreciation expenses based on the depreciation period you prefer.

See "Viewing Depreciation Details."

To calculate an asset's periodic depreciation expense and book value, the system must first calculate the daily depreciation expense of the asset.

See "Understanding Depreciation Methods and Daily Calculations."

The system must also calculate the number of days in the period before calculating an asset's periodic depreciation expense or book value.

Note: When calculating the number of days in a period, the system includes the first and final day in its tally. For example, the system counts the time between July 1, 2004 and July 2, 2004 as 2 days.

For most periods of an asset's life, the number of days in the period equals the number of days in the calendar month or fiscal year defined for your organization. For example, if you view depreciation expenses based on calendar month, the number of days in the period is 30 or 31. If you view depreciation expenses based on fiscal year and the fiscal year for your organization contains 365 days, the number of days in the period is 365.

The number of days falling in the first and last period of an asset's life, however, usually does not equal a full 365, 30, or 31 days. The system calculates the number of days in the first period based on the following equation:

- `Number of Days in First Period = Number of Days Between Commission Date and Period End Date`

The system calculates the number of days in the last period based on one of the following equations:

- `Number of Days in Last Period = Number of Days Between Period Start Date and Sold/Scrap Date`
- `Number of Days in Last Period = Number of Days Between Period Start Date and the Asset's End of Life Date`

Once the system calculates the number of days in each period, it can calculate the asset's depreciation expense and book values. See the sections below for examples.

Calculating periodic depreciation expense

The system calculates the periodic depreciation expense based on the following equation:

`Periodic Depreciation Expense = Daily Depreciation Rate x Number of Days in Period`

Note: If you view depreciation calculations based on fiscal years, the system may have to further divide each period into two segments to calculate the depreciation expense. If an asset's year of life, as defined by its **Commission Date**, and fiscal year do not coincide, the system must calculate two periodic depreciation expenses for each year of the asset's life. For example your asset's **Commission Date**is 5/1/02, therefore, its first year of life runs from 5/1/02 through 4/30/03. The fiscal year of the

asset runs from 11/1 through 10/31. Therefore, the system must calculate the asset's depreciation expense from 5/1/02 to 10/31/02 and then again from 11/1/02 to 4/30/03.

If you select Double Declining Balance as your **Depreciation Method**, the calculated periodic depreciation expense for the last period of an asset's life may cause the **Book Value** of the asset to be less than its **Residual Value**. In this case, the system adjusts the depreciation expense of the last period so the asset's **Book Value** equals its **Residual Value**.

Example:

See the following information to determine an asset's periodic depreciation expense for the years 2003, 2004, and 2005:

- The fiscal year of the asset's organization begins September 1 and ends August 31.
- The **Commission Date** for the asset is 02-JUL-2003.
- The **Sold/Scrap Date** of the asset is 02-SEP-2005.
- The daily depreciation expense of the asset is 17.60 USD.

To determine the depreciation expense for the year 2003, the system performs the following calculation:

```
2003 Depreciation Expense = Daily Depreciation Expense x Number of Days Be
tween Commission Date and Period End Date
```

```
2003 Depreciation Expense = 17.60 USD * 61
```

```
2003 Depreciation Expense = 1,073.60 USD
```

To determine the depreciation expense for the year 2004, the system performs the following calculation:

```
2004 Depreciation Expense = Daily Depreciation Expense x Number of Days in
Period
```

```
2004 Depreciation Expense = 17.60 USD * 366
```

```
2004 Depreciation Expense = 6,441.60 USD
```

Note: Because 2004 is a leap year and February 2004 occurs within the organization's 2004 fiscal year, the number of days in the period is 366.

To determine the depreciation expense for the year 2005, the system performs the following calculation:

```
2005 Depreciation Expense = Daily Depreciation Expense x Number of Days Be
tween Period Start Date and Sold/Scrap Date
```

```
2005 Depreciation Expense = 17.60 USD * 2
```

```
2005 Depreciation Expense = 35.20 USD
```

Calculating book values

The first time the system calculates the book value of an asset, it calculates based on the following equation:

```
Book Value = Original Value - Periodic Depreciation Expense
```

For all subsequent book value calculations of the asset, the system uses the following equation:

```
Book Value = Book Value from Previous Period - Periodic Depreciation Expense
```

Example

See the following information to determine an asset's book value at the end of the 2003, 2004, and 2005:

- The Original Value of the asset is 10,000 USD.
- The depreciation expense for 2003 is 1,073.60 USD. The depreciation expense for 2004 is 6,441.60 USD. The depreciation expense for 2005 is 35.20 USD as taken from the example in "Calculating Periodic Depreciation Expense" earlier in this chapter.

To determine the asset's book value at the end of 2003, the system performs the following calculation:

```
2003 Book Value = Original value - 2003 Periodic Depreciation Expense

Book Value = 10,000 USD - 1073.60 USD

Book Value = 8,926.40 USD
```

To determine the asset's book value at the end of 2004, the system performs the following calculation:

```
2004 Book Value = 2003 Book Value - 2004 Periodic Depreciation Expense

Book Value = 8,926.40 USD - 6,441.60 USD

Book Value = 2,484.80 USD
```

To determine the asset's book value at the end of 2005, the system performs the following calculation:

```
2005 Book Value = 2004 Book Value - 2005 Periodic Depreciation Expense

Book Value = 2,484.80 USD - 35.20 USD

Book Value = 2,449.60 USD
```

Entering depreciation data

Enter basic depreciation data for your equipment. The system calculates depreciation rates based on the information you enter.

See these references:

- "Understanding Depreciation Methods and Daily Calculations"
- "Understanding Periodic Depreciation and Book Value Calculations"

Create multiple depreciation schedules for a single piece of equipment as necessary. For example, you need to create report depreciation information to GAAP and a state agency for a chiller. GAAP requires that you use the Straight Line method, but the state agency requires that you use the Double Declining Balance method. Create one depreciation schedule for the chiller using the GAAP type and Straight Line method and a second depreciation schedule using the state agency type and the double declining balance method.

If you update **Starting Value**, **Rem. Useful Life**, the unit of measure, or **Residual Value**, the system automatically recalculates depreciation values.

Note: You can also manually recalculate depreciation values for all the equipment records in an organization for which you have defined depreciation data by clicking the **Recalculate Depreciation Details** on the **Fiscal Years** page of the **Organizations** form.

See the *System Administrator's Guide*.

To enter depreciation data:

1. Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2. Select the asset, position, or system for which to enter depreciation data, and then click the **Depreciation** tab.
3. Click **Add Depreciation Type**.
4. Specify this information:

   Depreciation Method
   Select the depreciation method for the depreciation schedule.

   Starting Value
   Specify the starting value of the asset.

   Rem. Useful Life
   Specify the remaining useful life of the asset, and then select the unit of measure of the remaining useful life in the adjacent field. If you select Days or Months or as the unit of measure, you must specify the remaining useful life as a positive integer. If you select Weeks, Months, Quarters, or Years, you can specify the remaining useful life as a decimal.
   Note: If you select Weeks, Months, Quarters, or Years as the unit of measure, the system must convert the remaining useful life into number of days in order to calculate depreciation expenses. The system is able to automatically convert months into the appropriate number of corresponding days without performing any calculations. If you select Weeks, Quarters, or Years, the system must convert the unit of measure into days or months in order to determine the corresponding number of days.

   See these terms for more information:

Option	Description
Weeks	The system must convert the remaining useful life into days. The system multiplies the number you specify by 7 to determine the equivalent number of days, and then rounds the result to the nearest positive integer. For example, .1 weeks multiplied by 7 equals .7 days, which the system rounds to 1 day.

Option	Description
Quarters	The system must convert the remaining useful life into months. The system multiplies the number you specify by 3 to determine the number of months, and then rounds to the nearest positive integer. For example, .4 quarters multiplied by 3 equals 1.2 months, which the system rounds to 2 months.
Years	The system must convert the remaining useful life into months. The system multiplies the number you specify by 12 to determine the number of months, and then rounds to the nearest positive integer. For example, .4 years multiplied by 12 equals 4.8 months, which the system rounds to 5 months.

Relative Start
Specify the relative start for the amount of time between the commission date and when the depreciation event occurs.

UOM Relative Start
Specify the unit of measure (UOM) for the relative start date.

For example, if **Relative Start** is set to 5 and the **UOM Relative Start** is set to years, then the depreciation event occurs five years after the commission date for the equipment.

Residual Value
Specify the estimated value of the asset at the end of its useful life.

Est. Lifetime Output
Specify the units of output you estimateT the equipment will produce over its lifetime if you selected Units of output as the Depreciation Method.

Depreciation Category
Select the depreciation category.

Depreciation Type
Select a depreciation type.
Note: Depreciation types are linked to the DETP entity for which you must define your depreciation type codes. Contact your system administrator for more information.

From Date
Specify the starting date to calculate deprecation.

Change Value
Specify an amount by which to change the **Starting Value** of the asset if the **Depreciation Category** is Increase Value or Decrease Value.

Change Life
Specify an amount by which to change the **Rem. Useful Life.** of the asset if the **Depreciation Category** is Increase Life or Decrease Life.

Change Estimated Lifetime Output
Specify an amount by which to change the **Est. Lifetime Output** of the asset if the **Depreciation Category** is Increase Estimated Lifetime Output or Decrease Estimated Lifetime Output.

Notes
Specify additional detail about the depreciation of the equipment.

5 Click **Submit**.

Viewing depreciation details

View depreciation details based on the fiscal year defined for your organization or for each month of the fiscal year defined for your organization.

See "Understanding Periodic Depreciation and Book Value Calculations."

If you update an asset's **Original Value**, **Est. Useful Life**, the unit of measure, **Residual Value**, or **Commission Date**, the system recalculates depreciation values.

Note: If you update an asset's values, the system displays the new depreciation calculations. You cannot access the asset's former depreciation calculations. Likewise, if you transfer an asset to a new organization, the system calculates depreciation based on the fiscal year of the asset's new organization. You cannot access the asset's former depreciation calculations.

To view depreciation details:

1 Select one of these options:
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

2 Select the asset, position, or system for which to view depreciation details, and then click the **Depreciation** tab.

3 Select the depreciation record for which to view depreciation details, and then click **View Depreciation Details**.

4 Select **Fiscal Years** or **Months** to view the depreciation details based on fiscal years or months. The system automatically populates **Depreciation (To Date)**, **Depreciation (Period To Date)**, and **Book Value (To Date)** based on the following equations:

	Straight Line, Sum of Years Digits, and Double Declining Balance	Units of Output
Depreciation (To Date)	Daily Depreciation Rate x Number of Days Between Commission Date and Current Date	Depreciation Per Unit * Units of Output in the period through n (where n= fiscal year prior to current fiscal year) + Depreciation for the Current Fiscal Year through Today's Date Depreciation Per Unit = (starting value - residual value) / estimated lifetime output. See "Calculating Units of Output Depreciation." **Note:** For the current fiscal year, depreciation uses the following equation: Average Number of Units Produced per Day * Number fiscal through today's date * Depreciation per Unit where: Average Number of Units per day = entered Units of Output total days in Fiscal Year Number of Fiscal Year days through Today's Date = Today's Date – Commission Date or Fiscal Year Start Date, whichever is greater + 1 Depreciation Per Unit = (Original Value – Residual Value) / Estimated Lifetime Value
Depreciation (Period To Date)	Daily Depreciation Rate x Number of Days Between First Day in the Current Period and the Current Date	See equation in Depreciation (To Date) above fore more information on calculating depreciation in current period.
Book Value (To Date)	Original Value – Depreciation (To Date)	Original Value – Depreciation (To Date)

5 Click **Close**.

Entering units of output

Enter units of output information for equipment if you are tracking its depreciation based on the Units of Output depreciation method.

To enter units of output:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2 Select the asset, position, or system for which to enter units of output, and then click the **Depreciation** tab.
3 Select the depreciation record for which to enter units of output, and then click **Units of Output**.
4 Click **Add Units of Output**.
5 Specify this information:

   Start Date
   Specify the fiscal year for which to enter units of output. The system automatically populates **End Date**.
   Note: If the fiscal year's **End Date** is later than today's date, the system calculates **Depreciate (To Date)**, **Depreciation (Period To Date)**, and **Book Value (To Date)** based on the entire length of the fiscal year.

   See "Viewing Depreciation Details."

   Units of Output
   Specify the number of units produced by the piece of equipment.

6 Click **Submit**.
7 Click **Close**.

Defining and managing change notices

Vendors use change notices to notify their customers of possible defects in their equipment or to recommend changes to previously documented maintenance plans. Change notices can be recorded in the system once they are issued from the vendor. Identify equipment affected by the change notices, reference change notices on work orders, and track transactions and events associated with change notices.

Defining change notices

Define change notices, setting up selection criteria for the assets to which to associate the change notice.

To define change notices:

1 Select **Equipment > Additional Features > Change Notices**.

2 Click **New Record**.

3 Specify this information:

Organization
Specify the organization to which the change notice belongs if you use multi-organization security.

Change Notice
Specify a unique number identifying the change notice, and then specify a description of the reason for the change notice in the adjacent field.

Status
Select the status for the change notice.
Note: You can only create change notices in an Unfinished status.

Class
Specify the class of the change notice. The system automatically populates **Class Org.**

Manufacturer
Specify the manufacturer of the assets affected by the change notice.

Start Date
End Date
Specify the dates during which the manufacturer repairs or replaces assets affected by the change notice. The system automatically populates **Close Date** when **Status**changes to Closed.

4 Select the **Filer Assets by Manufacturer** check box to include only equipment with the specified manufacturer on the list of equipment for the change notice.

5 Click **Save Record**.

Adding lines for change notices

Details on this form specify which assets to be included on a change notice. You can specify ranges for asset numbers, serial numbers, and part numbers.

To add lines for change notices:

1 Select **Equipment > Additional Features > Change Notices**.

2 Select the change notice for which to add a line, and then click the **Lines** tab.

3 Click **Add Line**.

4 Select one of these options:

Option	Description
From Asset To Asset	Specify the starting number and ending number for the range of assets to include.
From Serial Number To Serial Number	Specify the starting number and ending number for the range of serial numbers to include.

5 Specify this information:

Part
Specify the part number for the part affected by the change notice. The system automatically populates **Part Org.**

6 Click **Submit**.

Viewing assets for change notices

View a list of assets associated with a specific change notice.

To view assets for change notices:

1 Select **Equipment > Additional Features > Change Notices**.
2 Select the change notice for which to view assets, and then click the **Assets** tab.
3 View the asset information.

Defining locations for change notices

Change notice locations filter the types of equipment that can be added to change notices. If Location is populated, assets are restricted to valid locations.

To define locations for change notices:

1 Select **Equipment > Additional Features > Change Notices**.
2 Select the change notice for which to define locations, and then click the **Locations** tab.
3 Click **Add Location**.
4 Specify this information:

Location
Specify the location for which assets can be included. The system automatically populates the location description.

5 Click **Submit**.

Designing energy consumption for equipment

Design energy consumption information for equipment that are flagged as **GAS Tracked**. Record the equipment manufacturer's energy efficiency specifications to indicate the level of energy efficiency the equipment should maintain while operating when using specific energy commodities, such as electricity, gas, etc.

You can also link equipment with a utility bill source to tie the equipment to the utility billing information/rates for the utility bill source, such as a building in which the equipment is located.

Note: The link between the equipment and utility bill source established on the **Design Consumption** page is simply a link between the equipment related to energy consumption and is not a structural link as defined in an equipment hierarchy.

To design energy consumption for equipment:

1 Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**

2 Select the equipment for which to add design consumption, and then click the **Design Consumption** tab. The system automatically populates **Date Effective** with the current date and **Date Expired** with 12/31/2199. You can modify **Date Effective** as necessary.

3 Specify this information:

Utility Bill Source
Specify the utility bill source to associate with the equipment. The **Utility Bill Source** represents the billing structure established to calculate a daily rate for utility/energy consumption for invoice vouchers. .

See "Defining utility bills for invoice vouchers."

Note: If **Utility Bill Level** is not selected for the equipment, then a **Utility Bill Source** is required.

Commodity
Specify the commodity to associate with the equipment. The **Commodity UOM** is populated from the selected **Commodity**.

If a record is inserted and the **Date Effective** and **Date Expired** of the new record overlap with the **Date Effective** and **Date Expired** of another record with the same **Commodity**, the system updates the **Date Expired** of the new record with the oldest **Date Effective** to avoid having an overlap.

See "Understanding Effective and Expiration Date Calculations for Design Consumption."

Design Usage UOM
Specify the unit of measure to be used for the energy consumption design. The system populates **Design Consumption Rate UOM** in the format **Commodity UOM**/**Design Usage UOM**.

Default Load Factor
Specify the number to default for the maximum factor for the load ranges. This value is used as the default when specifying records on the Actual Consumption page. The system automatically populates **Range-1 Low**.

Range-1 High
Specify the maximum load range for range 1.

Range-1 Design Consumption Rat
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-2 Low
Specify the minimum load range for range 2.

Range-2 High
Specify the maximum load range for range 2.

Range-2 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-3 Low
Specify the minimum load range for range 3.

Range-3 High
Specify the maximum load range for range 3.

Range-3 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-4 Low
Specify the minimum load range for range 4.

Range-4 High
Specify the maximum load range for range 4.

Range-4 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-5 Low
Specify the minimum load range for range 5.

Range-5 High
Specify the maximum load range for range 5.

Range-5 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-6 Low
Specify the minimum load range for range 6.

Range-6 High
Specify the maximum load range for range 6.

Range-6 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-7 Low
Specify the minimum load range for range 7.

Range-7 High
Specify the maximum load range for range 7.

Range-7 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-8 Low
Specify the minimum load range for range 8.

Range-8 High
Specify the maximum load range for range 8.

Range-8 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-9 Low
Specify the minimum load range for range 9.

Range-9 High
Specify the maximum load range for range 9.

Range-9 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Range-10 Low
Specify the minimum load range for range 10.

Range-10 High
Specify the maximum load range for range 10.

Range-10 Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

Design Consumption Rate
Specify the energy consumption rate for the equipment. This indicates the amount of the commodity that is consumed in the **Design Usage UOM**. For example, an equipment can be designed to use 10KW of electricity per hour.

4 Click **Submit**.

Note: Click **Clear** to clear the design consumption details for the selected record.

Setting the GDRV installation parameter to FULL enables the system to purge and recalculate all energy efficiency data, including actual energy consumption records. However, if you are updating

a design consumption record, the system does not update data displayed on the **Actual Consumption** page of the Assets, Positions, or Systems forms.

See "Entering Actual Energy Consumption Information for Equipment."

Understanding effective and expiration date calculations for design consumption

When entering multiple design consumption records on the **Design Consumption** page of the Assets, Positions, or Systems forms, the **Commodity** specified for a record is tied to a **Date Effective** and **Date Expired** . This association establishes the valid date ranges for the energy efficiency specifications established for the **Commodity**. By necessity, these date ranges must be flexible in the ways in which they connect the equipment and the Commodities to which they are linked. Therefore, if you must specify multiple design consumption records on the **Design Consumption** page for same **Commodity**, the system must calculate the date ranges for **Date Effective** and **Date Expired** based on the existing record(s) and the **Date Effective** specified for an additional record when there is an overlap between the **Date Effective** of the existing record and the **Date Effective** of the additional record(s). Likewise, the same is true for the expiration dates of the existing and additional records. See the following example for more information.

Example 1

In this example, there are two existing design consumption records, and you are inserting a new record. At the time of insert, the date information for the design consumption records is as follows:

	Date Effective	Date Expired
Existing record one	01/01/2006	06/30/2006
Existing record two	07/01/2006	12/31/2199
Record to be inserted	01/01/2007	12/31/2199

Note: Date Expired is protected. The system defaults 12/31/2199 as the **Date Expired** for the record to be inserted.

The record to be inserted shares the same **Commodity** as the existing records, and the **Date Effective** of the record to be inserted overlaps with the **Date Effective** and **Date Expired** of the existing records. The system locates the existing record with the same **Commodity** based on the **Date Effective** and updates the **Date Expired** for the second existing record with a new **Date Effective** as follows:

	Date Effective	Date Expired
Existing record one	01/01/2006	06/30/2006
Existing record two	07/01/2006	12/31/2006
Record inserted	01/01/2007	12/31/2199

Example 2

In this example, there are two existing design consumption records, and you are inserting a new record. At the time of insert, the date information for the design consumption records is as follows:

	Date Effective	Date Expired
Existing record one	01/01/2006	12/31/2006
Existing record two	01/01/2007	12/31/2199
Record to be inserted	06/01/2006	12/31/2199

Note: Date Expired is protected. The system defaults 12/31/2199 as the **Date Expired** for the record to be inserted.

The record to be inserted shares the same **Commodity** as the existing records, and the **Date Effective** of the record to be inserted overlaps with the **Date Effective** of the existing records. The system locates the existing record with the same **Commodity** based on the **Date Effective** and updates the **Date Expired** of existing record one and the **Date Effective** of existing record two and the data inserted is as follows:

	Date Effective	Date Expired
Existing record one	01/01/2006	05/14/2006
Existing record two	01/01/2007	12/31/2199
Record inserted	06/01/2006	12/31/2006

Entering actual energy consumption information for equipment

Enter details related to the actual energy consumption levels for equipment that are flagged as **GAS Tracked**. The energy consumption information is recorded to track the actual energy usage levels maintained during a given time period while operating equipment using specific types of energy commodities, such as electricity, gas, etc.

To enter actual energy consumption information for equipment:

1 Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**

2 Select the equipment for which to add actual consumption, and then click the **Actual Consumption** tab. The system automatically populates **Reading Date** with the current date.

   Note: If you clear **Reading Date**, the system automatically clears **Actual Usage UOM** and **Actual Consumption UOM**.

3 Specify this information:

Commodity
Specify the commodity to associate with the actual consumption reading. The system populates the **Actual Consumption UOM** from the selected **Commodity** and the **Actual Usage UOM** from the **Design Usage UOM** on the **Design Consumption** page.

See "Designing Energy Consumption for Equipment."

Note: When the **Commodity** is updated for the actual consumption reading, the system automatically updates **Actual Consumption UOM**, **Actual Usage UOM**, and **Actual Consumption Rate UOM** by searching for a date range on the **Design Consumption** page.

Actual Consumption
Specify the actual energy consumed.
Note: If **Utility Bill Level** is not selected for the equipment on the **Record View** page, you must specify a value for **Actual Consumption**. If **Utility Bill Level**is selected, the system uses the actual consumption from the utility bill when generating the asset sustainability calculations.

Actual Usage
Specify the actual usage. This indicates the amount time that was used to consume the value specified for **Actual Consumption**. The system automatically calculates the **Actual Consumption Rate**.

Load Factor
Specify the load factor for this actual consumption record, overriding the default value defined on the **Design Consumption** page.

4 Click **Save Record**.

Understanding Energy Star

Infor is a partner of Energy Star, a joint program between the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) to monitor and improve energy efficiency efforts.

Infor EAM works with the customer by sending the customer's energy consumption data to Energy Star's Portfolio Manager system (PM) via web services of the Automated Benchmarking System (ABS). The customer receives Energy Star ratings in return from PM thru the ABS.

Infor EAM helps commercial businesses monitor energy efficiency ratings through four of eight total web services through which data is exchanged with the EPA:

1 Get Pending Authorizations

Infor EAM receives ID information on the customer's facilities and meters.

2 Confirm Pending Authorizations

Complete mapping of the customer's Infor EAM IDs to facilities and meter IDs in PM.

3 Manage Meter Information

Send energy consumption data from Infor EAM to PM.

4 Rating Exchange Service

Retrieve Energy Star Ratings for historical 12 month periods.

Setting up Energy Star

Map Portfolio Manager facilities and meters with Infor EAM facilities and meters to collect and transmit the correct energy consumption data to Portfolio Manager thru the Automated Benchmarking System (ABS). ABS will send all facility and/or meter data previously defined in PM to Infor EAM.

Next, select the Infor EAM Equipment ID or Infor EAM Meter ID for each facility or meter within that facility. Once the system matches some or all of the facilities/meters to their PM counterparts, click Confirm Pending Authorizations to initiate the web service message thru ABS to PM.

To set up Energy Star:

1. Select **Equipment > Additional Features > Energy Star > Energy Star Setup**.
2. Click **Get Pending Authorizations**.
3. Specify the **Energy Start Customer Account ID**.

   Note: The **Energy Star Customer Account ID** is the same as the Portfolio Manager username used to log in to Portfolio Manager.
4. Click **Retrieve Customer Account ID**, and then specify the **User ID** and **Password** to retrieve the Customer Account ID.
5. Click **Submit**.

   The system closes the popup, sends a Get Pending Authorization message to ABS by web service, and receives a response from ABS by web service.

   The system displays the **Energy Star Setup** page.

   The system automatically populates **Energy Star Customer Account ID**, **Energy Star Building ID**, **Energy Star Building Name**, **Energy Star Building Address**, **Energy Star Building City**, **Energy Star Building State**, **Energy Star Building Zip Code**, **Energy Star Building Year Built**, **Energy Star Meter ID**, **Energy Star Meter Name**, **Confirmed**, and **Energy Star Energy Type**.
6. Specify the **EAM Building ID** and **EAM Meter ID**.

   Note: You must indicate that this facility is Utility Bill Level in the Facility Details section of the asset record.
7. Click **Submit**. The system matches the records.
8. Click **Confirm Pending Authorizations**. The system opens the Customer Lookup popup.
9. Specify the **Energy Start Customer Account ID**.
10. Click **Submit**.

Viewing Energy Star ratings

The Energy Star Portfolio Manager system hosts the EPA national energy performance rating system. PM stores customer information on buildings, space utilization, and energy meters. Infor EAM utilizes web services to provide PM with energy consumption data thru the ABS. PM calculates an Energy Star Rating or value from 1-100, viewable on the Energy Star Ratings tab on the Equipment screen. The higher the value, the more efficient and less pollutant a facility is.

On this form, view Energy Star ratings and associated information on energy consumption and greenhouse gas emissions.

Note: Energy Star's service level commitment states that the response may take up to 24 hours for asynchronous messages to be viewable; however, the response time from Energy Star may be considerably less.

To view Energy Star ratings:

1 Select **Equipment > Assets**.
2 Click the **Energy Star Ratings** tab.
3 Click **Get Energy Star Ratings**.
4 Specify the **Start Date** and **End Date**.
5 Click **Submit**.

Viewing Energy Star messages

View and purge asynchronous messages sent to the Energy Star Portfolio Manager (PM) thru the Automated Benchmarking System (ABS). View messages acknowledged by ABS with a transaction ID.

To view Energy Star messages:

1 Select **Equipment > Additional Features > Energy Star > Energy Star Message Viewer**.
2 Select the transaction for which to view messages, and then choose one of the options:

Option	Description
To view messages	Click **View Message**. The system displays the information.
To purge message records	Click **Purge Messages**. Select the time period from which to purge messages, and then click **Submit**.

Printing the Energy Star ratings chart report

Print the energy star ratings chart report.

To print the energy star ratings chart report:

1 Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2 Click the **Energy Star Ratings Chart** tab.
3 Specify the **Start Date** and **End Date**.
4 Click **Submit**.
5 Click **Print**.

Understanding equipment rankings

Create equipment rankings for equipment to determine the criticality or risk a piece of equipment poses to your operation. If the machine fails, could it have safety or environmental implications, or will it result in production shutdown? Equipment rankings will help formalize the process to determine this risk based on your answers to the ranking questions you have configured.

Equipment rankings allow users to assign a Ranking Index and Ranking Score to assess equipment risk. Users must first define criteria by which to assess the risk.

Use the Decision Tree and develop the formula to calculate the Ranking Score, and use the assigned score ranges to determine which Ranking Index should be applied.

To utilize the equipment ranking functionality, perform these tasks:

1. Create an equipment ranking record.
2. Add levels to the decision tree structure.
3. Add answers to the decision tree.
4. Add formulas to the decision tree.
5. Add normalization values to the decision tree.
6. Order questions for the decision tree.
7. Assign ranking scores to ranking index values.
8. Associate equipment to an equipmentt ranking.
9. Answer the ranking survey.
10. Calculate ranking values.

Creating equipment rankings

To create an equipment ranking:

1. Select **Equipment > Setup > Equipment Ranking**.
2. Click **New Record**.
3. Specify this information:

   Equipment Ranking
   Specify a unique code identifying the equipment ranking, and then specify a description of the equipment ranking in the adjacent field.

   Class
   Specify the class of the equipment ranking. The system automatically populates **Class Org.**.

   Out of Service
   Select to exclude the equipment ranking in the lookup on the Equipment page record.

   Type
   Select the type of equipment ranking.

4. Click **Save Record**. The system automatically populates **Created By** and **Date Created**.

Creating survey setup for equipment rankings

Create, view, or modify the survey setup for a equipment ranking to calculate an equipment ranking score.The setup consists of survey questions and answers that are part of a decision tree. This tree is comprised of four levels which include the top equipment ranking level and up to three sub-levels, answers, formulas, and normalization values.

Note: All levels must be used. Different branches in the survey may use varying numbers of levels.

To create a survey setup for equipment rankings:

1. Select **Equipment > Setup > Equipment Ranking**.
2. Select the equipment ranking for which to create a survey setup, and then click the **Survey Setup** tab.

Adding levels

Add levels to the survey setup to create a structure for calculating equipment rankings.

A level can be a node in the survey where a formula is executed or it can be a question. A question always means the lowest level in the survey has been reached. If the level is a question, one or more answers must be supplied for the question level. Levels that are not questions may have child levels.

To add levels:

1. On the **Survey Setup** tab, expand the tree, select the level for which to add to, and then click **Add Level**.
2. Specify this information:

   Level
   Specify the unique code identifying the level, and then specify a description in the adjacent field.

   Question Level
   Select to indicate the level is a question with which an answer will be associated.

   Question
   Specify the question the system will ask if this level is a question level.

3. Click **Submit**.

   Note: To translate the selected level description and question, select the level, and then click **Translations** or **Question Translations**. The system opens the Translations popup. Select the language record, specify the **Translated Description**, and then select **Translated**.

Adding answers

Add answers to a selected question level in the survey to create a structure for calculating equipment rankings.

To add answers:

1. On the **Survey Setup** tab, select a question level, and then click **Add/Edit Answers**.
2. Click **Add Answer**.
3. Specify this information:

Answer
Specify a unique code identifying the answer, and then specify the answer in the adjacent field.
Note: Specify as many answers as necessary for a selected **Question Level**.

Value
Specify the value for the answer.
Note: The system will use this value in the formula to determine the Equipment Ranking Score.

4 Click **Submit**.

Note: To translate the selected answer description, select the answer, and then click **Translations**. Select the language record, specify the **Translated Description**, and then select **Translated**.

Adding formulas

Add, edit, or delete a formula for a selected non-Question level.

Note: The system does not allow formula associations to question levels.

To add formulas:

1 On the **Survey Setup** tab, select a non-question level for which to add a formula, and then click **Add/Edit Formula**. The system automatically populates **Level** and the level description of all the children.
2 Specify this information:

Formula
Specify the formula. Use the child levels in the formula by adding a colon ":" in front of the level code. The formula also supports any SQL numeric functions.

Example: Where the score for the level is determined by the average of the environmental level and 2 times the safety level:

```
(:ENVIRONMENT + 2* :SAFETY) / 2
```

3 Click **Submit**.

Adding normalization values

Add, edit, or delete normalization values for a selected level.

You can normalize a level if the outcome for that level fluctuates between a certain range of values. However this is not the range you want to pass along to the higher level in the tree. Identify the outcome range and the normalized outcome range you want to use moving forward.

Note: A question level cannot be normalized.

To add normalization values:

1 On the **Survey Setup** tab, select a non-Question level, and then click **Normalize Level**.
2 Click **Add Value**.
3 Specify this information:

Minimum Value
Specify the minimum value for the range.

Maximum Value
Specify the maximum value for the range.

Normalized Value
Specify the normalized value for the range.

4 Click **Submit**.

Ordering questions

Update the sequential order of questions for equipment rankings.

To order questions:

1 On the **Survey Setup** tab, click **Order Questions**. The system automatically populates **Question**, **Description**, and **Level**.
2 Specify this information:

Sequence Number
Specify the number for each **Question** to define the sequential order in which the questions should appear on the equipment ranking survey.

3 Click **Submit**.

Assigning a ranking index

Assign a ranking index to a range of values. The system uses the assigned value when a ranking score has been calculated for equipment using the decision tree formulas.

To assign a ranking index:

1 Select **Equipment > Setup > Equipment Ranking**.
2 Select the ranking for which to assign a ranking index, and then click the **Ranks** tab.
3 Click **Add Rank**.
4 Specify this information:

Minimum Value
Specify a minimum score for the selected index for the ranking score.

Maximum Value
Specify a maximum score for selected index for the ranking score.

Ranking Index
Specify the ranking index. The system automatically populates the ranking index description.
Note: Ranking Index is created on the System Codes screen. Codes for Entity equals OBRI.

5 Click **Submit**.

Viewing equipment associated to equipment rankings

View the list of equipment associated to selected equipment rankings.

To view equipment for equipment rankings:

1. Select **Equipment > Setup > Equipment Rankings**.
2. Select the equipment ranking for which to view associated equipment, and then click the **Equipment** tab.
3. View the equipment.

Completing the ranking survey

Answer the questions on the survey for selected equipment to calculate the Equipment Ranking Score and the Equipment Ranking Index.

The system calculates the Equipment Ranking Score using the formula of the equipment ranking levels and the answers specified on the ranking survey. If a range has been defined for normalization, the system normalizes the output for the ranking formula during the formula calculation roll-up process.

To complete the survey:

1. Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2. Select the asset for which to complete the survey, and then click the **Ranking Survey** tab. The system automatically populates **Question** and **Value**.

   Note: Questions are based on the selected equipment ranking associated to the selected asset
3. Select the **Question**, and then specify the **Answer**.
4. Click **Calculate Ranking Values** when the survey is complete.

   The system calculates and automatically populates **Equipment Ranking Score** and associated **Equipment Ranking Index** for the selected asset.

   The system also automatically populates **Ranking Values Out of Sync**, **Ranking Values Last Calculated**,**Ranking Survey Last Updated**, and **Ranking Setup Last Updated** for the selected asset.

Updating equipment ranking values in a batch

Save selection information to calculate and assign Ranking Score and Ranking Index values to an equipment class, category, or to selected equipment.

Once a new batch record is created for the equipment class, category, or selected equipment and ranking values are calculated, the system applies the ranking values to all records in the selected equipment class, category, or type.

To update rankings values in a batch:

1 Select **Equipment > Process > Batch Update Equipment Ranking Values**.
2 Click **New Record**.
3 Specify a description for the ranking batch update record.
4 Specify the **Organization**, **Equipment Class**, **Equipment Category**, **Equipment**, and **Equipment Ranking**.
5 Select the **Include Children** check box to include the child equipment of the selected equipment in the ranking values.
6 Click **Save Record**. The system automatically assigns a **Record ID**.

Completing the ranking survey in a batch

Answer all questions related to the equipment ranking survey for the selected equipment ranking and equipment. Once all questions are answered, the system calculates the Ranking Score and associated Ranking Index.

To complete the equipment ranking survey in a batch:

1 Select **Equipment > Process > Batch Update Equipment Ranking Values**.
2 Select a ranking batch update record, and then click the **Ranking Survey** tab. The system automatically populates **Sequence Number**, **Question**, **Level**, the level description, and **Value**.
3 Specify this information:

   Answer
   Select the answer to the question.

4 Click **Submit**.

   Note: To calculate the equipment ranking value after the survey is complete, click **Calculate Ranking Values**. The system calculates the values and automatically populates **Ranking Index**, **Ranking Score**, **Ranking Values Out of Sync**, **Ranking Values Last Calculated**, **Ranking Survey Last Updated**, **Ranking Setup Last Updated**, **Date Created**, and **Created By** on the **Record View**.

Copying equipment ranking values to equipment in a batch

Apply equipment ranking values to selected equipment.

To apply equipment ranking values to selected equipment in a batch:

1 Select **Equipment > Process > Batch Update Equipment Ranking Values**.
2 Select the equipment ranking batch update record for which to copy equipment ranking values, and then click the **Equipment** tab.
3 Select the equipment records for which to apply equipment ranking values.
4 Click **Apply Equipment Ranking Values to Selected Equipment**.

   The system updates the Equipment list and automatically populates **Ranking Index**, **Ranking Score**, **Ranking Values Out of Sync**, **Ranking Values Last Calculated**, **Survey Last Updated**, and **Ranking Setup Last Updated**.

5 Click **Detach Ranking from Selected Equipment** to detach the ranking from the selected equipment.
6 Click **Set as Default for Selected Equipment** to set the equipment ranking as the default for the selected equipment.

   Note: Only one equipment ranking of type Facility Condition Index type and one equipment ranking of type Condition Index can be applied to a piece of equipment.

Copying equipment rankings

Copy equipment rankings to quickly create a new equipment ranking by copying information from an existing equipment ranking to a new equipment ranking.

To copy equipment rankings:

1 Select **Equipment > Setup > Equipment Rankings**.
2 Select a equipment ranking record for which to copy equipment rankings, and then click the **Record View** tab.
3 Right-click anywhere on the **Equipment Rankings** form, and then select **Copy Equipment Ranking**.
4 Specify this information:

   New Equipment Ranking
   Specify a unique code identifying the new equipment ranking, and then specify a description of the equipment ranking in the adjacent field.

5 Select which related details to copy to the new equipment ranking. These include:
   - **Custom Field Values**
   - **Comments**
   - **Decision Tree**
   - **Documents**
   - **Ranks**
6 Click **Submit**.

Printing the reliability calculations reports

Print the reliability calculations chart, hazard chart, probability density chart, or unreliability chart.

To print the reliability calculations reports:

1 Select one of these options:.
   - **Equipment > Assets**
   - **Equipment > Positions**
2 Click the **Reliability Calculations** tab.
3 Specify this information:

   Type
   Specify the type of chart to generate for the report. Specify H for Hazard Chart, P for Probability Density Chart, R for Reliability Chart, or U for Unreliability Chart.

4 Specify the **Problem Code**, **Failure Code**, **Cause Code**, **Action Code**, **Sequence Number**, **Start Day**, and **Scale Multiplier**.
5 Click **Submit**.
6 Click **Print**.

Creating rooms

Create rooms that are accessible in Infor EAM and Infor HMS when the two products are integrated.

Note: If the rooms were created in Infor EAM you may edit the rooms on this form. However if the rooms were created in Infor HMS you cannot edit the rooms on this form. To edit the rooms access the room records on the Rooms form in Infor HMS.

To create rooms:

1 Select **Equipment > Rooms**.
2 Click **New Record**.
3 Specify the **Room Type**, **Unit Type**, **Maximum Guest Count**, **Phone Number**, **Key Number**, **Square Footage**, **Number of Beds**, **Number of Baths**, and **Facility** for the room.
4 Specify this information:

Property
Specify the property to which the room belongs.

Room
Specify a room number to identify the room, and then specify a description of the room in the adjacent field. The system automatically populates **Building**, **Wing**, **Floor**, and **Exposure**.
Note: Location information (**Building**, **Wing**, **Floor**, and **Exposure**) is only available when Infor EAM is integrated with Infor HMS. It is not possible to track this information in a stand-alone Infor EAM environment.

Status
Select the status of the room.

Option	Description
In Service	Assigned when a room is in place and operating within the business organization.
Withdrawn	Assigned when a room is no longer available for use. The system automatically populates **Withdrawal Date**.

Commission Date
Select the room's installation date, or date the room will be counted in inventory.

Assigned To
Specify the person responsible for the room, which is typically housekeeping or building maintenance personnel.

Kitchen
Select the type of kitchen the room includes. Your options are Central, None, Shared, or Private.

Living Room
Select the type of living room the room includes. Your options are Central, None, Shared, or Private.

Out of Service
Select this check box to prevent the room from being displayed in lookups.

Accessible
Select this check box if the room is accessible to persons with disabilities.

Non-Smoking
Select this check box if the room is designated as a non-smoking room.

Reservation Calendar Owner
Specify the reservation calendar owner who can edit equipment reservations.

Cost Roll-up
Select this check box if the costs should roll up to the facility.

Open Bay
Select this check box if this room is designated as an open bay.

5 Specify the **Name**, **VIP Status**, **Email Address**, and **Guest Phone Number** for the guest.

Note: Guest information such as **Name**, **VIP Status**, **Email Address**, and **Guest Phone Number** is only editable from Infor HMS when operating in an integrated environment with Infor EAM. This guest information cannot be manually specified when operating in standalone Infor EAM.

6 Click **Save Record**.

Creating facilities

Create facilities to identify and maintain buildings, floors, elevators, HVAC units, etc. for associated properties.

To create facilities:

1 Select **Equipment > Facilities**.
2 Click **New Record**.
3 Specify this information:

Property
Specify the property to which the facility belongs.

Facility
Specify a unique code identifying the facility, and then specify a description of the facility in the adjacent field.

Facility Parent
Specify the parent facility.

Type
Select the facility type.

Status
Select the status of the facility. For example, select In Service to designate the facility as available for use. The system automatically populates **Withdrawal Date** when **Status** is Withdrawn.

Year Built
Specify the year the facility was built or purchased.

Commission Date
Specify the date the facility was commissioned.

Assigned To
Specify the person responsible for maintaining the facility, typically the maintenance personnel.

Out of Service
Select to exclude the facility from lookups.

FCI Calculation
Select to calculate the **Facility Condition Index (FCI)** for the facility.

Service Life (years)
Specify the service life of the facility.

Facility Condition Index (FCI)
Specify the resultant FCI based on the maintenance details of the facility. `Cost of Needed Repairs/Current Replacement Value=FCI`

Cost of Needed Repairs
Specify the cost of necessary repairs. The system automatically populates the currency and selects **Eligible for Energy Star Label**.

Replacement Value
Specify the current replacement value for the equipment. The system automatically populates the currency.

Reservation Calendar Owner
Specify the reservation calendar owner who can edit equipment reservations.

Cost Roll-up
Select if costs should roll up to the parent facility.

Track Utility Bills
Select to mark the facility as having capabilities to record utility bills.

Track GAS
Select to set the facility as GAS (Global Asset Sustainability) Tracked.

Manufacturer
Specify the facility's manufacturer.

Serial Number
Specify the facility's serial number.

Model
Specify the facility's model number.

Lock Reliability Ranking Values
Select to lock the reliability ranking values for the facility on the Reliability Survey tab of the Equipment screen.
Note: If **Lock Reliability Ranking Values** is selected, the system will not allow the user to modify the reliability survey answers and calculate reliability ranking values for the facility. The system also prevents the selection of facility for update on the Batch Update Reliability Ranking Values form.

Reliability Ranking
Specify the reliability ranking code for the facility.

The system automatically populates **Reliability Ranking Index**, **Reliability Ranking Score**, **Reliability Ranking Values Out of Sync**, **Reliability Ranking Values Last Calculated**, **Reliability Survey Last Updated**, and **Reliability Ranking Setup Last Updated**, after answering the reliability survey.

4 Click **Save Record**.

Creating vehicles

Create and maintain vehicles for hospitality properties.

To create vehicles:

1 Select **Equipment > Vehicles**.
2 Click **New Record**.
3 Specify the **Vehicle**, **Property**, **Status**, **Vehicle Value**, **Facility**,**Commission Date**, **Driver**, and **Driver Phone Number**.
4 Specify this information:

Assigned To
Specify the person responsible for the vehicle, typically the maintenance personnel.

Documoto Book ID
Specify a specific Documoto Book with which to associate the vehicle.

Accessible
Select this check box if the vehicle is handicap accessible.

Non-Smoking
Select this check box if the vehicle is a non-smoking vehicle.

Out of Service
Select this check box to prevent the vehicle from displaying in lookups.

Reservation Calendar Owner
Specify the reservation calendar owner who can edit equipment reservations.

Cost Roll-up
Select this check box if costs should roll up to the vehicle's associated facility.

5 Specify the **Manufacturer**, **Serial Number**, and **Model** of the vehicle.
6 Click **Save Record**.

Defining policies

Define your organization's corporate initiatives as policies. For example, a policy can be a corporate initiative to improve energy performance.

To define policies:

1 Select **Equipment > Additional Features > Asset Management Policy > Policies**.
2 Click **New Record**.
3 Specify this information:

Policy
Specify a unique code identifying the policy, and then specify a description of the policy in the adjacent field.

Policy Statement
Specify a policy statement that explains how your organization plans to achieve the goal. The policy statement cannot contain more than 4,000 characters.

Approved By
Specify the name of the person responsible for approving the policy.

Date Approved
Specify the date the policy was approved.

Out of Service
Select if the policy is currently not being used. If you select **Out of Service**, the policy will not display in the lookups for policies on other forms.

4 Click **Save Record**.

Viewing strategies for policies

View a list of strategies associated with a policy.

To view strategies for policies:

1 Select **Equipment > Additional Features > Asset Management Policy > Policies**.
2 Select the policy for which to view strategies, and then click the **Strategies** tab.
3 View the strategies.

Defining strategies

Strategic initiatives help organizations meet long-term goals. For example, a strategic initiative can be your organization's corporate commitment to reducing electrical consumption. Define your organization's strategic initiatives as strategies.

To define strategies:

1. Select **Equipment > Additional Features > Asset Management Policy > Strategies**.
2. Click **New Record**.
3. Specify this information:

   Strategy
   Specify a unique code identifying the strategy, and then specify a description of the strategy in the adjacent field.

   Policy
   Specify the policy to associate with the strategy. A policy can be associated with multiple strategies. The system automatically populates the policy description.

   Strategy Statement
   Specify a strategy statement that explains how your organization plans to achieve the goal. The strategy statement cannot contain more than 4,000 characters.

   Approved By
   Specify the name of the person responsible for approving the strategy.

   Date Approved
   Specify the date the strategy was approved.

4. Select the **Out of Service** check box if the strategy is currently not being used. If you select **Out of Service**, the strategy will not display in the lookups for strategies on other forms.
5. Click **Save Record**.

Viewing objectives for strategies

View a list of objectives associated with a strategy.

To view objectives for strategies:

1. Select **Equipment > Additional Features > Asset Management Policy > Strategies**.
2. Select the strategy for which to view objectives, and then click the **Objectives** tab.
3. View the objectives.

Defining objectives

Define your organization's tactical initiatives as objectives. Tactical initiatives are short-term goals that help an organization achieve its strategic, long-term goals. The expected results and when the results

are expected will be specifically stated. For example, an objective can be a tactical initiative to reduce electrical consumption at a facility by a specific amount and by a particular date.

To define objectives:

1. Select **Equipment > Additional Features > Asset Management Policy > Objectives**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the objectives belongs.

   Objective
   Specify a unique code identifying the objective, and then specify a description of the objective in the adjacent field.

   Strategy
   Specify the strategy to associate with the objective. A strategy may be associated with multiple objectives. The system populates the strategy description.

   Objective Statement
   Specify an objective statement that explains how your organization plans to achieve the goal. The objective statement cannot contain more than 4,000 characters.

   Currency
   Specify the currency for the objective.

   Approved By
   Specify the name of the person responsible for approving the objective.

   Date Approved
   Specify the date the objective was approved.

   Out of Service
   Select if the objective is currently not being used. If you select **Out of Service**, the objective will not appear in the lookups for objectives on other forms.

   Target Type
   Select the target type for the objective. You can select target types for these target types: asset performance, energy, and waste.

   Target Subtype
   Select the target subtype.

   Reliability Calculations
   Select the reliability calculations. If the target subtype is reliability, you can select the reliability calculations.

   Parameters
   Select the parameters. You can select parameters for these reliability calculations: Crow-AMSAA Individual Events, Crow-AMSAA Cumulative Events, Weibull Individual Events, and Weibull Cumulative Events.

Conversion Type
Select one of the conversion type options:

Option	Description
EPA 2007	Select if the objective was designed to help reduce factors that contribute to environmental damage as a result of the EPA 2007 plan.
Defra 2009	Select if the objective was designed to help reduce factors that contribute to environmental damage as a result of the Defra 2009 plan.

UOM
Specify the unit of measure for the objective.

Category Options
Select the category option.

Baseline Date Range From Date/To Date
Specify the beginning and ending dates with which to compare the final results to determine if an improvement was made.

Kickoff Date
Specify the date the objective begins.

Goal Date
Specify the date the objective ends.

Baseline Amount
Specify the baseline amount before the objective is implemented.

Change Amount
Specify the expected change in the amount after the objective is completed. The system calculates **Days**, **Target Amount**, and **Target Change %**.

4 Click **Save Record**.

Defining energy targets for objectives

Define energy targets used to support selected objectives.

To define energy targets for objectives:

1 Select **Equipment > Additional Features > Asset Management Policy > Objectives**.
2 Select the objective for which to define an energy target, and then click the **Energy Targets** tab.
3 Click **Add Energy Target**.
4 Specify the **Scope**, **Activity**, and **Emission Source** for the energy target.
5 Click **Submit**.

Viewing capital planning requests for objectives

View a list of capital planning requests that are associated with a specific objective. For each objective, the system displays the capital planning request which includes the financial aspects of the project.

To view capital planning requests for objectives:

1. Select **Equipment > Additional Features > Asset Management Policy > Objectives**.
2. Select the objective for which to view capital planning requests, and then click the **CPRs (Plans)** tab.
3. View the capital planning requests.

Defining parameters for asset inventory

Perform asset audits to compare the physical location of the asset in the system with the actual physical location of the asset. Define the parameters for the asset inventory on the **Parameters** tab, and then perform the asset inventory manually or using a handheld device.

To define parameters for asset inventory:

1. Select **Equipment > Asset Inventory > Asset Inventory**.
2. Click the **Parameters** tab.
3. Select the **Parameter List**, and then specify the **Asset Organization**, **Department**, **Asset Class**, **Asset Status**, **Inventory Verification Date**, **Parent Store**, and **Standard WO**.

   The **Session ID** will be created after you click **Create/Update Session**. Specify a description of the session in the adjacent field.
4. Specify this information:

   Assigned To
   Specify to whom the asset counting is assigned.

   Physical Location Parent
   Specify the physical location parent for the asset. The system automatically populates **Physical Location Parent Org.**

   Physical Location Type
   Select the physical location type for the asset.
5. Optionally, specify the **Asset Organization**, **Department**, **Asset Class**, **Asset Status**, and **Inventory Verification Date**.

   Note: The system will exclude all asset records with an **Inventory Verification Date** later than the date specified on the **Parameters** tab.
6. Select the **Blind Inventory** check box if the **Inventory Results** tab should not be synced to the mobile device.
7. Select the **Allow Move WO(s)** check box to give the iPad user permission to create **Move WO(s)**.
8. Select the **Allow Physical Location Updates** to give the iPad user permission to make structural changes.

9 Click **Create/Update Session**. The system displays the results on the **Inventory Results** tab for the selected Physical Location Parent and asset children with a status of "I" if a specific status is not specified.

   Note: When **Create/Update Session** is clicked, the system saves and protects all fields except **Standard WO**.

Viewing inventory results for assets

View a list of assets generated based on data specified on the **Parameters** tab.

To view inventory results for assets:

1 Select **Equipment > Asset Inventory > Asset Inventory**.
2 Click the **Inventory Results** tab. The system displays the asset records generated based on the settings on the **Parameters** tab or the **Session ID**.
3 View the asset records.

Marking assets as not found

Assets can be marked as not found if **Observed Physical Location**, **Observed Bin Location**, and **Resolution** are blank.

To mark assets as not found:

1 Select **Equipment > Asset Inventory**.
2 Click the **Inventory Results** tab.
3 Select the assets to mark as not found, and then click **Mark as Not Found**.

Adding assets to list

Add assets that were not a part of the asset inventory session.

To add assets to list:

1 Select **Equipment > Asset Inventory**.
2 Click the **Inventory Results** tab.
3 Click **Add Asset to List**.
4 Specify this information:

   Asset
   Specify the asset to add to the list. The system automatically populates **Description** and **Asset Org.** Assets with a status of installed, also known as "I", and to which you have organization rights and department security rights will be shown.

5 Click **Submit**.

Updating observed physical location of assets

Update the observed physical location of an asset when it is determined that the system indicates that the asset is in a different location. The observed physical location can only be updated if the Asset Inventory Status is Unfinished.

To update the observed physical location of assets:

1. Select **Equipment > Asset Inventory**.
2. Click the **Inventory Results** tab.
3. Select the asset record for which to update the observed physical location, and then click **Update System with Observed Physical/Bin Location**.
4. Specify the **Observed Physical Location**, **Observed Physical Location Org.**, **Observed Bin Location**, and **Inventory Verification Date**.
5. Click **Save**.

Creating work orders for assets

Create work orders for assets that need to be moved to a new location.

To create work orders for assets:

1. Select **Equipment > Asset Inventory**.
2. Click the **Inventory Results** tab.
3. Select the asset record for which to create a work order, and then click **Create Move WO(s)**. If the **Observed Physical Location** is not equal to the **System Physical Location**, the system updates the **Resolution** to Move WO Created <WO Number>.

   Note: When creating work orders for assets, specify **Inventory Verification Date**. Otherwise, they system automatically updates **Inventory Verification Date** to the current system date.

Approving sessions for asset inventory

Approve an existing asset inventory session.

To approve sessions for asset inventory:

1. Select **Equipment > Asset Inventory > Asset Inventory**.
2. Select the **Session ID** to approve.
3. Click the **Inventory Results** tab.
4. Click **Approve Session**.

Canceling sessions for asset inventory

Cancel an existing asset inventory session if the **Session ID** is populated and **Status** is Unfinished.

To cancel sessions for asset inventory:

1 Select **Equipment > Asset Inventory > Asset Inventory**.
2 Specify this information:

   Session ID
   Select the session to cancel.

3 Click **Cancel Session**.

Adding safety data to equipment

Add safety data to equipment to inform your employees of any hazardous situation that can cause bodily harm and of the precautions to take to protect themselves from these hazards. For example, you can add a precaution to turn equipment off and remove the power cord from the power outlet before performing repairs on electrical equipment. After adding the safety data, review and verify the record by clicking the **Reviewed By** icon. The review fields will be automatically populated after you review the record.

To add safety data to equipment:

1 Select one of these options: .
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
   - **Equipment > Setup > Categories**
   - **Equipment > Equipment Configuration > Equipment Configurations**
2 Select the equipment for which to add safety data, and then click the **Safety** tab.
3 Specify this information:

   Hazard
   Specify the hazard to add to the equipment. The system automatically populates **Hazard Org.**, **Hazard Type**, and the hazard description.

   Precaution
   Specify the safety measure to protect your employees from the hazard. The system automatically populates **Precaution Org.** and the precaution description.

   Timing
   Select the timing which is used to identify when the precaution should be taken. For example, if your employee is working with fire, you can specify the timing of pre-work to alert the employee that they should wear fire-resistant clothing before beginning the task.

   Sequence
   Specify the sequence number which is used to identify the order in which your employee should be made aware of the precaution. All precautions are important regardless of the sequence number specified.

4 Select the **Apply to Children** check box to have the safety details applied to all of the child records. A safety record attached to a production line will now be visible on all equipment in that production line.
5 Select the **Delete Pending** check box to delete the pending safety record during the next review.
6 Click **Submit**. The system automatically populates **Created By**, **Date Created**, **Updated By**, **Date Updated**, **Reviewed By**, **Reviewed By Name**, **Date Reviewed**, and **Review Type**.

Defining lockout/tagout details for equipment

Define the steps your employees must take to isolate equipment from its energy sources so that your employees can complete maintenance work on the equipment without suffering bodily harm or other potential dangers in the event of the unexpected startup of the equipment or the release of stored energy. For example, define the steps necessary to isolate a jammed conveyor system from its energy sources so that the work performing maintenance and clearing the jam is not injured by the unexpected startup or release of the conveyor system.

To define lockout/tagout details for equipment:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the asset, position, system, or location for which to define lockout/tagout details, and then click the **LOTO** tab.
3 Click **Add LOTO Record**.
4 Specify this information:

Sequence
Specify the sequence in which to implement lockout/tagout procedures.

Isolation Type
Select the isolation type or method for isolating or disconnecting equipment, such as a water valve, from its energy source in order that work can be performed without risk or injury.

Isolation Step
Select to indicate this procedure is an isolation step and not a de-isolation step.

Isolation Point
Specify the isolation point or area the equipment can be isolated from its energy sources to prevent injury from unexpected startup. The system automatically populates the description of the isolation point, **Isolation Point Org.**, **Equipment**, the description of the equipment, **Equipment Org.**, **Location**, and **Location Org.**

Location Note
Specify any additional notes on the location of the equipment as necessary.

Energy Source
Select the equipment's source of energy such as electrical power.

Isolation Method
Specify the method by which to isolate the equipment from its energy source. The system automatically populates the description of the isolation method.

Number of Tags
Specify the number of tags required to properly lock and tag the equipment so that automatic startup of the equipment is prevented.

Residual Energy
Select the source of residual energy to the equipment if any.

Secondary Residual Energy
Select the secondary source that stores residual energy for the equipment. This source supplies energy to the equipment when the equipment is disconnected from its primary energy and secondary energy sources.

Delete Pending
Select to delete the lockout/tagout details record during the next review.

5 Click **Submit**. The system automatically populates **Created By** and **Date Created**.

To add or edit comments to the lockout/tagout details record, select an isolation record, and then click **Add/Edit Comments**. Specify or edit comments as necessary.

To add or edit documents to the lockout/tagout details record, select an isolation record, and then click **Add/Edit Documents**. View, associate, or edit documents to the record.

To copy lockout/tagout details from equipment, click **Import From Equipment**.

To copy lockout/tagout details from a permit to work, click **Import from PTW**.

Importing lockout/tagout details from equipment

When defining lockout/tagout details for equipment, you can import the details from existing equipment records.

To import lockout/tagout details from equipment:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the asset, position, system, or location for which to define lockout/tagout details, and then click the **LOTO** tab.

3 Click **Import from Equipment**.

4 Specify this information:

Equipment
Specify the equipment from which to copy lockout/tagout details. The system automatically populates **Equipment Org.**

Isolation Type
Select the isolation type from which to copy lockout/tagout details. To copy all available isolation types, leave this field blank.
Note: If records already exist for an isolation type, the system deletes the records prior to copying the new records.

5 Click **Submit**.

Importing lockout/tagout details from permits to work

When defining lockout/tagout details for equipment, you can import the details from existing permit to work records.

To import lockout/tagout details from permits to work:

1 Select one of these options:.
- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**
- **Equipment > Setup > Locations**

2 Select the asset, position, system, or location for which to define lockout/tagout details, and then click the **LOTO** tab.
3 Click **Import from PTW**.
4 Specify this information:

Permit to Work
Specify the permit to work from which to copy lockout/tagout details.

Isolation Type
Select the isolation type to assign to the new lockout/tagout details.
Note: If records already exist for an isolation type, the system deletes the records prior to copying the new records.

5 Click **Submit**.

Viewing the reservation calendar

View equipment reservations on the **Reservation Calendar**. Unscheduled equipment can be scheduled on the calendar by double clicking on an empty time period or dragging and dropping to create a time period on the calendar. Reserved equipment can be modified by authorized users by moving the reservation to a different time period.

You can set up the default settings for the calendar on the **Reservation Calendar** tab of the **Screen Setup** screen.

To view the reservation calendar:

1. Select **Equipment > Additional Features > Reservation Calendar**.
2. Vew the **Reservation Calendar**.
3. Select **Go To Day** to select a day for which to view reserved equipment.
4. Rest on an equipment reservation record in the calendar grid to view the title and description of the equipment reservation.

   Note: You can only view and edit the reservation details if you created the reservation or if you are the Reservation Calendar owner.
5. Optionally, double-click a piece of equipment in the equipment grid to view all of the calendar reservations for that equipment.

Setting up defaults for reservation calendar

Setup defaults for the **Reservation Calendar** screen. These values are used when displaying the scheduling calendar for a piece of equipment.

To setup defaults for the **Reservation Calendar** screen:

1. Select **Administration > Screen Configuration > Screen Setup**.
2. Select the equipment for which to setup defaults for the **Reservation Calendar** screen, and then click the **Reservation Calendar** tab.
3. Specify this information:

   Schedule Setting
   Select Minute, Hour, or Day for the schedule setting.

   If you do not specify a **Schedule Setting**, the screen will show the Minute based calendar by default.

   Block Duration
   Select the duration of the block of time. The block duration is dependent on the **Schedule Setting** that you selected.

   For example, if you select Minute for **Schedule Setting**, you can select 15, 30, or 45 for the **Block Duration**. If you select Hour for **Schedule Setting**, you can select any whole number between 0 and 24.

   Working Start Time Hours
   Select the hour that work starts.

   Working Start Time Minutes
   Select the minute that work starts.

   Working End Time Hours
   Select the hour that work ends.

   Working End Time Minutes
   Select the minute that work ends.

4 Specify the **Default Reservation Type**. Select Pool if the equipment is marked as Reservable Equipment, Loaner if the equipment marked as Contract Equipment on the header, or Other if the equipment is equipment not marked as Reservable or Contract.
5 Select the check boxes for the working days.
6 Select the **Popup Function** which denotes the popup and its clones.
7 Click **Save Record**.

Creating equipment reservations

Create and modify equipment reservations on a calendar to request or reserve equipment records. Equipment reservations can be viewed in increments of minutes, hours, and days. Move reservations on the calendar screen to adjust start and end times for equipment records.

You should define defaults on the **Reservation Calendar** tab of the **Screen Setup** screen before reserving equipment on the **Reservation Calendar** screen.

You can only request or reserve equipment on this screen. All other status changes have to be done on the **Reservations** screen. If the equipment status is Issued, you can only change the **End Date**.

The created user of the reservation, the **Reservation Calendar Owner**, and any users that are part of the **Reservation Calendar Owners List** associated with the record can edit the reservation.

To create an equipment reservation:

1 Select **Equipment > Additional Features > Reservation Calendar**.
2 Select **Go To Day** to select a day for which to view reserved equipment.
3 Double-click a specific time period on the calendar to schedule the equipment.

   Note: You can also create an equipment reservation by clicking on an empty grid on the calendar and dragging to the side to specify the duration. You can move existing reservations by clicking and dragging them to empty spaces on the grid.

4 Specify the **Title**, **Start Date/Time**, **End Date/Time**, and **Status** of the reservation.
5 Specify this information:

   Travel From (Minutes)
   Travel To (Minutes)
   Specify the amount of travel time needed for the equipment reservation.

   Setup Time (Minutes)
   Specify the amount of time needed for setting up the equipment.

   Tear Down Time
   Specify the amount of time needed for dismantling the equipment.

6 Select the **Private** check box to prevent users who did not create the equipment reservation from editing and seeing the details of the equipment reservation.
7 Select the **All Day** check box to change the **Start Date** and **End Dates** to midnight so the reservation will last all day.
8 Specify the **Work Order**, **Work Address**, and **Project** for the equipment reservation.

9 Optionally, specify the **Instruction 1** for **Supplier 1**. Repeat this step for **Supplier 2** and **Supplier 3.**
10 Optionally, specify the **Building Services**, **Building Services Email**, **Building Services Instruction**, and **Invitees** for the equipment reservation.
11 Specify **Vehicle Type**, **Issue To**, **Customer**, **Customer Contact**, **Reference**, **Cost Code**, **Phone Number**, **Work Phone Number**, **E-mail**, and **Driver's License No.** for the rental details.
12 Click **Submit**.

Managing keys

Manage keys and rings of keys for equipment. Keys and rings of keys are assigned holders who are the individuals to whom those keys have been issued.

To manage a key or ring of keys:

1 Select **Equipment > Additional Features > Key Management**.
2 Click **New Record**.
3 Specify the **Key/Ring**, **Key Description**, and **Organization**.
4 Specify this information:

Type
Select key or ring of keys.

Access Level
Optionally, select Change, Department, Master, or Grand Master as the access level for the key or ring of keys.

Cabinet
Specify the cabinet in which the key is stored.

Position
Specify the position within the cabinet in which the key is stored.

5 Select the **Lost** check box if the key or ring of keys is lost.
6 Select the **Out of Service** check box if the key or ring of keys is out of service.
7 Optionally, specify the **Parent Key**, **Supplier**, **Supplier Key Number**, **Manufacturer**, and **Key Type** of the key.
8 Specify this information:

Key Decode
Specify the code or number that identifies the depths of the cut for a key.

Employee
Specify the employee who is the holder of the key or ring of keys.

Issue Expiration Date
Specify the expiration date for the issue of the key or ring of keys to the holder.

Holder Notes
Optionally, specify any notes for the holder of the key or ring of keys.

9 Click **Save Record**.

Managing locks for keys

Manage locks for keys and rings of keys, and specify the equipment that is locked or accessed using a specified key.

To manage a lock for a key or ring of keys:

1 Select **Equipment > Additional Features > Key Management**.
2 Select the key or ring of keys for which to associate locks, and then click the **Locks** tab.
3 Click **Add Lock**.
4 Specify the **Lock** name and description.
5 Optionally, specify the **Equipment**, **Department**, **Location**, and **Cylinder Number** for the lock.
6 Select the **Out of Service** check box if the lock is out of service.
7 Click **Submit**.

Associating keys with rings of keys

To associate keys with a ring of keys:

1 Select **Equipment > Additional Features > Key Management**.
2 Select the ring of keys record with which to associate keys, and then click the **Ring Keys** tab.
3 Select a **Key** to associate to the ring and then specify a description.
4 Click **Submit**.

Viewing transactions for keys

View the transactions or issue and return of keys and rings of keys.

To view the transactions for keys and rings of keys:

1 Select **Equipment > Additional Features > Key Management**.
2 Select the key or ring of keys for which to view transactions, and then click the **Transactions** tab.
3 View the transactions.

Creating sets and consists

A set is a group of equipment that are physically attached to each other, such as train cars. A consist is one or more sets of these equipment, such as a fully functional train.

To create a set or consist:

1 Select **Equipment > Sets/Consists**.
2 Click **New Record**.
3 Specify this information:

   Set/Consist
   Specify the name and description of set or consist.

   Organization
   Specify the organization associated with the set or consist.

   Type
   Specify whether the equipment is a set or a consist.

   Class
   Specify the class of the set or consist.

   Start Date
   End Date
   Specify the start and end dates for the consist. These fields cannot be specified for sets.

   Note: You can create duplicate consists but not duplicate sets. For duplicate consists, the **Start Date** and **End Date** for the duplicate consists cannot overlap.

4 Click **Save Record**.

Adding equipment to sets and consists

Build sets and consists by adding equipment and defining the position of the equipment within the sets and consists.

To add equipment to set or consist:

1 Select **Equipment > Sets/Consists**.
2 Select the set or consist to which to add equipment, and then click the **Equipment** tab.
3 Click **New Record**.
4 Specify this information:

   Equipment
   Select one or more pieces of equipment to be part of the set or consist.

   Set Position
   Specify the position of the equipment within the set.

   Consist Position
   Specify the position of the equipment within the consist.

5 Click **Submit**.

Copying a consist

To copy a consist record:

1 Select **Equipment > Sets/Consists**.
2 Select a Consist record, and click **Copy Consist**.
3 Specify the **New Consist Description**, **New Start Date**, and **New End Date**.
4 Optionally, specify this information:

   Custom Field Values
   Select this check box to copy custom field values associated with the consist.

   Equipment
   Select this check box to copy equipment associated with the consist.

   Addresses
   Select this check box to copy addresses associated with the consist.

   Comments
   Select this check box to copy comments associated with the consist.

   Documents
   Select this check box to copy documents associated with the consist.

5 Click **Submit**.

Defining workspaces

Define the space or area where work is completed. Examples of a workspace include an office, a cubicle, and a meeting room.

1 Select **Equipment > Additional Features > Workspaces**.
2 Specify the **Workspace** name and description.
3 Specify the **Organization**, **Department**, **Status**, **Type**, and **Class**.
4 Specify this information:

   Location
   Specify the location of the workspace.

   Seating Designation
   Specify the seating designation for the workspace, such as room or cubicle number.

   Floor
   Specify the floor on which the workspace is located.

   Floor Area
   Specify the size of the floor area and specify the UOM for the area.

   Employee
   Specify the employee assigned to the workspace.

If multiple employees are specified, the **Multiple Employees** check box will be selected. All specified employees are added to the **Employees** tab for this workspace record.

Parent Equipment
Specify any parent equipment associated with the workspace.

5 Select the **Out of Service** check box if the workspace cannot be used.
6 Click **Save Record**.

Associating furnishings with workspaces

Associate furnishings or parts, such as desks and chairs, with a workspace. This tab is the same as the **Parts Associated** tab found on other screens.

To associate furnishings with a workspace:

1 Select **Equipment > Additional Features > Workspaces**.
2 Select the workspace with which to associate furnishings, and then click the **Furnishings** tab.
3 Specify the **Part** to associate and the **Condition**, **Quantity**, **System Level**, **Assembly Level**, **Component Level**, **Component Location**, and **Comments** of the part associated.

   Note: Condition can only be specified if the part is tracked by a condition.

4 Click **Submit**.

Associating employees with workspaces

To associate an employee with a workspace:

1 Select **Equipment > Additional Features > Workspaces**.
2 Select the workspace for which to associate employees, and then click the **Employees** tab.
3 Select an **Employee** to associated with the workspace.

   You can only associate employees that have the **Workspace Occupant** check box on the **Employees** screen selected.

4 Click **Submit**.

Viewing equipment associated with workspaces

To view equipment associated with a workspace:

1 Select **Equipment > Additional Features > Workspaces**.
2 Select the workspace for which to view associated equipment, and then click the **Equipment** tab.
3 View the associated equipment.

Viewing workspaces associated with equipment

To view workspaces associated with equipment:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Assets Healthcare**
   - **Equipment > Properties Healthcare**
   - **Equipment > Systems Healthcare**
2 Select the equipment for which to view associated workspaces, and then click the **Workspaces** tab.
3 View the associated workspaces.

Creating workspace moves

Move equipment, furnishings, and employees from one workspace to another. For example, move specific employees and their computers from one floor of the office building to another.

To create a workspace move:

1 Select **Equipment > Additional Features > Workspace Moves**.
2 Click **New Record**.
3 Specify a description of the workspace move.
4 Specify this information:

   Organization
   Specify the organization of the workspace.

   From Campus
   Specify the campus from which you are moving.

   From Building
   Specify the building from which you are moving.

   From Floor
   Specify the floor from which you are moving.

   From Room/Unit
   Specify the room from which you are moving.

   From Workspace
   Specify the workspace from which you are moving.

   To Campus
   Specify the campus to which you are moving.

To Building
Specify the building to which you are moving.

To Floor
Specify the new floor to which you are moving.

To Room/Unit
Specify the room to which you are moving.

To Workspace
Specify the workspace to which you are moving.

Status
Specify the status of the workspace move.
Note: If changes are made to the **Associations** tab after the workspace move is originally created, a warning message will appear when changing the status from Open or Approved to Completed. If you accept these changes, then update the status of the workspace as Completed and click **Submit** again.

Work Order-Activity
Specify the work order-activity associated with the workspace move.

Notes
Specify any notes associated with the workspace move.

5 Click **Save Record**.

Viewing associations for workspace moves

Employees, furnishings, and equipment associated with a From Workspace location for a Workspace Move are copied to this tab. The selected Employees, Furnishings, and Equipment are moved to the new workspace when the workspace move is completed.

To associate employees, furnishings, and equipment with a workspace move:

1 Select **Equipment > Additional Features > Workspace Moves**.
2 Select the workspace move for which to edit associations, and then click the **Associations** tab.
3 Select the **Include in Move** check box for all employees, furnishings, and equipment to include in the workspace move.
4 Click **Save Record**.

Viewing and modifying equipment information

Search for equipment records, and view and modify equipment information as necessary.

Viewing equipment costs

To view equipment costs:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**

2 Select the asset, position, or system for which to view costs, and then click the **Costs** tab.

3 Click **Refresh Cost Data**.

4 View the cost information.

   Note: If the selected equipment is on the parent work order and a child work order, then the system duplicates the child work order costs by rolling the child work order costs up to the parent work order. Therefore, the system does not display the child work order costs when viewing the costs for the parent work order on the **Maintenance Costs** page.

   Click **Refresh Cost Data** to see the most up-to-date cost information.

   For linear equipment records, the system populates **From Point** and **To Point** based on the entire length in the linear reference unit of measure of the equipment.

   To view costs for a segment of the linear equipment record:

5 Specify this information:

   From Point
   Specify the point of the linear equipment record from which to view costs.

   To Point
   Specify the point of the linear equipment record to which to view costs.

6 Click **Run**. The system calculates and displays only those event costs that apply to the entered segment. When calculating segment cost, the system assumes that costs were accrued equally over the length of the work order. See the following example. WO 1657 was completed for I-85 from mile marker 5 to 10, and you want to view costs for I-85 from mile marker 5 to 6. The system displays WO 1657 in the list of equipment costs for I-85, but displays its cost as $20. The system cannot calculate segmented work order costs at a single point. See the following example:

You want to view costs for a segment of I-85. WO 1, WO 2, WO 3, WO 4, and WO 5 all fall on or within the defined **From Point** and **To Point**. Therefore, the system displays all five work orders on the **Costs** page. The system displays WO 3 and WO 4 because they intersect at some point with the segment's **From Point** and **To Point**; however, the system displays their costs as $0. The

system calculates and displays the segmented costs for WO 1 and WO 2. The system displays the full cost of WO 5 because its length coincides exactly with the segment's length.

Viewing fuel costs for equipment

View the actual fuel costs related to a piece of equipment.

To view fuel costs for equipment:

1. Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2. Select the equipment for which to view fuel costs, and then click the **Fuel Costs** tab.
3. View the fuel costs information.

Viewing equipment reservations

View equipment reservations for an asset, position, system, or location.

1. Select one of these options: .
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2. Select the equipment for which to view equipment reservations, and then click the **Reservations** tab.
3. View the reservations for the equipment.
4. Select a reservation and then click the reservation number to view the **Reservation** details.

Viewing events and work orders for equipment

View the list of work orders and other events related to the equipment.

To view events and work orders for equipment:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
2 Select the equipment for which to view equipment work orders, and then click the **Events** tab.
3 View the equipment work order and events information.

   Note: When you select a record in the grid, the system populates the associated work order number next to **Event**. The work order number is a hyperlink to the actual work order on the **Work Orders** screen.

   Double-click on a record in the grid to hyperlink to the **Work Orders** form.

   For linear equipment records, the system populates **From Point** and **To Point** based on the entire length in the linear reference unit of measure of the equipment.
4 Specify this information:

   From Point
   Specify the point of the linear equipment record from which to view events.

   To Point
   Specify the point of the linear equipment record to which to view events.
5 Click **Run**. The system displays events that intersect at any point with the segment. For example, the system displays a work order if its **To Point** intersects with the segment's **From Point** or if its **From Point** intersects with the segment's **To Point**.

Viewing material usage

To view material usage:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
2 Select the equipment for which to view material usage, and then click the **Material Usage** tab.
3 View the material usage information.

Viewing purchase orders for equipment

View purchase orders for equipment to review a list of all purchase order lines for parts associated with work orders for the equipment.

To view purchase orders for equipment:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2 Select the asset, system, or position for which to view purchase orders, and then click the **Purchase Orders** tab.

   Note: By default the system displays all purchase order lines for the equipment that have not been completely received.

   If a purchase order line contains a multiple equipment work order, the system also displays information about how the purchase order is split among the equipment and related work order(s).
3 View the purchase order information.

   See "Creating purchase order headers."

Viewing structure details for equipment

View structure details for equipment. The structure will display assets, positions, systems, locations, component locations, and system, assembly, and component levels.

To view structure details for equipment:

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
   - **Equipment > Setup > Locations**
2 Select the record for which to view the structure details, and then click the **Structure Details** tab.
3 View the structure details.
4 Optionally, select one of the following options to change the focal point of the screen:
   - Click **Move to Top Level Asset** to move the focal point to the highest-level asset.
   - Click **Move to Top Level Position** to move the focal point to the highest-level position.
   - Click **Move to Top Level System** to move the focal point to the highest-level system.

Defining details for condition score matrix setup

The condition score matrix is used to determine the condition score, condition index, and next inspection date of a nonconformity.

Define any combination of severity, intensity, size, and importance, and then associate a condition score, index, and inspection interval. For example, you can specify that a nonconformity with minor severity, low intensity, and low importance should have a low condition score with a condition index of reasonable.

1 Select **Equipment > Condition Score Matrix**.

2 Click **New Record**.

3 Specify this information:

RCM Project
Select the RCM Project.

Severity
Select the severity level of the nonconformity, such as minor, serious, or severe.

Intensity
Select the intensity level of the nonconformity, such as low, moderate, or high.

Size From
Size To
Specify the size range of the nonconformity.

Importance
Specify the importance of the equipment.

Condition Score
Specify a number for the condition score.

Condition Index
Select the condition index.
Note: You can create a condition score matrix in which a nonconformity with the lowest severity, intensity, size, and importance is assigned a score of 1 whereas a nonconformity with the highest severity, intensity, size, and importance is assigned a score of 5.

Re-Inspect After
Specify the duration of time before the nonconformity is re-inspected.

4 Click **Save**.

Defining settings for nonconformities

Define settings for nonconformities and nonconformity observations to control synchronization, status changes, and merge restrictions.

To define settings for nonconformities and nonconformity observations:

1 Select **Equipment > Nonconformities > Nonconformities Setup**.

2 Select an organization for which to define settings.

3 Specify this information:

Synchronize Header With Observation
Specify when observation data should be synchronized with the associated nonconformity header.

Merge Restrictions

Specify which nonconformities can be selected for merging.

If set to Unrestricted, there is no constraint. If set to Restricted, Equipment, Type, Part, System Level, Assembly Level, Component Level, and Material Type must be the same or blank

If set to Similar Equipment, only Equipment must be the same. If set to Similar Type, only Type must be the same. And if set to Similar Part, only Part, System Level, Assembly Level, Component Level, and Material Type must be the same.

Use Observation Status

Specify whether nonconformity observations require manual status changes or not.

If set to Yes, the user must manually change the status. If set to No, the system will protect the status and never apply changes.

If Automatic, the system will protect the status and will apply updates automatically.

Note: If you specify Yes for **Observation Status**, the **Superseded Status** and **Re-Inspection Status** fields become required.

4 Optionally, specify this information:

Protect Header Data
Select to protect the header nonconformity data on the **Nonconformity Observations** screen and the **Nonconformities** tab of the **Work Order** screen if more than one observation is present for the nonconformity.
Note: Protection of individual fields is still subject to the selections on the**Nonconformities** tab of the **Revision Control Setup** screen.

Protect Observation Data on Header
Select to protect the observation data on the **Nonconformities** screen in update mode.

Superseded Status
Specify the status of the currently approved observation after approval of a new observation. You can select any value, as long as it is attached to an approved or superseded system code.

Re-Inspection Status

Specify the value of the Status of new observations when created for a re-inspection of an existing nonconformity. This is used for automatically generated observations during the release of PM or Maintenance Pattern work orders.

This is also used when manually creating a new observation for an existing nonconformity on the **Nonconformity Observations** screen.

Auto Approve Status
Specify what status should be automatically set for any unfinished observation associated with the work order.

This only works if the observation was created for the work order or if the observation was for re-inspection and the record was updated. If you leave this value blank the system will prevent closing the work order.

Auto Skip Status
Specify what status should be automatically set for any observation associated with the work order for re-inspection.

This only works if the record was not updated (skipped). If you leave this value blank the system will prevent closing the work order.

Include Condition for Re-Inspection
Select to copy the values of severity, intensity, size, importance, and next inspection date override from the related nonconformity header to the observation when a new observation is created. Otherwise, these fields will remain blank on the new observation.

Previous Observation Count
Specify to determine how many other previous observations for the same nonconformity will be displayed on the comments and documents pop-up screens. If left blank, the default is 0.

5 Click **Save**.

Creating status dependencies for nonconformities

Create and maintain observation status codes and their effect on the nonconformity header status. For example, you can specify that if the nonconformity observation is set to Approved, the Nonconformity status on the header record is set to Confirmed/Open.

To create a status dependency:

1 Select **Equipment > Nonconformities > Nonconformities Setup**.
2 Select the organization for which to setup status dependencies, and then click the **Status Dependencies** tab.
3 Specify this information:

Observation Status
Specify the observation status that will determine the status of the **Nonconformity Status**.

Nonconformity Status
Specify what the status of the nonconformity should be based on the **Observation Status**.

Only if Nonconformity Status Is
Optionally, specify what the nonconformity status must be for the status dependency to occur.

For example, you can specify that if the **Observation Status** is set to Repair, then the **Nonconformity Status** will be set to Temporary Repair but only if the current **Nonconformity Status** is Open.

4 Click **Submit**.

Defining nonconformities

Define nonconformities, such as decay, corrosion, leaks, or cracks. You can record new observations for the nonconformity to track its development.

To define nonconformities:

1 Select **Equipment > Nonconformities > Nonconformities**.
2 Click **New Record**.
3 Specify a description and **Organization** for the nonconformity.

4 Specify this information:

Equipment
Specify the equipment associated with the nonconformity.

Department
Specify the department.

Class
Specify the class.

Part
Specify the part associated to the nonconformity.

Status
Specify the status of the nonconformity.

Type
Specify the type of nonconformity.

Material Type
Specify the material type of the nonconformity, such as metal, wood, or plastic.

Severity
Specify how severely the nonconformity affects the equipment. For example, you can select a minor severity if the nonconformity does not affect the functionality of the equipment.

Intensity
Optionally, specify the intensity of how the nonconformity has developed. For example, you can select average intensity if the nonconformity is visible and has grown over time.

Size
Optionally, specify the size of the nonconformity.

Importance
Optionally, specify how important the component is that has the nonconformity. For example, you can select critical importance if the component is vital, such as the handrail of steps.

Priority
Optionally, select the priority for the nonconformity.

Notes
Optionally, specify notes for the nonconformity.

5 Click **Save**.

a Optionally, right-click and select **Merge Nonconformity** to merge two nonconformities.
b Optionally, right-click and select **Create WO** to create a work order for the nonconformity.
c Optionally, right-click and select **Create Capital Planning Request** to create a capital planning request for the nonconformity.
d Optionally, right-click and select **View All Comments** to view comments for the nonconformity observations and the nonconformity header record.

e Optionally, right-click and select **View All Documents** to view documents for the nonconformity observations and the nonconformity header record .

Merging nonconformities

If different users track two nonconformities that are determined to be the same issue, these nonconformities and their observations can be merged.

To merge nonconformities:

1. Select **Equipment > Nonconformities**.
2. Select a nonconformity record to keep, and then click **Merge Nonconformity**.
3. Select the nonconformity to be merged.
4. Click **Submit**.

Specifying results of checklists for nonconformities

Specify results for checklists associated with nonconformities. You can use checklists to verify that observation data was collected correctly.

You must specify the **Task Plan for Checklist** on the **Nonconformity Observations** screen or on the **Observations Tab** of the **Nonconformities** screen for a checklist to be associated with the nonconformity.

To specify results for checklists associated with nonconformities:

1. Select **Equipment > Nonconformities > Nonconformities**.
2. Select the nonconformity for which to specify checklist results, and then click the **Checklist** tab.

   Note: You cannot change checklist items if these conditions exist:

   - The nonconformity **Status** is Closed.
   - The **Use Observation Status** is not Automatic and the observation **Status** is not Unfinished.
   - The **Use Observation Status** is Automatic and the observation **Status** is not Unfinished or Approved.

   You can specify the **Use Observation Status** and other settings for nonconformities and nonconformity observations on the **Nonconformities Setup** screen.

   See "Defining settings for nonconformities."

3. Optionally, you may add, edit, or view documents attached to task checklist items on the **Checklist** tab. Click **Add/Edit Checklist Item Documents** for a selected checklist item to add or edit associated documents.
4. Specify the **Observation** for which to complete the checklist.
5. Specify the results of the checklist.
6. Specify this information:

   Result
   Specify the result of the checklist item.

Notes
Optionally, specify any notes for the checklist item.

Final Occ.
Optionally, select the check box if the results entered represent the final occurrence of the specific checklist item.

Performed By
Specify who performed the checklist.

Reviewed By
Specify who reviewed the checklist.

7 Click **Submit**.

Creating observations for nonconformities

Create and maintain observations for nonconformities. You can specify the status and severity of the observation. Each new observation is assigned a sequential number so its development can be tracked.

To create an observation for a nonconformity:

1 Select **Equipment > Nonconformities**.
2 Select the nonconformity for which to create observations, and then click the **Observations** tab.
3 Specify this information:

Observation Status
Specify the status of the observation, such as Unfinished or Approved.

Task Plan for Checklist
Specify Task Plan for Checklist for the observation.

Severity
Specify the severity of the observation.

4 Click **Submit**.

Viewing nonconformities associated with equipment

View nonconformities and observations associated with assets, positions, systems, and locations.

To view nonconformities associated with equipment:

1 Select one of these options:
- Select **Equipment > Assets**.
- Select **Equipment > Positions**.
- Select **Equipment > Systems**.
- Select **Equipment > Locations**.

2 Select the equipment for which to view nonconformities, and then click the **Nonconformities** tab.

3 View the nonconformities and observations.

Creating nonconformity observations

Define observations for nonconformities, such as decay, corrosion, leaks, or cracks. On this screen, you can add a new nonconformity or update an observation for an existing nonconformity. Each new observation is assigned a sequential number so its development can be tracked.

To create an observation of a nonconformity:

1 Select **Equipment > Nonconformities > Nonconformity Observations**.
2 Click **New Record**.
3 Specify a description and **Organization** for the nonconformity.
4 Specify this information:

Equipment
Specify the equipment associated with the observation.

Type
Specify the type of observation.

Class
Specify the class.

Nonconformity Note
Optionally, specify a note for the nonconformity

Observation Status
Specify the status of the observation. The observation cannot be deleted if it has a status of Unfinished or if the header nonconformity status is Closed.

Task Plan for Checklist
Select a checklist for the nonconformity. The task plan must be specified as a Nonconformity Checklist on the **Task Plans** screen.

Severity
Optionally, specify the severity of the observation.

Intensity
Optionally, specify the intensity of the observation.

Size
Optionally, specify the size of the observation.

Severity
Optionally, specify the importance of the observation.

Observation Note
Optionally, specify the note for the observation.

5 Optionally specify **Recorded By** and **Date Recorded**.

6 Click **Save**.
   a Optionally, right-click and select **New Observation** to create a new observation for the nonconformity.
   b Optionally, right-click and select **Create WO** to create a work order for the nonconformity.
   c Optionally, right-click and select **View All Comments** to view comments for the nonconformity observations and the nonconformity header record.
   d Optionally, right-click and select **View All Documents** to view documents for the nonconformity observations and the nonconformity header record .
7 Click **New Observation** to create a new observation for a nonconformity.

Specifying results of checklists for nonconformity observations

Specify results for checklists associated with nonconformity observations. You can use checklists to verify that observation data was collected correctly.

You must specify the **Task Plan for Checklist** on the **Nonconformity Observations** screen or on the **Observations Tab** of the **Nonconformities** screen for a checklist to be associated with the nonconformity.

To specify results for checklists associated with nonconformity observations:

1 Select **Equipment > Nonconformities > Nonconformity Observations**.
2 Select the nonconformity observation for which to specify checklist results, and then click the **Checklist** tab.

   Note: You cannot change checklist items if these conditions exist:
   - The nonconformity **Status** is Closed.
   - The **Use Observation Status** is not Automatic and the observation **Status** is not Unfinished.
   - The **Use Observation Status** is Automatic and the observation **Status** is not Unfinished or Approved.

   You can specify the **Use Observation Status** and other settings for nonconformities and nonconformity observations on the **Nonconformities Setup** screen.

   See "Defining settings for nonconformities."

3 Optionally, you may add, edit, or view documents attached to task checklist items on the **Checklist** tab. Click **Add/Edit Checklist Item Documents** for a selected checklist item to add or edit associated documents.
4 Specify this information:

   Result
   Specify the result of the checklist item.

   Notes
   Optionally, specify any notes for the checklist item.

   Final Occ.
   Optionally, Select the check box if the results entered represent the final occurrence of the specific checklist item.

Performed By
Specify who performed the checklist.

Reviewed By
Specify who reviewed the checklist.

5 Click **Submit**.

Defining nonconformity types

Define nonconformity types for parts. For example, you can create a nonconformity type named "Stained" and associate it with the cloth fabric of a car.

To define nonconformity types:

1 Select **Equipment > Nonconformity Types**.
2 Click **New Record**.
3 Specify this information:

Nonconformity Type
Specify the nonconformity type, such as rotting, cracked, loose.

Description
Specify a description for the nonconformity type.

Organization
Specify the organization associated with the nonconformity type

Class
Optionally, specify the class associated with the nonconformity type.

Severity
Specify the severity of the nonconformity type, such as Minor, Major, or Catastrophic.

Nonconformity Class
Specify the class for the nonconformity.

Task Plan for Checklist
Specify the task plan to use for the nonconformity type.

Out of Service
Select this check box if the nonconformity type is out of service.

Standard WO
Specify the standard work order for the nonconformity type.

4 Click **Save**.

Associating material types with nonconformity types

Associate material types with applicable nonconformity types. For example, you can associate fabric with nonconformity types like torn, stained, or faded.

To associate a part with a nonconformity type:

1. Select **Equipment > Nonconformity Types**.
2. Select a nonconformity type, and then click the **Material Types** tab.
3. Click **Add Material Type**.
4. Select a material type to associate with the nonconformity type.
5. Click **Submit**.

Associating EMRS with nonconformity types

Associate System, Assembly, and Component levels with applicable nonconformity types.

To associate System, Assembly, and Component levels with a nonconformity type:

1. Select **Equipment > Nonconformity Types**.
2. Select a nonconformity type, and then click the **EMRS** tab.
3. Click **Add Component**.
4. Select the **System Level** to associate with the nonconformity type.
5. Optionally, select the **Assembly Level** and **Component Level** to associate with the nonconformity type.
6. Click **Submit**.

Associating parts with nonconformity types

Associate parts with applicable nonconformity types. For example, you can associate a tire with nonconformity types like flat, underinflated, or punctured.

To associate a part with a nonconformity type:

1. Select **Equipment > Nonconformity Types**.
2. Select a nonconformity type, and then click **Parts**.
3. Click **Add Part**.
4. Specify one or more parts to associate with the nonconformity type.
5. Click **Submit**.

Entering notes in the notebook

Enter notes and details about defects for equipment.

To enter notes in the notebook:

1 Select **Equipment > Notebook**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization for which to make notes.

Note
Specify a note.

4 Optionally, specify this information to record a defect:

Private
Select this check box to indicate that the notebook is a private record belonging to the user who created the notebook.

Defect
Select this check box to indicate there is a defect for the equipment.

If not selected, the **Nonconformity Type**, **Nonconformity Class**, and **Nonconformity Severity** fields are protected.

History
Select this check box to hide the record from the default dataspy.

Equipment
Specify the equipment with the defect.

Nonconformity Type
Specify the type of nonconformity.

Level 1
Specify the equipment for the first level, such as a Division.

Level 2
Specify the equipment for the second level, such as a Line.

Level 3A
Specify the equipment for the third level, such as a Track.

Level 3
Specify the equipment for the third level, such as a Section.

Level 4
Specify the equipment for the fourth level, such as the Nearest Station.

Stationing (major)
Specify the primary numeric identifier for the location of the issue being recorded in the notebook.

Stationing (minor)
Specify the secondary numeric identifier for the location of the issue being recorded in the notebook.

Detailed Location
Optionally, specify the detailed location of the defect.

5 Click **Save**.

The system generates a Mobile Notebook number and populates the **Date/Time Created**.

Adding emails to the notebook

Add email transactions for the notebook. An email transaction is a record of to whom the notebook creator wants to send the notebook.

To view emails for the mobile notebook:

1 Select **Equipment > Notebook**.
2 Click the **Emails** tab.
3 Specify the **Employee** and **E-mail Address**.
4 Click **Submit**.

Adding references for the notebook

Add references for the notebook.

To add references:

1 Select **Equipment > Notebook**.
2 Select a notebook for which to add references, and then click the **References** tab.
3 Click **Add Reference** to add a new reference to the notebook.
4 Specify the **Referenced Notebook Code**.
5 Click **Submit**.

Viewing equipment used for linear references

View where equipment is used as related equipment on the **Linear References** tab. You can also view equipment parents, that is the parent route or the right of way, if the equipment is used on the **Segments** or **Routes** tab.

1 Select one of these options:
   - **Equipment > Assets**
   - **Equipment > Positions**
   - **Equipment > Systems**
2 Select the equipment for which to view details, and then click the **Linear Where Used** tab.
3 View where the selected equipment is used.

Updating operational status for equipment

Identify the equipment that should be taken out of rotation for maintenance. This screen shows equipment which have overdue preventive maintenance records, meaning maintenance that should be performed has not yet been performed. Modify the operational status of the equipment.

To update operational status for equipment:

1. Select **Equipment > Additional Features > Equipment Operational Status**.
2. Select the equipment for which to update the operational status, and then click the **Record View** tab.
3. Specify the **Operational Status**.

   Note: Equipment cannot be made operational if regulatory items exist with repairs needed. The checklist items for the equipment must have a resolution of Repair Completed or Temporary Repair with a Follow-up WO-Activity or Deferred Maintenance.
4. Click **Save**.

Viewing work orders for equipment in need of preventive maintenance

View and verify details of work orders attached to equipment that should be taken out of operations for preventive maintenance.

To view work orders for equipment in need of preventive maintenance:

1. Select **Equipment > Additional Features > Equipment Operational Status**.
2. Select the equipment for which to view the work orders, and then click the **Work Orders** tab.
3. View the information.

   When you select a record in the grid, the system populates the associated work order number next to **Work Order**. The work order number is a hyperlink to the actual work order on the **Work Orders** screen. However this screen displays all work orders regardless of the status so if the work order has a status of Awaiting Release, the hyperlink functionality will not work.

   Double-click on a record in the grid to link to the **Work Orders** form.

Materials management

Setting up initial materials information

Set up initial materials information before using the materials management module.

Defining commodity codes

Define commodity codes to establish a method of classifying materials for purchasing and inventory. Commodity codes can identify specific types of goods, such as fiber optics, fuses, switches, etc., that can then be used to categorize specific parts in your inventory. Buyers can then associate particular suppliers with these different commodities and send out requests for quotes for the particular commodities. Storeroom and maintenance personnel can also use commodity codes to quickly access stock information.

After defining a commodity, you can update the commodity record as necessary; however, you cannot modify the **Commodity** or **Organization** for an existing commodity record.

To define commodity codes:

1. Select **Materials > Setup > Commodities**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the commodity belongs if you use multi-organization security.

   Commodity
   Specify a unique code identifying the commodity, and then enter a description of the commodity in the adjacent field.

   Class
   Specify the class of the commodity. The classes shown belong to the COMM entity. The system automatically populates **Class Org.**

   UOM
   Specify the unit of measure of the commodity.

   Greenhouse Gas Emission Category
   Select the greenhouse gas emission category for the commodity.

   Out of Service
   Select to indicate that the commodity code is no longer in use. If you select **Out of Service**, the system retains the commodity record, but it will no longer appear in the lookups for commodities on other forms.

4. Click **Save Record**.

Recording greenhouse gas records for fuel types for commodities

Record CO2e emission data for fuel types to record the quantity of greenhouse gases emitted to produce commodities.

To record greenhouse gas records for fuel types for commodities:

1. Select **Materials > Setup > Commodities**.
2. Select the commodity for which to record greenhouse gas records for fuel types, and then click the **Fuels** tab.

3 Click **Add Fuel**.

4 Specify this information:

Fuel Type
Select the fuel type for the commodity.

Greenhouse Gas Emitted
Specify the greenhouse gas the fuel type emits.

Emission Amount
Specify the amount of greenhouse gas the fuel emits.

Date Effective
Specify the effective date this record is effective. **Date Expired** is automatically populated.

5 Click **Submit**.

Defining currencies

In international markets, organizations are required to monitor the various currencies used and the different exchange rates. The system contains many predefined currencies. Define additional currencies as necessary.

Note: Various parts of the system rely upon currency for computing transactions. Therefore, even if you do not intend to use the system to calculate currencies for international markets, you must at least enter a base currency and attach an exchange rate of "1" to it.

To define currencies:

1 Select **Materials > Setup > Currencies**.

2 Click **New Record**.

3 Specify this information:

Currency
Specify a unique code identifying the currency, and then enter a description of the currency in the adjacent field.

Class
Specify the class of the currency. The classes shown belong to the CURR entity. The system automatically populates **Class Org.**

Out of Service
Select to remove this currency from the currency lookups.

4 Click **Save Record**.

Defining exchange rates for currencies

Define the exchange rate for a currency by entering a base currency and exchange rate for the currency.

Note: Define the base currency in the DEFCURR parameter of the **Install Parameters** form.

The system uses exchange rates to convert foreign currency amounts to base currency using the following equation:

base currency amount=foreign currency amount/exchange rate

Example:

Your base currency is USD. You have created a purchase order for 50 filters at 9 EUR. The price of the air filters must now be converted to USD. Assuming that the exchange rate is 1.2 EURO-USD, the system calculates the following conversion:

50 air filters @ 9 EUR = 450 EUR;

450 EUR/1.2 = 375 USD

To define exchange rate for currencies:

1. Select **Materials > Setup > Currencies**.
2. Select the currency with which to associate an exchange rate, and then click the **Exchange Rates** tab.
3. Click **Add Exchange Rate**.
4. Specify this information:

   Base Currency
   Specify the base currency against which to calculate the selected foreign currency. The system automatically displays the currency associated with the organization of the current session. The system displays only those currencies associated with organizations to which you have access.
   Note: You can only define exchange rates for multiple currencies if the MULTIORG installation parameter is set to YES.

   Exchange Rate
   Specify the exchange rate for the currency.

   Start Date
   Specify the date for which the exchange rate is effective. The system automatically displays the current date.

   End Date
   Specify the date for which the exchange rate is no longer effective.

5. Click **Submit**.

   Note: Because exchange rates change frequently, update currency information often.

Defining lots

Define lots for materials as necessary. Manufacturers often produce items in volume batches, called lots. Lots are a numeric or alphanumeric method of indicating that an item is a member of a group of items that are produced at the same time.

Depending on the setting of the LOTNRG installation parameter, the system can automatically generate lot numbers when you receive items. Set the installation parameter LOTNRG to one of the following values:

- `T`

  The system generates a lot code for each receipt (Transaction).

- `P`

  The system generates a lot code for each part checked by lot. These items are designated by having **Track by Lot** selected on the **Parts** form.

Note: The SHOWLOT installation parameter determines whether lots are used for stock information for parts. The default setting for SHOWLOT is Y. If SHOWLOT is set N, the system disables Lot and it is not displayed on forms.

A dash indicates that no parts are lot-controlled.

The default setting for lot numbering is P. In most cases, this is the ideal lot number method. Items requiring lot tracking receive your lot assignment; those items that do not need lot tracking are simply placed in the stock system as is. Infor EAM recommends setting the value to T for companies whose incoming parts and supplies should be lot-tracked at all times for safety, regulatory, and quality control purposes.

The lot numbers assigned by the system are internal numbers. Cross-reference the internal numbers assigned by the system to the manufacturer's lot numbers to track defective parts when notified by the manufacturer.

Define lot codes to identify the exact lot or batch number when stocking parts in stores.

After defining a lot, you can update the lot record as necessary. You cannot modify the **Lot** or **Organization** for an existing lot record.

To define lots:

1. Select **Materials > Setup > Lots**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the lot belongs if you use multi-organization security.

   Lot
   Specify a unique code identifying the lot, and then enter a description of the lot in the adjacent field.

   Class
   Specify the class of the lot. The classes shown belong to the LOT entity.

   Expiration Date
   Specify the expiration date of the lot.

   Manufacturer Lot
   Specify the manufacturer's lot number.

4. Click **Save Record**.

Defining tax codes

Define tax codes to apply to materials and purchases. Tax codes represent the definition of tax coding structure that consists of a tax rate type, a tax rate code, a value for tax rate code, a tax code, and a value for the tax code.

Tax code records represent the combination of tax rate codes and tax code information that establish a structure that will apply all of the applicable taxes to materials and purchases based on transaction dates and the established tax structure created within a tax code. You can create any number of tax codes to fit any tax situation. You can also enter multiple rate codes for each tax code, as necessary.

Define tax codes by creating a tax code structure in the following order.

Step 1. Defining tax rate types

Define tax rate types to specify tax rate classifications corresponding to base tax rates, such as taxable and nontaxable. Use tax rate type codes to identify the type of tax, such as sales tax, internal tax, excise tax, or an import tax.

To define tax rate types:

1. Select **Materials > Setup > Tax Rate Types**.
2. Click **New Record**.
3. Specify this information:

   Tax Rate Type
   Specify a unique code identifying the tax rate type, and then specify a description of the tax rate type in the adjacent field.

4. Click **Save Record**.

Step 2. Defining tax rates

Define tax rates to build the second level of tax coding. Before creating a tax rate, create tax rate types on the **Tax Rate Type** form.

Create a tax rate, such as "SC TAX" to represent a South Carolina state tax, and then associate that tax rate with a tax rate type, such as a sales or excise tax rate type. The combination of a tax rate type and a tax rate represent the definition of a tax rate code. You can also indicate whether to include the tax rate code in stock valuation.

To define tax rates:

1. Select **Materials > Setup > Tax Rates**.
2. Click **New Record**.
3. Specify this information:

   Tax Rate
   Specify a unique code identifying the tax rate, and then specify a description of the tax rate in the adjacent field.

   Type
   Specify the type of tax rate.

Include Part Taxes in Stock Value
Select to include tax in inventory calculations of stock value.

Include Service Taxes in WO Cost
Select to include tax in service calculations of work order costs.

4 Click **Save Record**.

Step 3. Defining values for tax rates

Define values for tax rates to specify the tax rate percentage and the dates on which the tax period begins and ends.

To define values for tax rates:

1 Select **Materials > Setup > Tax Rates**.
2 Select the tax rate for which to define values and then click the **Values** tab.
3 Click **Add Value**.
4 Specify this information:

Start Date
Specify the tax rate's effective date.

End Date
Specify the tax rate's expiration date.

Percentage
Specify the tax percentage.

5 Click **Submit**.

Note: To delete a value, select the value to delete, and then click **Delete Value**.

Step 4. Defining tax codes

Define tax codes to specify a code under which to group tax rates together to simplify taxing materials.

Tax code records represent the combination of each of the applicable tax rates and their values. To define a tax code, specify a code and description for the tax code, and then associate all of the tax rates that are applicable for the tax code. You can create tax codes to fit any tax situation as necessary, and you can associate multiple tax rates for each tax code.

To define tax codes:

1 Select **Materials > Setup > Tax Codes**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the tax code belongs if you use multi-organization security.

Tax Code
Specify a unique code identifying the tax, and then specify a description of the tax code in the adjacent field.

Class
Specify the class of the tax code. The classes shown belong to the TAX entity.

4 Click **Save Record**.

Step 5. Defining rates for tax codes

Define rates for tax codes to specify the tax rate(s) to include in the tax code. For example, a tax code for South Carolina might include a federal sales tax, state sales tax, and city sales tax.

The system calculates the sum of all the tax rates specified for the tax code and displays the value in **Total Tax %** on the **Record View** page of the **Tax Code** form.

To define rates for tax codes:

1 Select **Materials > Setup > Tax Codes**.
2 Select the tax code for which to define rates, and then click the **Rates** tab.
3 Click **Add Rate**.
4 Specify this information:

Rate
Specify the rate used with this tax. The system automatically populates the rate description and **Percentage**.

5 Click **Submit**.

Note: Currently, taxes cannot be applied on a per piece basis. Taxes are determined as a percentage of the purchase price.

To remove a rate, select the rate to remove, and then click **Remove Rate**.

Defining reasons for return

Define reasons for return based on the most common reasons for which you must return parts. When returning parts to the supplier, the system allows you to select a reason for return. Predefined reasons for returns enable you to track return trends.

To define reasons for return:

1 Select **Materials > Setup > Reasons for Return**.
2 Click **New Record**.
3 Specify this information:

Reason for Return
Specify a unique code identifying the reason for return, and then enter a description of the reason for return in the adjacent field.

Class
Specify the class of the reason for return. The system automatically populates **Class Org.**

4 Click **Save Record**.

Defining units of measure

Measurements for storing and issuing stock items can depend on the item itself or on the supplier. Cable, for example, is generally measured in feet. Liquids can be measured by the bottle, barrel, or gallon. Screws might be measured according to box or pound.

Measurements can vary within your own organization. Perhaps you must order widgets from a vendor in 24-item cases (the purchase unit of measure). Inventory, on the other hand, stocks widgets as single items (the inventory or stock-keeping unit of measure).

Define various measurements for different purchasing and inventory items. All system store transactions are based on inventory units of measure (how the items are actually stored). All quantities referred to on the bill of materials are also based on inventory units of measure.

When purchasing items in units of measure different from that in which you stock them, convert the unit of measurement. When the inventory unit of measure and the purchase unit of measure are exactly the same, the conversion factor is 1. If they are not the same, use the following formula:

```
purchase UOM x conversion = issue UOM
```

```
(1 box of widgets x 10 = 10 widgets)
```

When the buyer sends out requests for quotes to suppliers, the supplier might provide a price based on a unit of measure that is different than the purchase unit of measure (which could be true due to volume discounts, for instance). This is the quotation UOM, and you then need to supply a conversion factor between the quotation UOM and the purchase UOM when creating the purchase order or requisition.

Note: The system follows ISO recommendations and comes with many units of measure installed.

To define units of measure:

1 Select **Materials > Setup > Units of Measure**.
2 Click **New Record**.
3 Specify this information:

UOM
Specify a unique code identifying the measurement, and then enter a description of the measurement in the adjacent field.

Class
Specify the class of the unit of measurement.

SOA UOM
Specify the Infor SOA unit of measurement for which to associate to this unit of measurement.

Out of Service
Select to prevent the UOM from being displayed in lookups.

Note: You cannot delete a unit of measurement if it is being used elsewhere in the system. If you want to hide the UOM in the system lookups, select **Out of Service**. This feature is especially useful for discarding many of the predefined ISO units that you may never use.

4 Click **Save Record**.

Defining conversion for UOM

Define the conversion factor for a selected UOM. A UOM may have multiple Conversion Factor assignments.

```
From UOM = Conversion Factor * To UOM
```

To define conversion for UOM:

1 Select **Materials > Setup > Units of Measure**.
2 Select the UOM for which to define conversion, and then click the **Conversion** tab.
3 Click **Add Conversion Factor**. The system automatically populates **From UOM**.
4 Specify this information:

Conversion Factor
Specify a number for the conversion factor. If your UOM is a box that includes 100 cups, you can select 100 as the Conversion Factor and cups as the To UOM.

To UOM
Specify the UOM to which to apply the conversion factor.

5 Click **Submit**.

Note: To delete a conversion factor for a UOM, select the **Conversion Factor** to delete and then click **Delete Conversion Factor**.

Understanding time-based inventory valuation (LIFO/FIFO)

You can set up and initialize stock using the last in first out (LIFO) and first in first out (FIFO) inventory valuation methods. LIFO and FIFO are both time-based price types. FIFO inventory pricing mandates that you will consume the materials purchased first before using the most recently purchased materials. LIFO pricing mandates that you will consume the most recently purchased materials before using the materials that were purchased first.

LIFO and FIFO are both storeroom price types that require you to set your pricing level on the store level. Pricing level is defined by the PRICELEV installation parameter, which must be set to S for store-level pricing.

You can set LIFO or FIFO as your pricing method for each store created on the **Stores** form; however, you can still modify price types for parts within a LIFO/FIFO store using a price type other than LIFO/FIFO, such as average price, last price, or standard price. The default price type for a store is determined by the PRICETYP installation parameter.

Note: You can set PRICETYP on the **Install Parameters** form; however, the parameter only determines the default price type that the system automatically displays for **Price Type** when you are creating a store on the **Stores** form. Modify the price type for each store as necessary.

When you create stock with any price type using the **Parts** form or the **Equipment** forms (for equipment defined with In store status), the system updates the **R5BINSTOCK** table with the increase in quantity, and it also creates a receipt transaction in the **R5TRANSACTIONS and R5TRANSLINES** tables. You can view the receipt transaction on the **PO Receipts** form. Because all receipt transactions require a supplier, the system automatically inserts an asterisk (*) as the supplier for the receipt, and the default description for each of these receipt transactions is 'Stock initialization.' If you are using LIFO/FIFO as your pricing method, the system also creates a record for all stock initialization in the **R5FIFO** table to ensure that it uses the appropriate price for all future issues of stock items from stores.

The **R5FIFO** table stores the part, price, quantity, store, and transaction date for each receipt transaction, as well as the purchase order and purchase order line for all LIFO/FIFO stock received from a purchase order. The transaction date indicates the date the stock is inserted into inventory upon which future LIFO/FIFO transactions are based. For every transaction that increases stock, the system inserts a new record in the **R5FIFO** table. For every transaction that decreases stock, the system locates the appropriate record(s) to update or delete based on the transaction date. For FIFO pricing, the system locates the record that was inserted into inventory first. For LIFO pricing, the system locates the record that was most recently inserted into inventory.

The system revalues the price of materials based on LIFO/FIFO pricing as transactions involving stock occur. The system displays the current price for LIFO/FIFO stock in **Stock Value** on the **Store** page of the **Parts** form. See the following scenarios for more information about how the system prices for different types of inventory transactions for the LIFO/FIFO pricing methods.

Note: FIFO pricing is used in the examples for each of the following scenarios. If you are using LIFO pricing, the system handles LIFO pricing for each example in the same manner; however, it locates the record that was inserted into inventory most recently to calculate the appropriate price, rather than locating the record that was inserted into inventory first.

Scenario 1: Issuing parts to work orders (LIFO/FIFO)

When issuing parts from stores to work orders using the Work orders form, and when you are using LIFO/FIFO as your pricing method, the system calculates the transaction price of issued parts using the **R5FIFO** table, rather than retrieving the base price from the **R5PARTS or R5STOCK** table.

If you have selected FIFO as your pricing method, the system locates the oldest part with the earliest insertion date in the **R5FIFO** table and attempts to fulfill the demanded quantity of the part on the work order. If the quantity of the first record is not sufficient to fulfill the demanded quantity of the part on the work order, the system issues the available quantity of the first record to the work order, and then locates the next record inserted into inventory in the **R5FIFO** table. The system continues to locate and issue the parts from the **R5FIFO** table, issuing the oldest parts first until the requested quantity of the part is fulfilled for the work order.

The system records the transaction price of the LIFO/FIFO issue to the work order using the price of the appropriate part inserted into the **R5FIFO** table. If the system uses more than one record from the **R5FIFO** table to fulfill the quantity of the issue, then it calculates the price of the issue using the weighted average of the price of the R5FIFO records used to fulfill the issue. However, the system inserts a record of the original issue price and quantity of the part issued in the **R5ISSUES** table to preserve a

record of the original issue price of a part should the issued part need to be returned to store in the future. See the example below for more information about how the system handles LIFO/FIFO pricing for issuing parts to work orders.

Example:

Your pricing method is FIFO. You have created a work order that creates demand for 10 air filters. Presently you have 19 air filters in stock with different insertion dates and prices. At the time of issue, the **R5FIFO** table contains the following information:

Insertion date	Quantity in store	Price
1-APR-2002	4	7 USD
7-MAY-2002	3	8 USD
10-JUN-2002	8	16 USD
25-JUN-2002	4	18 USD

Note: The Insertion date column in the table above indicates the date the stock was received into inventory.

To fulfill the requested quantity of the air filters for the work order, the system locates the 4 parts inserted into stock on 1-APR-2002 at 7 USD each, inserts a record of 4 parts at 7 USD into the **R5ISSUES** table, and then deletes the record of the 4 parts at 7 USD from the **R5FIFO** table. The system then locates the 3 parts inserted into stock on 7-MAY-2002 at 8 USD each, inserts a record of the 3 parts at 8 USD into the **R5ISSUES** table, and then deletes the original record of the 3 parts from the **R5FIFO** table. The system then locates the 8 parts inserted into stock on 10-JUN-2002 at 16 USD, inserts a record of 3 parts into the **R5ISSUES** table, and updates the quantity of the 10-JUN-2002 record to 5 in the **R5FIFO** table. The system then creates the issue to the work order and calculates the transaction price of the issue using the following equation:

```
[(4 air filters @ 7 USD) + (3 air filters @ 8 USD) + (3 air filters @ 16
USD)] / 10 = 10 USD
```

After completing the issue to the work order, the **R5ISSUES and R5FIFO** tables contain the following information:

R5ISSUES	R5FIFO
4 air filters @ 7 USD	5 air filters @ 16 USD
3 air filters @ 8 USD	4 air filters @ 18 USD
3 air filters @ 16 USD	

Scenario 2: Receiving parts (LIFO/FIFO)

When receiving parts into inventory using LIFO/FIFO as your pricing method, the system automatically inserts a record for the received part into the **R5FIFO** table upon approval of the receipt.

When creating and approving a receipt using the **PO Receipts** form, the system associates the stock record inserted in the **R5FIFO** table with the part on the appropriate purchase order line. Associating the stock record with the purchase order line in the **R5FIFO** table records the quantity of the part

received at the purchased unit price. The purchase unit price includes tax and/or any additional charges for the part if you have set the part price to include tax and/or additional charges.

Scenario 3: Returning parts from a work order to a store (LIFO/FIFO)

When returning parts from work orders to stores using the Work orders form, and when you are using LIFO/FIFO as your pricing method, the system attempts to locate an equivalent issue in the **R5ISSUES** table for the same store and part from which to make the return. The system also attempts to locate the same work order and activity or equipment or project to which the part was originally issued. If the equivalent issue exists in the **R5ISSUES** table, the system uses the issue price as the price of the return. If the equivalent issue does not fulfill the entire return, the system returns the remaining quantity of the part using its current average price.

As the system locates issues to fulfill the return, it deletes the used issues from the **R5ISSUES** table and inserts a record into the **R5FIFO** table using the date and time of the original receipt stored in the record in the **R5ISSUES** table. If the system cannot fulfill the return quantity using records from the **R5ISSUES** table, it inserts a new record in the **R5FIFO** table using the current system date and time as the transaction date. If the system locates the issues to fulfill the return quantity, it deletes or reduces the quantity of the issues used for the return from the **R5ISSUES** table.

The system calculates the transaction price of the LIFO/FIFO return from a work order, equipment, or project to store using the weighted average of the prices of the parts used from the **R5ISSUES** table. If equivalent issues exist to fulfill the return quantity, the system uses the date of the original R5FIFO records stored in the ISS_FIFODATE column of the **R5ISSUES** table as the transaction date recorded for the record(s) inserted into the **R5FIFO** table for the return. If no equivalent issues exist to fulfill the return, the system uses the current date. See the example below for more information about how the system handles LIFO/FIFO pricing for returning parts from a work order to a store.

Example:

Your pricing method is FIFO. You need to return 10 air filters from a work order to store. At the time of the return, the **R5ISSUES and R5FIFO** table contain the following information:

R5ISSUES (for this work order)	R5FIFO
3 air filters @ 8 USD 4-MAY-2002	1 air filter @ 8 USD 7-MAY-2002
5 air filters @ 10 USD 1-APR-2002	2 air filters @ 7 USD 29-MAY-2002
	2 air filters @ 9 USD 1-JUN-2002

Note: The date displayed in the R5ISSUES column in the table above indicates the date the stock was received into inventory.

To cover the return quantity, the system locates the 5 parts inserted into R5ISSUES on 1-APR-2002 at 10 USD each, returns them from the work order to store, inserts a record of 5 parts at 10 USD into the **R5FIFO** table, and deletes the record of the 5 parts at 10 USD from the **R5ISSUES** table. The system then locates the 3 parts inserted into R5ISSUES on 4-MAY-2002 at 8 USD each, returns them from the work order to store, inserts a record of the 3 parts at 8 USD into the **R5FIFO** table, and deletes the original record of the 3 parts from the **R5ISSUES** table.

There are no equivalent issues remaining from which to fulfill the return quantity, and 2 parts are still needed to fulfill the return quantity of 10, so the system then locates the records that existed in the

R5FIFO table before the return and calculates the weighted average price of the parts using the following equation:

```
[(1 air filter @ 8 USD) + (2 air filters @ 7 USD) + (2 air filters @ 9 USD)]
/ 5 = 8 USD
```

The system returns the remaining 2 parts using the price of 8 USD and inserts a new record of 2 parts at 8 USD in the **R5FIFO** table.

The system calculates the transaction price of the return using the following equation:

```
[(5 air filters @ 10 USD) + (3 air filters @ 8 USD) + (2 air filters @ 8
USD)] / 10 = 9 USD
```

After completing the return from work order to store, the **R5ISSUES and R5FIFO** tables contain the following information:

R5ISSUES	R5FIFO
	5 air filters @ 10 USD 1-APR-2002
	3 air filters @ 8 USD 4-MAY-2002
	1 air filter @ 8 USD 7-MAY-2002
	2 air filters @ 7 USD 29-MAY-2002
	2 air filters @ 9 USD 1-JUN-2002
	2 air filters @ 8 USD 4-JUN-2002 (The transaction date for this record is updated to the current system date and time.)

Scenario 4: Pricing store-to-store transactions (LIFO/FIFO)

When moving parts between stores, you can do so using the following forms: the **Quick Store-to-Store Transfers** form, the **Store-to-Store Issues** form, the **Store-to-Store Requisitions** form, and the **Store-to-Store Receipts** form. The system creates two transaction lines for the store-to-store transaction. Initially, the system creates an issue transaction in the issuing store of the parts to transfer. The system also creates a receipt transaction in the receiving store. If you are using LIFO/FIFO as your pricing method when moving parts between stores; the system also creates a record in the **R5FIFO** table for the receiving store; however, this issue transaction does not create a record in the **R5ISSUES** table for the issuing store.

To avoid creating transactions that result in a price of zero for store-to-store materials movements, you must specify a value for Price when you issue a part using the **Quick Store-to-Store Transfer** form.

The system automatically populates **Price** with the average LIFO/FIFO price of the part in the issuing store. You can modify **Price** as necessary. The price of the issue transaction in the issuing store is equal to the average price of the records in the **R5FIFO** table that are affected by the transfer.

If the part being transferred does not already exist in the receiving store, then the system inserts a new record of the part and the receiving store in the **R5FIFO** table priced at the value specified for **Price** on the **Quick Store-to-Store Transfer** form or on the **PO Receipts** form. The system also creates a receipt transaction for the quantity transferred and the value specified for Price.

Scenario 5: Pricing returns to suppliers (LIFO/FIFO)

When returning parts purchased on a purchase order from a store to a supplier using the **Supplier Returns** form, and when you are using LIFO/FIFO as your pricing method, the system attempts to locate a record of the same part on the original purchase order line from which to calculate the return price of the part in the **R5FIFO** table. If the system locates a record of the part on the purchase order line in the **R5FIFO** table, then the system uses the original price of the part on the purchase order line as the return price. If the return quantity cannot be completely covered by the quantity of the part located on the purchase order line in the **R5FIFO** table, the system continues to attempt to locate matching records of the part to return on purchase order line records in the **R5FIFO** table until the return quantity is completely covered.

If the system cannot locate enough matching records to fulfill the return quantity, then the outstanding quantity of the return is fulfilled using other available records of the same part in the **R5FIFO** table that are not associated with the original purchase order line for which you are returning the parts. However, the system still uses the appropriate first or last record depending on whether your price type is LIFO or FIFO. The system deletes or reduces the quantity of all the records used to fulfill the return quantity from the **R5FIFO** table.

See the example below for more information about how the system handles LIFO/FIFO pricing for pricing returns to suppliers.

Example:

Your pricing method is FIFO. You need to return 10 air filters that were originally purchased on purchase order number 10003 at 8 USD each. At the time of the return, the **R5FIFO** table contains the following information:

Insertion date	Quantity in store	Price	Purchase order number
1-APR-2002	2	18 USD	
7-MAY-2002	9	8 USD	10003
10-JUN-2002	8	9.50 USD	10004

Note: The Insertion date column in the table above indicates the date the stock was received into inventory.

The system locates the 9 parts at 8 USD from the original purchase order 10003 for the return and deletes this record from the **R5FIFO** table, because there is no remaining quantity of this part for this R5FIFO record.

There are no matching records of the part on a purchase order line from which to fulfill the return quantity, and 1 part is still needed to fulfill the return quantity of 10, so the system then locates the first record of 2 parts at 18 USD that were received into inventory and inserted into the **R5FIFO** table on 1-APR-2002. The system updates the quantity from 2 to 1 for the return. The last part is returned at the price of 18 USD.

The system calculates the price of the return using the following equation:

```
[(9 air filters @ 8 USD each) + (1 air filter @ 18 USD each)] / 10 = 9 USD
```

After completing the return from store to the supplier, the **R5FIFO** table contains the following information:

Insertion date	Quantity in store	Price	Purchase order number
1-APR-2002	1	18 USD	
10-JUN-2002	8	9.50 USD	10004

Scenario 6: Pricing internal repair receipts (LIFO/FIFO)

The system handles pricing of internal repair receipts in much the same manner as a normal receipt from a vendor. See Scenario 2. Repairable spares can be repaired internally and externally. The forms used to receive repairable spares and the receipt process will vary depending on whether the part is being repaired externally or internally. When creating receipts for parts repaired internally, use the **Internal Repair Receipts** form. When creating receipts for parts repaired externally, use the **PO Receipts** form. See the examples below for more information about how the system handles LIFO/FIFO pricing for parts repaired internally and externally.

Example 1:

You are receiving a part repaired internally. The system updates the available quantity of the part in inventory by the received quantity and inserts a record of the part and the Repair Price in the **R5FIFO** table when the internal repair receipt is approved.

Example 2:

You are receiving a part repaired externally. The system updates the available quantity of the part in inventory by the received quantity and inserts a record of the part and the receipt unit price in the **R5FIFO** table when the PO receipt is approved.

Note: You can view and/or edit stock value information created by transactions for all LIFO/FIFO stock on the **Stock Value** page of the **Parts** form.

Scenario 7: Pricing positive and negative adjustments (LIFO/FIFO)

When signing off stocktake and updating quantities using the **Physical Inventory** form, the system handles LIFO/FIFO pricing of negative adjustments the same way that it handles regular issues.

For positive adjustments, the system calculates the average price of the part in the store that is adjusted by the stocktake. Then the system inserts a record of the positive adjustment quantity at the calculated average price and a transaction record of the positive adjustment in the **R5FIFO** table.

Note: For scrapped repairable spare parts, the system does not update the price for external or internal repairs.

Creating stores

Create stores to define specific locations for storing parts. When creating stores, the system automatically populates the **Price Type** for the store with the value specified for the PRICETYP installation parameter, but you can modify the price type for each store as necessary.

You can set the store pricing method to Average price, Last price, Standard price, first in first out (FIFO), or last in first out (LIFO). However, you can only set **Price Type** to FIFO or LIFO if the PRICELEV installation parameter is set to S.

To create stores:

1. Select **Materials > Setup > Stores**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the store belongs if you use multi-organization security.
   Note: Stores cannot belong to common organizations.

   Store
   Specify a unique code identifying the store, and then enter a description of the store in the adjacent field.

   Class
   Specify the class of the store. The classes shown belong to the STOR entity.

   Enterprise Location
   Specify an enterprise location for the store.
   Note: You can only associate **Enterprise Location** to one **Store**.

   Price Type
   Select the price type for the store.
   Note: If the PRICELEV installation parameter is set to P, **Price Type** is hidden, and the system sets the price type for the store based on the setting of the PRICETYP installation parameter.

   Location
   Specify the store's location within the facility.

   Auto. Req. Status
   Select the status code for a part requisition when quantities fall below a specified minimum. **Auto. Req. Status** determines the status that is automatically assigned to the system-generated requisitions. You may want to set **Auto. Req. Status** to automatically assign a status of Approved to requisitions with set reorder points and approved reorder quantities.

   Parent Store
   Specify the parent store.

   Copy Parent's Reorder Details
   Select to copy stock management information from the parent store to the child store when creating a stock record in the child store.

   If you select a parent store, the system automatically populates **Minimum Level**, **Reorder Level**, **Order Quantity**, and **Preferred Supplier** or **Preferred Store** for the new stock record with the values from the stock record of the parent store.

   Note: **Copy Parent's Reorder Details** is enabled only if you have selected a value for **Parent Store**. Additionally, a stock record must already exist for the store selected as the parent store from which to copy the parent reorder details, and the DEFSTOCK installation parameter must be set to YES.

Out of Service
Select to indicate that the store is no longer in use. If you select **Out of Service**, the system retains the store record, but it will no longer appear in the lookups for stores on other forms. However, you can continue to modify information on the store record as necessary.
Note: Selecting **Out of Service** will not affect any unfinished transactions for the store, such as requisitions, purchase orders, purchase order receipts, part issues and returns, etc.

Parts Tax Code
Specify the tax code for the part used on the Parts tab of the PO line.

Services Tax Code
Specify the tax code for the service used on the Services tab of the PO line.

Sun., Mon., Tues., Wed., Thurs., Fri., Sat.
Select to indicate the working days for the store that are to be included when the system is counting the number of days for which to generate demand-based requisitions based on the **Reserved Parts Buffer (Days)**.

For example, if you select **Mon.**, **Tues.**, **Wed.**, **Thurs.**, and **Fri.** as the working days for the store, then the system will only count those days, and Saturdays and Sundays will be excluded from the count. If the **Reserved Parts Buffer (Days)** is set to 60 and you select **Mon.**, **Tues.**, **Wed.**, **Thurs.**, and **Fri.** as the working days for the store, the system will actually be including part-demand on generated requisitions for a period that is longer than 60 days in actuality but only 60 days in terms of the selected working days for the store.

Lead Time (Days)
Specify the number of days needed internally for inventory deliveries or transfers at the store. **Lead Time (Days)** is only used for store-to-store requisitions.
Note: If you also define or have defined **Lead Time (Days)** on the **Stores** page of the **Parts** form, that value overrides the value entered here on the **Record View** page of the **Stores** form.

Internal Lead Time (Days)
Specify the number of days needed internally for inventory deliveries or transfers at the store. **Internal Lead Time (Days)** is used for store-to-store requisitions that have automatically generated from a batch report.

Specifying an **Internal Lead Time (Days)** enables you to factor in an additional lead time required for approvals or processing that must be considered when calculating the time needed to receive inventory. The value specified for **Internal Lead Time (Days)** will be considered in conjunction with the **Lead Time (Days)** specified for the supplier on the **Record View** page of the **Suppliers** form. If you know that you require three days for a purchase order to be approved internally for this store, you can enter 3 as the value for **Internal Lead Time (Days)** to accommodate the lead time when generating demand-based requisitions for this store.

Reserved Parts Buffer (Days)
Specify the maximum number of days for the system to consider when generating requisitions for reserved parts. **Reserved Parts Buffer (Days)** is only used for automatic requisition generation.

For example, if you specify 60 as the value for **Reserved Parts Buffer (Days)**, then the system will only include parts for which there is demand within 60 days of the date on which the requisitions are generated.

To further illustrate the function of the **Reserved Parts Buffer (Days)**: A scheduler within your organization creates and releases a preventive maintenance work order on which there are part reservations that create demand for the parts on the work order. However, because the due date for the work order is six months from the date on which you are generating requisitions, the demand for the parts will also be six months. Therefore, since the **Reserved Parts Buffer (Days)** is set to 60, the system will not consider the part demand created by the released preventive maintenance work order when generating requisitions even though the released work order has already created demand for the parts required for the work order, because the demand for the parts on the work order extends beyond the specified buffer of 60 days.

Label Printer
Specify the default printer for printing barcoding labels.

Label Template (Issue)
Specify the default label template for printing barcoding labels for issues.

Label Template (Receipt)
Specify the default label template for printing barcoding labels for purchase order receipts.

Label Template (Non-PO Receipt)
Specify the default label template for printing barcoding labels for non-purchase order receipts.

Label Server
Specify the server for printing barcoding labels.

4 Click **Save Record**.

Creating bins for stores

Create bins for stores to identify specific locations where parts can be stored. Bins are useful for locating and issuing parts and for supporting physical inventory counts of part holdings.

To create bins for stores:

1 Select **Materials > Setup > Stores**.
2 Select the store for which to create bins, and then click the **Bins** tab.
3 Click **Add Bin**.
4 Specify this information:

Bin
Specify a unique code identifying the bin.

Description
Specify a description of the bin.

Out of Service
Select to indicate that the bin is no longer in use.
Note: You can only select **Out of Service** if there is no quantity of a part/parts on hand in the bin.

5 Click **Submit**.

Note: To delete a bin, select the bin to delete, and then click **Delete Bin**. You can only delete a bin if there are no existing part records associated with the bin.

Viewing part reservations for stores

View part reservations for parts in store that are reserved or allocated.

To view part reservations for stores:

1. Select **Materials > Setup > Stores**.
2. Select the store for which to view part reservations, and then click the **Reservations** tab.
3. View the reservations for the part in the selected store.

Viewing archived transactions for stores

To view archived transactions for stores:

1. Select **Materials > Stores**.
2. Select the store for which to view archived transactions, and then click the **Archived Transactions** tab.
3. View the archived transactions.

Creating and managing parts information

Creating and managing parts information for a business has far-reaching effects. Once you include this information in the database, it is used time and time again by buyers, storeroom employees, planners, managers, and other individuals throughout the organization.

One of the primary considerations associated with creating and managing parts information is choosing and establishing your pricing method for parts. The system enables you to set up and initialize stock using different price types and pricing methods. Average price reflects a calculated average of part prices throughout the life cycle of the part. Last price is the last price paid for a part in purchasing. Standard price is a periodically adjusted fixed price that is usually taken from the supplier's catalog. You can enter the initial prices; however, the system readjusts these prices as the part begins to record transactions. Base price is the default price used for purchasing if the part is not listed in the supplier's catalog. It is also the price used for work orders, stock issues, and direct purchases that involve the part. Base price is always average price, last price, or standard price depending on the value set for the price type.

The system also enables you to set up and initialize stock using the last in first out (LIFO) and first in first out (FIFO) inventory valuation methods. LIFO and FIFO are both time-based price types. FIFO inventory pricing mandates that you consume the materials purchased first before using the most recently purchased materials. LIFO pricing mandates that you consume the most recently purchased materials before using the materials that were purchased first. Class codes, categories, units of measure, suppliers, and other information must be defined before adding parts information to the database.

Creating parts

Create parts to identify parts, assets, and tools that can be entered into inventory. When creating parts, you can classify and categorize parts; identify serialized parts; and specify tax codes, warranty information, tracking methods, buyers, and preferred suppliers to facilitate the requisition and purchasing process. You can also designate parts as core tracked parts. Core tracked parts are issued and returned like regular parts; however, a core tracked part can also be repaired or reconditioned like a piece of equipment. When a part is flagged as core tracked, you can set up repair details on the **Parts** form to indicate how the part is to be repaired. Core tracked parts can be repaired internally on work orders or externally on purchase orders.

The pricing level of a part is set at either the part level or the stock level, but the prices are always set on the **Part** form. Price level determination is defined by the PRICELEV installation parameter. If the PRICELEV installation parameter is set to P, then define prices on the part level. If PRICELEV is set to S, then define prices on the store level.

If PRICELEV is set to P and you are not using multi-organization security (MOS), you can set prices on the **Record View** page of the **Parts** form. If you have set the PRICELEV installation parameter to P and you are using MOS, you must set prices on the **Prices** page of the **Parts** form.

If the PRICELEV is set to S, you must set prices on the **Stores** page of the **Parts** form regardless of whether you are using MOS.

If you are using FIFO or LIFO as your pricing method, PRICELEV must be set to S. For LIFO/FIFO pricing, the system creates a receipt transaction that automatically updates and inserts records into the R5BINSTOCK and R5FIFO tables when you receive a part to store to ensure that the appropriate unit price is used for each subsequent issue transaction. Because receipt transactions require a supplier, the system automatically inserts an asterisk (*) as the supplier for the receipt.

See "Understanding time-based inventory valuation (LIFO/FIFO)."

The PRICETYP installation parameter is a fixed parameter that determines the default price type that the system uses to process storeroom transactions for parts. The default value for PRICETYP is A (Average price). The system administrator can set PRICETYP to S (Standard price), L (Last price), LIFO (last in first out price), or FIFO (first in first out price) depending on the setting of the PRICELEV installation parameter.

To create parts:

1. Select **Materials > Parts**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Enter the organization to which the work order belongs if you use multi-organization security.

   Part
   Specify a unique code identifying the part, and then enter a description of the part in the adjacent field. The system automatically populates **Primary Manufacturer** and **Primary Manufacturer Part Number** if the selected part has a record with **Primary** selected on the **Manufacturers** page.
   Note: If the AUTOPNUM installation parameter is set to YES, the system automatically assigns a part number after you save the record if no Part code is entered.

   If you need to change the Part number, click **Change Part Number**.

Class
Specify the class of the part. The classes shown belong to the PART entity.

Category
Specify the category.

Tool
Specify a tool for the part to identify the part as a tool. Identifying a part with a **Tool** enables you to issue and return tools and track tool usage for the part. Tools are defined on the **Tools** form.
Note: If **Track by Asset** is selected for the part, then the tool is also equipment. If **Track by Asset** is not selected, then the tool is only considered a part.

UOM
Specify the part's unit of measure.

Commodity
Specify the commodity if the part is considered a commodity. Entering a commodity code for a part enables you to segregate parts into broad groups for purchasing and inventory. These groups can include wiring, office supplies, and safety equipment.

Secondary Commodity
Specify the secondary commodity if the part is considered a commodity within more than one commodity group. Entering a secondary commodity code for a part enables you to further segregate parts into multiple groups for purchasing and inventory. These groups can include wiring, office supplies, and safety equipment.

Documoto Book ID
Specify a specific Documoto Book with which to associate the part.

Documoto Part ID
Specify a unique Documoto part number.

Track by Asset
Select to track parts by asset number or serial number. Tracking parts by asset indicates that parts are pieces of equipment.
Note: If you select **Track by Asset**, you must first receive the part and then enter a unique serial number for each part upon receiving the part.

Track by Lot
Select to track parts by lot number. If you select a Lot, then a lot number will be required for all material transactions involving the part.

Track as Kit
Select to track the part as a kit part.

Track as Kit must be selected to include the part on a kit template.

Calibration Standard
Select to indicate the part is used as a standard for calibration.

Track Cores
Select this checkbox if the part is a core tracked part. Core tracked parts can be repaired internally on work orders or externally on purchase orders.
Note: If **Track Cores** is selected, **Track as Kit** and **Fugitive Gas** cannot also be selected.

Out of Service
Select if you do not want the part to appear in the parts lookup elsewhere in the system.

Tax Code
Specify the tax to apply to the part. The values in this lookup come from a previously defined tax structure.

Insp. Method
Specify the inspection method for the part.

Insp. Required
Select to indicate that an inspection is required for the part when it is received on the **PO Receipts** form.

System Level
Specify the VMRS code identifying the system level for the part.

Assembly Level
Specify the VMRS code identifying the assembly level for the part.
Note: You cannot enter an **Assembly Level** unless you entered a **System Level**.

Component Level
Specify the VMRS code identifying the component level for the par
Note: You cannot enter a **Component Level** unless you entered an **Assembly Level**.

Tracking Method
Select one of the tracking options:

Option	Description
Stock	Use stocked, quantity tracked, and amount tracked for normal, stocked parts.
Expense	Use stocked, quantity tracked, and amount not tracked for devalued spare parts. These parts are issued at no cost.
Non-stock	Use non-stock, not tracked, expedited ordering for expediting the parts procurement process.

Warranty Days
Enter the number of days the part is under warranty.

Save History
Select to capture historical inventory valuation data for the part in the parts daily snapshot (PDS).

Prevent Reorders
Select to prevent this part from being reordered.

Fugitive Gas
Select to track gas emissions for the part.

Part Hierarchy
Specify the part code hierarchy level to attach to the part.

Profile Name
Specify the profile to attach to the part.

Department
Specify the department to attach to the part.

Equipment Class
Specify the equipment class to attach to the part.

Manufacturer
Specify the manufacturer of the part.

Model
Specify the model of the part.

Revision
Specify the revision number for the part.

Variable 1, Variable 2, Variable 3, Variable 4, Variable 5, Variable 6
Specify any additional information about the part as necessary.

Buyer
Specify the part's buyer. Buyer assigns a particular person to buying functions for the part.

Preferred Supplier
Specify the part's primary supplier if the system automatically generates requisitions for this part. The system automatically populates **Supplier Price**, **Supplier UOM**, and **Qty. per UOP** if they have been added to the supplier's catalog. If you enter a **Preferred Supplier** with no catalog records, the system automatically creates a record of the part in the supplier's catalog. You can update part details for the supplier on the **Suppliers** page.
Note: If the MULTIORG installation parameter is set to YES, part pricing is organization specific, and **Price Type**, **Average Price**, **Last Price**, **Standard Price**, and **Core Value** are read-only.

If the PRICELEV installation parameter is set to S, part prices are recorded at the stock level on the **Stores** page of the **Parts** form, and **Price Type**, **Core Value**, **Average Price**, **Standard Price**, and **Last Price** are read-only. Part pricing at the stock level enables you to maintain different prices for the same part in different stores.

If the PRICELEV installation parameter is set to P, part prices are recorded at the part level. Complete steps 32-36.

Price Type
Select the price type for the part. The system automatically populates **Price Type** depending on the setting of the PRICETYP installation parameter.
Note: If PRICETYP is set to LIFO or FIFO, the system does not display last in first out or first in first out as a price type because LIFO/FIFO is not available for part pricing when prices are set at

the part level. You must select Average price, Last price, or Standard price as the price type for the part.

Core Value
Enter the value of the part when it needs repair.

Average Price
Specify the average price paid for the part if prices are based on the average price paid.

Standard Price
Specify the standard price for the part if prices are based on standard price.

Last Price
Specify the last price paid for the part if prices are based on last price paid.

Track by Condition
Select this checkbox if the part should be tracked by condition. If **Track by Condition** is not selected when the part is created, you cannot select the checkbox after the part has been created.
Note: When creating parts, you cannot select **Track as Kit** or **Fugitive Gas** if **Track by Condition** is selected. However, it is possible to build a kit then add the parts that you have designated as track by condition to the kit template.

Part Condition Template
Specify the part condition template for the part. The system automatically populates **Part Condition Template Org.**.

4 Click **Save Record**. If a review has been performed on the **Safety** tab, the system automatically populates **Safety Date Review Required** and **Safety Reviewed By**.

Defining multiple prices of parts (MOS)

With multi-organization security (MOS), centrally maintain prices of parts used across organizations. Often companies have multiple organizations with different currencies for each organization.

When you are using MOS, you can enter multiple prices for a part that belongs to a common organization. However, you can only enter one price for a part that belongs to a specific organization.

If PRICELEV is set to P and MULTIORG is set to NO, then set prices on the **Record View** page of the **Parts** form. If PRICELEV is set to S, set prices on the **Stores** page of the **Parts** form regardless of the setting of the MULTIORG parameter. The PRICELEV installation parameter is fixed.

To define multiple prices of parts (MOS):

1 Select **Materials > Parts**.
2 Select the part for which to define prices, and then click the **Prices** tab.
3 Click **Add Price**.
4 Specify this information:

Organization
Specify the organization to which the part price belongs.

Note: The system only displays organizations to which you have access. If the part belongs to a common organization, the system displays all valid specific organizations for the logged in user. If the part belongs to a specific organization, the system displays only that organization.

Price Type
Select the price type for the part.

Condition
Specify the condition if the part is a condition tracked parent part. The system automatically populates **Part** and **Part Org.** If the part is a condition tracked child part, the system automatically populates **Condition**, **Part**, and **Part Org.**

Core Value
Specify the value of the part when it needs repair.

Average Price
Specify the average price of the part if prices are based on average price.

Standard Price
Specify the standard price of the part if prices are based on standard price.

Last Price
Specify the last price paid for the part if prices are based on last price paid. The system automatically populates the currency in the field adjacent to **Average Price**, **Last Price**, and **Standard Price** with the currency of the part's organization.

5 Click **Submit**.

Note: To delete a price, select the price to delete, and then click **Delete Price**.

To modify the part number, click **Change Part Number** on the **Record View** page.

Defining sales prices for parts

Sales prices can be defined for specific parts to create invoice lines using a fixed sales price rather than use the actual work order costs tracked by the system, like part issues, time sheets, tool costs, etc.

To define sales prices for parts:

1 Select **Materials > Parts**.
2 Select the part for which to define sales prices, and then click the **Sales Prices** tab.
3 Click **Add Record**.
4 Specify this information:

Organization
Specify the organization of the part.

Store
Specify the store to which the part belongs.

Sales Price
Specify the sales price for the selected part.

Date Effective
Specify the date this sales price will become effective for the part.

5 Optionally, specify the **Condition** of the part if it is a condition tracked part.
6 Click **Submit**.

Associating manufacturers with parts

Associate manufacturers with parts. You can have multiple manufacturers for a part within an organization.

You must define manufacturers on the **Manufacturers** form before associating them with parts.

To associate manufacturers with parts:

1 Select **Materials > Parts**.
2 Select the part for which to associate manufacturer information, and then click the **Manufacturers** tab.
3 Click **Add Manufacturer**.
4 Specify this information:

Manufacturer
Specify the manufacturer for the part. The system automatically populates **Manufacturer Org.**

Manufacturer Part Number
Specify the manufacturer's part number for the part

Condition
Specify the condition if the part is a condition tracked parent part. The system automatically populates **Part** and **Part Org.** If the part is a condition tracked child part, the system automatically populates **Condition**,**Part**, and **Part Org.**

Drawing Number
Specify the drawing number if a drawing of the part is available.

Documoto Book ID
Specify a specific Documoto Book with which to associate the manufacturer.

Documoto Part ID
Specify a unique Documoto part number.

Out of Service
Select if you do not want the system to display the manufacturer part number in the manufacturer part number lookups.

Primary
Select to indicate that the manufacturer is the primary manufacturer of the part.

5 Click **Submit**.

Note: To delete a manufacturer, select the manufacturer to delete, and then click **Delete Manufacturer**. The system does not delete the record if the manufacturer and the manufacturer part number are selected on the **Stores** page of the **Parts** form as the **Primary Manufacturer** or **Primary Manufacturer Part Number**.

Associating suppliers with parts

Associate suppliers with parts. You can have multiple suppliers for a part within an organization. Additionally, suppliers may also have different methods for distributing parts, such as their own unique units of measure. If a supplier's unit of measure for selling a part is different than the unit of measure of the part in inventory, you must establish the conversion factor for the part to create the appropriate unit of measure for an issue. You can also identify the supplier's catalog number for the part, supplier's part description, as well as other information pertaining to supplier's price, currency, and minimum order quantity.

The reference between suppliers and parts is created automatically when generating purchase orders. The system verifies the supplier and notifies you if a supplier is not recorded for a specific part. You may still proceed with a transaction after such a warning. If you do proceed, the system automatically creates a new reference for the part with the supplier.

You must define suppliers on the **Suppliers** form before associating them with parts.

To associate suppliers with parts:

1 Select **Materials > Parts**.
2 Select the part for which to define supplier information, and then click the **Suppliers** tab.
3 Click **Add Supplier**.
4 Specify this information:

Supplier
Specify the supplier for the part. The system automatically populates **Supplier Org.** and **Tax Code**.

Supplier Part Desc.
Specify the supplier's description of the part.

Condition
Specify the condition if the part is a condition tracked parent part. The system automatically populates **Part** and **Part Org.** of the part associated to the selected **Condition**. If the part is a condition tracked child part, the system automatically populates **Condition**,**Part**, and **Part Org.**

Catalog Reference
Specify the supplier's part number. It may be identical to the existing part number.

Cost Code
Specify the cost code with which to associate the cost of the part.

Gross Price
Specify the supplier's price for the part without discounts or additional fees.

Repair Price
Specify the supplier's repair price for the part if the part is core tracked.
Note: Repair Price is only enabled if the **Part** for which you are entering a supplier record is core tracked.

If you entered an **Internal Repair Price** for a part on the **Repair Details** page of the **Parts** form, the system retrieves the **Repair Price** from the repair details for the part. If you did not specify an Internal **Repair Price**, the system retrieves the **Base Price** of the part for the **Repair Price**.

Preferred
Select to indicate that the supplier is the preferred supplier of the part.

Minimum Order Qty.
Specify the supplier's minimum order quantity for the part.

UOP
Select the supplier's unit of purchase for the part.

Qty. per UOP
Specify the conversion factor if the purchase unit of measure is different from the inventory unit of measure.

Lead Time (Days)
Specify the average number of days that the supplier needs to provide the ordered goods.

Repair Part Number
Specify the supplier's repair part number for the part if the part is core tracked.
Note: Repair Part Number is only enabled if the **Part** for which you are entering a supplier record is core tracked.

Documoto Book ID
Specify a specific Documoto Book with which to associate the supplier.

Documoto Part ID
Specify a unique Documoto part number.

Expiration Date
Specify the expiration date for the part and supplier. This is just a "catalog" date, and the date entered indicates the date on which the supplier's catalog information for the part should be replaced with a new catalog entry (new price, number, etc.).

Tax Code
Specify the tax code for the supplier.

5 Click **Submit**. The system automatically populates **Net Price**.

Note: The system calculates the **Net Price** by adjusting the **Gross Price** for any discounts or additional fees for the part.

The system inserts the current date in **Date Last Updated** and calculates **Local Price** based on the currency of your organization with the following equation:

```
(Gross Price / Exchange Rate) / Qty. per UOP = Local Price
```

To delete a supplier, select the supplier to delete, and then click **Delete Supplier**.

To add iProcure item association, click **Add iProcure Item Association**.

To update iProcure items in the parts catalog, click **Update iProcure Items**.

To update selected iProcure items in the parts catalog, click **Update Selected iProcure Items**.

To view iProcure sync errors, click **View iProcure Sync Errors**. View the errors, and then click **Close**.

Associating alternate supplier catalog references for parts

Alternate supplier catalog references allow customers to keep a record of past catalog reference numbers for a specific part.

To associate alternate supplier catalog references for parts:

1. Select **Materials > Parts**.
2. Select the part for which to create an alternate catalog reference of parts, and then click the **Suppliers** tab.
3. Click **Alternate Catalog of References**.
4. Click **Add Catalog Reference**.
5. Specify this information:

   Catalog Reference
   Specify the supplier catalog reference to which to associate to the supplier.

   Notes
   Specify notes for the catalog reference as necessary.

6. Click **Submit**.

   Note: To delete an alternate catalog reference, select the alternate catalog reference to delete, and then click **Delete Catalog Reference**.

Adding safety data to parts

Add safety data to parts to inform your employees of any hazardous situation that can cause bodily harm and of the precautions to take to protect themselves from these hazards. For example, you can add a precaution to wear a safety harness when you identify a working at heights hazard. After adding the safety data, review and verify the record by clicking the **Reviewed By** icon. The review fields will be automatically populated after you review the record.

To add safety data to parts:

1. Select **Materials > Parts**.
2. Select the part for which to add safety data, and then click the **Safety** tab.
3. Specify this information:

   Hazard
   Specify the hazard to add to the part. The system automatically populates **Hazard Org.**, **Hazard Type**, and the hazard description.

Precaution
Specify the safety measure to protect your employees from the hazard. The system automatically populates **Precaution Org.** and the precaution description.

Timing
Select the timing which is used to identify when the precaution should be taken. For example, if your employee is working with fire, you can enter the timing of pre-work to alert the employee that they should wear fire-resistant clothing before beginning the task.

Sequence
Specify the sequence number which is used to identify the order in which your employee should be made aware of the precaution. All precautions are important regardless of the sequence number entered.

Health Hazard
Specify the health hazard for the part.

Flammability
Specify the flammability safety measure for the part.

Instability
Specify the instability safety measure for the part.

Special Hazards
Specify the special hazards for the part.

4 Click **Submit**. The system automatically populates **Created By**, **Date Created**, **Updated By**, **Date Updated**, **Reviewed By**, **Reviewed by Name**, **Date Reviewed**, and **Review Type**.

Creating repair details for core tracked parts

Create repair details for core tracked parts to enter detailed information about repairing or reconditioning a part. The repair details for a core tracked part specify whether a part is to be repaired internally or externally, and they include additional information used to generate repair work orders or external repair requisition lines.

Understanding the auto-assignment processes for core tracked parts

The assignment process for a core tracked part denotes a bin location from which the system is to take a part for repair, not a location in which to place a part for repair. The system can either automatically assign repair details or you can manually assign repair details. The manner in which the system auto-assigns core tracked parts will vary depends on the **Auto-Assign** setting and quantities available for repair in bin locations.

If you specify a **Store** and set up a **Default Core Bin**, the system assigns the **Qty. to Repair** from the **Default Core Bin** (from which the **Bin**, **Lot**, and **Asset** are specified for the repair parts), and updates the **Qty. Assigned**. The system updates the **Repair Details** page of the **Parts** form and moves the **Core Qty.** to the **Qty. at Shop**. If the system cannot find enough parts for repair in the **Default Core**

Bin or if no parts are located in the **Default Core Bin** or if you do not select a **Default Core Bin** on the **Repair Details** page of the **Parts** form, the system assigns details from other bin locations.

Creating repair details for core tracked parts to be repaired internally

Create repair details for core tracked parts to be repaired internally on **Repairable Spare Type** work orders. If you select to generate work orders for repairable cores on the **Generate/Release WOs** form, the system checks to see if there is a **Core Qty.** specified for any parts in inventory for which you have entered repair details. If so, the system generates a work order for the repairable core part based on the specified repair details for the part.

The system updates the stock record for the part in the selected store with the repair details.

To create repair details for core tracked parts to be repaired internally:

1. Select **Materials > Parts**.
2. Select the part for which to create repair details, and then click the **Repair Details** tab.
3. Select the store for which to create repair details for this core tracked part.
4. Specify this information:

   Internal Repair
   Select to repair the part internally.
   Note: If you select **External Repair** after saving the repair details as an **Internal Repair**, the system displays a confirmation message asking whether you wish to continue. If you select to continue, the system clears **WO Equipment**, **Department**, and **Standard WO**. The system enables **Supplier**, **Lead Time (Days)**, and **Min. Repair Qty**.

   WO Equipment
   Specify the work order equipment for the core tracked part.

   Department
   Specify the department for the repair work order.
   Note: If you enter a value for **WO Equipment**, the system automatically populates **Department**. Modify **Department** as necessary.

   Standard WO
   Specify the standard work order for repairing the part.

   Internal Repair Price
   Specify the cost of repairing the part internally. The system automatically populates **Core Value** with the value entered on the **Stores** tab.

   Default Core Bin
   Specify the default core bin to which to return the broken core tracked part.

   If you specify a **Default Core Bin**, the system automatically returns the broken core tracked part to the specified bin location when you return it for repair from any form on which you can return a part for repair.

   Note: Infor strongly recommends using the **Default Core Bin** feature to reduce the number of manual steps required to manage your core tracked data. Specifying a **Default Core Bin** in the repair details eliminates the need to manually enter a bin location for returning the broken part when you actually return the part for repair.

Use Stock Method
Select to generate the quantity to repair based on the default stock method specified for the part in the store.

If you select **Use Stock Method**, the system calculates the **Qty. to Repair** based on the stock replenishment method specified for the part in the holding store. For example, you selected Min/Max as the stock method for the part and you specified 5 as the **Minimum Qty.** and 10 as the **Maximum Qty.** for the part. The current **Quantity** of the part on hand is 4 and the **Core Qty.** is 9. When you generate an internal repair work order for the part, the system calculates the **Core Qty.** as 6 parts rather than 9 to update the**Qty. on Hand** of the part in stock to the specified maximum of 10.

The**Core Qty.** represents the total number of core parts that are currently in a store. The system calculates the **Qty. to Repair**, which is the total number of parts that must be repaired and can be less than the **Core Qty.** depending on the current stock/repair levels for the part.

Auto-Assign
Select to indicate that the system automatically assign parts for repair from the specified **Default Core Bin** when generating a repairable core work order or requisition.

If you select **Auto-Assign**, the system attempts to assign the number of parts in **Qty. to Repair** from the specified **Default Core Bin** when generating repair work orders or requisitions. If there are parts to be repaired in the **Default Core Bin**, the system automatically assigns the parts from the bin location to the work order or requisition first. When the system assigns all of the parts for repair located in the **Default Core Bin** or if no parts are located in that bin, the system then checks other bin locations for the parts to assign to the work order or requisition.

Note: The assignment process for a core tracked part denotes a bin location from which a part is to be taken for repair, not a location in which to place a part for repair.

5 Click **Submit**.

Note: If you are using LIFO/FIFO as your pricing method and the RPPRCCAL installation parameter is set to NO, the system protects the internal repair price and records the base price of the part in the **R5FIFO** table.

Creating repair details for core tracked parts to be repaired externally

Create repair details for core tracked parts to be repaired externally. External repairs are initiated using external repair requisitions submitted to a supplier who will repair the part. If you select to generate external repair requisitions on the **Generate Requisitions** form, the system checks to see if there is a **Core Qty.** specified for any parts in inventory for which you have entered repair details. If so, the system generates a requisition for the core tracked part based on the specified repair details for the part.

The system updates the stock record for the part in the selected store with the repair details.

To create repair details for core tracked parts to be repaired externally:

1 Select **Materials > Parts**.
2 Select the part for which to create repair details, and then click the **Repair Details** tab.
3 Select the store for which to create repair details for this core tracked part.
4 Specify this information:

External Repair
Select to send the part to an external supplier for repair.
Note: If you select **Internal Repair** after saving the repair details as an **External Repair**, the system displays a confirmation message asking whether you wish to continue. If you select to continue, the system clears **Preferred Supplier**,**Lead Time (Days)**, and **Min. Repair Qty**. The system enables **WO Equipment**, **Department**, and **Standard WO**.

The system automatically populates **Core Value** with the value entered on the **Stores** tab.

Default Core Bin
Specify the default core bin to which to return the broken core tracked part.

If you specify a **Default Core Bin**, the system automatically returns the broken core tracked part to the specified bin location when you return a broken core tracked part from any form from which you can return a part for repair.

Note: Infor strongly recommends using the **Default Core Bin** feature to reduce the number of manual steps required to manage your core tracked data. Specifying a **Default Core Bin** in the repair details eliminates the need to manually enter a bin location for returning the broken core tracked part when you actually issue/return the part for repair.

Preferred Supplier
Enter the preferred supplier for which to generate the requisition for repair.

Lead Time (Days)
Specify the lead time for the core tracked part in days. The specified lead time is added to the date requested (system date) to determine the amount of additional lead time necessary for processing the repair.

Min. Repair Qty.
Specify the minimum quantity for repair that will trigger the generation of a requisition for the core tracked part.

Auto-Assign
Select to indicate that the system automatically assign parts for repair from the specified **Default Core Bin** when generating a repairable cores work order or requisition.

If you select **Auto-Assign**, the system attempts to assign the number of parts in **Qty. to Repair** from the specified **Default Core Bin** when generating repair work orders or requisitions. If there are parts to be repaired in the **Default Core Bin**, the system automatically assigns the parts from the bin location to the work order or requisition first. When the system assigns all of the parts for repair located in the **Default Core Bin** or if no parts are located in that bin, the system then checks other bin locations for the parts to assign to the work order or requisition.

Note: The assignment process for a core tracked part denotes a bin location from which a part is to be taken for repair, not a location in which to place a part for repair.

5 Click **Submit**.

Note: If you are using LIFO/FIFO as your pricing method and the RPPRCCAL installation parameter is set to NO, the system protects the internal repair price and records the base price of the part in the **R5FIFO** table.

Defining substitute parts

Define parts that can be substituted for other parts. Parts do not have to be substituted in a one-to-one relationship. You cannot add a substitute part to a condition tracked parent part. However, you can associate substitute parts to condition tracked child parts.

To define substitute parts:

1. Select **Materials > Parts**.
2. Select the part for which to define a substitute, and then click the **Substitutes** tab.
3. Click **Add Substitute**.
4. Specify this information:

   Substitute Part
   Specify the part to serve as a substitute. The system automatically populates the part description and **Substitute Part Org.**

   Condition
   Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

   Fully Compatible
   Select to indicate the original and substitute parts that can serve as substitute parts for each other. For example, if you define Part A as a substitute for Part B and select **Fully Compatible**, the system automatically displays Part B as a substitute for Part A as well.
   Note: To remove a substitute, select the substitute to remove, and then click **Remove Substitute**.

   If you remove a substitute that was specified as Fully Compatible, the system removes the association for both parts. For example, Part A is not a substitute for Part B and Part B is not a substitute for Part A.

Changing part numbers

Modify part numbers/codes for temporary part numbers or existing parts.

During the requisition and purchase order process, the system assigns a temporary part number to a part to prevent the part from appearing in the parts catalog several times with different part numbers. System-generated part numbers begin with the character "N." Allocate a new part number to one of the system-generated temporary part numbers or change the temporary number to an existing part number. The system retains the part information from the purchase order and creates a new part record.

Additionally, many companies assign part codes to parts in their part catalog based on a supplier's catalog number for the part. Frequently, a supplier's catalog is updated or changes over time, so an existing part in your part catalog may lose its association with the supplier catalog number. Therefore, you may need to update an existing part code to retain the purchasing history and historical information for the part, rather than creating a new part to associate with the updated supplier catalog numbers.

When you modify condition tracked parent part numbers, the system automatically changes the part numbers for the condition tracked child parts. The last two characters (**Suffix Separator** and **Suffix Code**) of the child part number must remain unchanged.

Note: If installation parameter AUTOPNUM is set to Yes, you may change a temporary or existing part number; however, the system automatically changes the part number to the next available part number within the system.

To change part numbers:

1. Select **Materials > Parts**.
2. Select the part for which to modify the part number, and then right-click on the form in the **Record View**.
3. Select **Change Part Number**.
4. Specify this information:

   Class
   Specify the part class. The system automatically populates **Class Org.**

   New Part
   Specify the new part number. The system automatically populates **New Part Org.** and **New Part Description** based on the current organization and description of the part.
   Note: You may either enter an existing part number or enter a part number that does not exist currently in the system by typing the number in **New Part**.

   The new part number cannot begin with the character "N" followed by a number.

   Use Auto-number
   Select to have the system automatically assign the next available part number as the new part number.
   Note: If you select **Use Auto-number**, the system protects **New Part**. You cannot enter a new part number.

5. Click **Submit**.

Viewing part number history

View all modifications of part numbers.

To view part number history:

1. Select **Materials > Overview > Part Number History**.
2. Specify this information:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy to view records. The system applies the Dataspy to the list view, and displays the records.

3. View the part number history.

Viewing part reservations for stores

View part reservations for parts in store that are reserved or allocated.

To view part reservations for stores:

1 Select **Materials > Setup > Stores**.
2 Select the store for which to view part reservations, and then click the **Reservations** tab.
3 View the reservations for the part in the selected store.

Viewing the monthly part usage chart

The monthly part usage chart shows the part usage for the current month and the previous five months.

To view the monthly part usage chart:

1 Select **Materials > Parts**.
2 Select the part for which to view the monthly usage, and then click the **Monthly Part Usage Chart** tab.
3 Specify the **Store**.
4 Click **Submit**.

Viewing archived transactions for parts

View archived transactions for parts.

To view archived transactions:

1 Select **Materials > Parts**.
2 Select the part for which to view archived transactions, and then click the **Archived Transactions** tab.
3 View the archived transactions.

Defining and managing manufacturer information

Manufacturer information is more than a listing of manufacturers of parts. You can associate manufacturers with parts in a concise and organized manner and attach other relevant information relating to manufacturers and parts, e.g., drawing numbers, manufacturer part numbers, and local part numbers. Complete supplier information on the **Supplier** form prior to defining manufacturers and parts information.

Defining manufacturer information

To define manufacturer information:

1 Select **Materials > Setup > Manufacturers**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the manufacturer belongs if you use multi-organization security.

Manufacturer
Specify a unique code identifying the manufacturer, and then enter a description of the manufacturer in the adjacent field.

Class
Specify the class of the manufacturer. The classes shown belong to the MANU entity. The system automatically populates **Class Org.**

Supplier
Specify the manufacturer's supplier. The system automatically populates **Supplier Org.**

Out of Service
Select if the manufacturer is out of service.

4 Click **Save Record**.

Associating parts with a manufacturer

Associate parts with a manufacturer record. If you have multiple parts for one manufacturer, the system allows you to associate each of them with that manufacturer. For each part that you associate with a manufacturer, enter your part code and the manufacturer's part code. The system will automatically cross-reference the manufacturer's part codes with your part codes based on the information you provide.

To associate parts with a manufacturer:

1 Select **Materials > Setup > Manufacturers**.
2 Select the manufacturer for which to associate parts, and then click the **Parts** tab.
3 Click **Add Part**.
4 Specify this information:

Part
Specify your part code. The system automatically populates the part description and **Part Org.**

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Manufacturer Part Number
Specify the manufacturer part code

Out of Service
Select if you do not want the system to display the manufacturer part number in the manufacturer part number lookups.

Drawing Number
Specify the drawing code if a drawing of the part is available.

Documoto Book ID
Specify a specific Documoto Book with which to associate the manufacturer.

Documoto Part ID
Specify a unique Documoto part number.

5 Click **Submit**. Add additional parts as necessary.

Note: To delete a part from the Parts list, select the part to delete from the list, and then click **Delete Part**.

The system does not delete the record if the manufacturer and the manufacturer part number are selected on the **Stores** page of the **Parts** form as the **Primary Manufacturer** or **Primary Manufacturer Part Number**.

Defining and managing supplier information

Large maintenance organizations deal with many suppliers. There are suppliers for parts, equipment, services, rentals, office supplies, and more. The **Suppliers** form is the primary form for setting up a supplier network. Within this form, establish a list of suppliers, create a catalog of parts provided by specific suppliers, and list contacts for suppliers. You can also associate addresses for suppliers.

You can also create a supplier hierarchy to establish parent/child relationships between suppliers. When creating a supplier hierarchy, you cannot designate a supplier as a parent supplier if the supplier is already designated as a child in a supplier hierarchy. Additionally, a supplier cannot have multiple parent suppliers, nor can a supplier be parent supplier to itself within a supplier hierarchy. For example, you create supplier records for the following three suppliers: AMG INC, HARTFORD BOILERS, and SOUTHEASTERN. To create a supplier hierarchy, you select AMG INC as the parent supplier for both HARTFORD BOILERS and SOUTHEASTERN. Because HARTFORD BOILERS and SOUTHEASTERN are designated as children of AMG INC, neither can be selected as a parent supplier in any other supplier hierarchy, nor can they be designated as a child to any other supplier in another supplier hierarchy.

After defining supplier information, you can update information for both suppliers and their catalogs as necessary; however, you cannot delete a supplier record or a record from a supplier's catalog if they have been associated with another record within the system.

Defining suppliers

Define suppliers to create records for the suppliers in your supplier network.

Purchase Site and **Service Provider** indicate whether you can purchase materials and/or services from the supplier. If you unselect **Purchase Site**, you cannot select the supplier for purchase orders for materials. Likewise, if you unselect **Service Provider**, you cannot select the supplier for purchases for services or labor.

Additionally, you can specify minimum and maximum order values for the supplier to establish limits for purchasing from this supplier. You are prevented from creating purchase orders for the supplier if you exceed the specified maximum or fail to meet a minimum order value for purchasing materials or services.

To define a supplier:

1 Select **Materials > Setup > Suppliers**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the supplier belongs if you use multi-organization security.

Supplier
Specify a unique code identifying the supplier , and then enter the supplier's name in the adjacent field.

Language
Select the supplier's language.

Currency
Specify the supplier's currency.

Class
Specify the class of the supplier. The classes shown belong to the COMP entity.

Out of Service
Select to indicate that you no longer wish to use this supplier. If you select **Out of Service**, the system retains the record; however, it will no longer display the supplier in the lookups from which you select suppliers on any other forms within the system.

Status
Specify a status to categorize the supplier by status. Define the status field for any purpose (e.g., enter AC if the supplier is being actively used). The status is for your informational use only.

iProcure Vendor
Specify the vendor to associate with the supplier for use with iProcure transactions.

Account Number
Specify the supplier's iProcure account number.

Purchase Site
Select to indicate that you purchase goods from this supplier. Selecting **Purchase Site** inserts the supplier into the lookup from which you select suppliers on any other forms within the system. Unselect to indicate that the supplier is only for purchasing labor or services.

Parent Supplier
Specify the parent company. Using the "Parent" attribute, you can indicate whether a supplier is part of a larger organization. Parent/child supplier relationships can be established for information only.
Note: You cannot designate a supplier as a parent supplier if the supplier is already designated as a child in a supplier hierarchy. Additionally, a supplier cannot have multiple parent suppliers, nor can a supplier be a parent supplier to itself within a supplier hierarchy.

Lead Time (Days)
Specify the average number of days the supplier needs to provide the ordered goods or services.

Real-time Info
Select to indicate that the supplier provides real-time information for the items they supply via iProcure.

Service Provider
Select to indicate that the supplier provides services. Unselect to indicate that the supplier is only for purchasing materials. If unselected, the supplier cannot be selected for purchasing or requisitioning labor.

Min. Order Value
Specify the minimum order amount.

FOB Point
Specify the supplier's free on board shipping point.

Ship Via
Specify the supplier's method of shipping.

Payment Method
Specify the supplier's preferred method of payment.

Max. Order Value
Specify the maximum order amount.

Payment Terms
Specify the supplier's payment terms.

Freight Terms
Specify the supplier's freight terms.

Buyer
Specify the primary buyer for this supplier.

Contact Name
Specify the primary supplier contact.

Telephone, Fax Number
Specify the supplier's phone and fax numbers.

E-mail Address
Specify the supplier contact's e-mail address.

Our Contact
Specify the supplier's primary contact for your organization, which is generally the corporate buyer.

EDI Number
Specify the supplier's electronic data interchange (EDI) number for processing electronic transaction information.

Customer
Select to indicate the supplier is a customer. Selecting **Customer** inserts the supplier into the lookup from which you select customers on any other forms within the system. If **Customer** is unselected, the supplier cannot be selected for customer contracts or rentals.

Customer Account Code
Specify the supplier's customer account code.

Customer Cost Center
Specify the supplier's customer cost center.

Tax Code
Specify the supplier's tax code.

4 Click **Save Record**.

Defining contacts for suppliers

Define contacts to have a reference library of contacts for each supplier. Maintain a list of supplier contacts for various purposes such as customer service, shipping, and billing, in addition to the primary contact specified on the **Record View** page of the **Suppliers** form.

To define contacts for suppliers:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier for which to define contacts, and then click the **Contacts** tab.
3 Click **Add Contact**.
4 Specify the **Sequence** number to associate with the contact.
5 Specify the contact's **Name**, **Address 1**, **Address 2**, **City**, **State**, **Zip Code**, **Primary Email**, **Secondary Email**, **Primary Phone**, **Secondary Phone**, **THird Phone**, **Primary Fax**, **Secondary Fax**, **Email Fax**, and **Preferred Contact Method**.
6 Select the **Out of Service** check box if the contact is out of service.
7 Click **Submit**.

Copying suppliers

Copy a supplier including all details to a new supplier.

To copy suppliers:

1 Create a supplier.
   See "Defining suppliers."
2 Right-click anywhere on the **Suppliers** form, and then select **Copy Supplier**.
3 Specify this information:

New Supplier
Specify the name of the new supplier. The system automatically populates the **New Supplier** description.

4 Select the record types to copy, and then click **Submit**.

Creating a supplier catalog

Create a supplier catalog to establish and maintain a list of the materials provided by a supplier.

To create a supplier catalog:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier for which to create a catalog of parts, and then click the **Parts** tab.
3 Click **Add Part**.
4 Specify this information:

Part
Specify the part to add to the requisition. The system automatically populates **Part Org.**, **Exchange Rate**, and **Date Last Updated**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Supplier Part Desc.
Specify the supplier's description of the part.

Catalog Reference
Specify the supplier's part number. It may be identical to the existing part number.

Cost Code
Specify the cost code with which to associate the cost of the part.

Gross Price
Specify the supplier's price for the part without discounts or additional fees. After adjusting gross price for discounts and additional fees, the system updates **Net Price** and calculates **Local Price** based on the currency of the organization with the following equation:

```
(Price / Exchange Rate) / Qty. per UOP = Local Price
```

Repair Price
Specify the supplier's price for repairing the part.
Note: Repair Price is only enabled if the **Part** is core tracked.

Tax Code
Specify the tax code for the part that identifies the tax structure to apply all of the applicable taxes to purchases of this part

Preferred Supplier
Select to indicate that this supplier is the preferred supplier of the part.

Expiration Date
Specify the expiration date indicating the date on which the supplier's catalog information should be replaced with a new catalog entry such as new price, part number, etc.

Comments
Specify comments for the supplier/part combination as necessary.

Minimum Order Qty.
Specify the minimum quantity of the part that you can order from this supplier.

UOP
Specify the unit of measure of purchase for the part.

Qty. per UOP
Enter the conversion factor if the purchase unit of measure is different from the inventory unit of measure.

Lead Time (Days)
Enter the average number of days that the supplier needs to provide the ordered goods.

Repair Part Number
Enter the number/code for the supplier who will actually be repairing the part.
Note: Repair Part Number is only enabled if the **Part** is core tracked.

Documoto Book ID
Specify a specific Documoto Book with which to associate the part.

Documoto Part ID
Specify a unique Documoto part number.

5 Click **Submit**.

Note: To delete a part, select the part to delete, and then click **Delete Part**.

The system automatically populates the **Date Last Updated** with the system date of the most recent changes to the part record.

To add iProcure item association, click **Add iProcure Item Association**.

To update iProcure items in the parts catalog, click **Update iProcure Items**.

To update selected iProcure items in the parts catalog, click **Update Selected iProcure Items**.

To view iProcure sync errors, click **View iProcure Sync Errors**.

To create an alternate supplier catalog reference, click **Alternate Catalog Reference**.

Associating alternate catalog references for suppliers

Alternate supplier catalog references allow customers to keep a record of past catalog reference numbers for a specific part.

To associate alternate catalog references for suppliers:

1 Select **Materials > Setup > Suppliers**.

2 Select the supplier for which to create an alternate catalog reference of parts, and then click the **Parts** tab.
3 Click **Alternate Catalog of References**.
4 Click **Add Catalog Reference**.
5 Specify this information:

Catalog Reference
Specify the catalog reference number to which to associate to the supplier.

Notes
Specify notes for the catalog reference as necessary.

6 Click **Submit**.

Note: To delete an alternate catalog reference, select the alternate catalog reference to delete, and then click **Delete Catalog Reference**.

Viewing purchase order history for suppliers

To view purchase order history for suppliers:

1 Open the **Business Partners** form.
2 Select the supplier for which to view purchase order history, and then click the **PO History** tab.
3 View the purchase order history for the supplier. The **PO History** page displays the same information as the **Purchase Orders** form.

Adding services to suppliers

To add services to suppliers:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier to which to add a service, and then click the **Services** tab.
3 Click **Add Service**.
4 Specify this information:

Task
Specify the work order task that corresponds with the supplier's service. The system automatically populates the task description, **Task Org.**, and **Exchange Rate**.

Catalog Reference
Specify the supplier's catalog reference number for the service.

Price
Specify the supplier's cost and currency for the service.

Tax Code
Specify the tax code for the service and supplier.

Preferred Supplier
Select if the supplier is the preferred supplier for the service.

Expiration Date
Specify the expiration date for the service and supplier. This is just a "catalog" date, and the date entered indicates the date on which the supplier's catalog information for the service should be replaced with a new catalog entry (new price, number, etc.).

Purchase UOM
Specify the supplier's unit of measure for the service.

Qty. per UOP
Specify the quantity per unit of purchase for the service.
Note: If you enter **Purchase UOM**, enter **Qty. per UOP** to indicate the unit of purchase in relation to the unit of measure that the supplier has defined for the service. For example, if you hire a supplier to landscape, the supplier defines his services in hours, and it will take the supplier 5 hours to landscape, then enter the code for hours in **Purchase UOM**. Then enter 5 in **Qty. per UOP**.

Lead Time (Days)
Specify the average number of days that the supplier needs to provide the service.

5 Click **Submit**.

The system inserts the current date in **Date Last Updated** and calculates **Local Price** based on the currency of your organization with the following equation:

```
(Price / Exchange Rate) / Qty. per UOP = Local Price
```

Note: To remove a service, select the service to remove, and then click **Remove Service**.

Defining rates for suppliers

Define and update rates for suppliers. Define multiple rates for each supplier as necessary.

Note: When automatically populating **Hourly Rate** on any form, the system populates the field based on the information entered on the **Rates** page of the **Suppliers** form. If you do not define a rate for a supplier, the system populates **Hourly Rate** based on the information entered on the **Rates** page of the **Trades** form if applicable.

To define rates for suppliers:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier for which to define rates, and then click the **Rates** tab.
3 Click **Add Rate**.
4 Specify this information:

Organization
Specify the organization to which the rate belongs if you use multi-organization security.
Note: If the supplier is assigned to a specific organization, the system automatically displays the organization. You cannot modify **Organization**.

Trade
Specify the trade.

Hourly Rate
Specify the hourly rate of the trade.

Tax Code
Specify the tax code to associate to the rate for the supplier.

Start Date, End Date
Specify the beginning and ending dates to which the rate applies.
Note: Dates for the same trade and rate combination cannot overlap. For example, the MAINT trade cannot have a rate of 20 to start 01-01-2004 and to end on 01-01-2005 and another rate of 25 to start on 06-01-2004.

5 Click **Submit**.

Note: To delete a rate, select the rate to delete, and then click **Delete Rate**.

Associating commodities with suppliers

Define commodity codes before associating commodities with suppliers.

The system allows you to associate multiple commodities with each supplier.

To associate commodities with suppliers:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier with which to associate a commodity, and then click the **Commodities** tab.
3 Click **Add Commodity**.
4 Specify this information:

Commodity
Specify the commodity to associate with the supplier. The system automatically displays the commodity description and **Commodity Org.**

5 Click **Submit**.

Note: To remove a commodity, select the commodity to remove, and then click **Remove Commodity**.

Recording fuel mixes for associated commodities

Record the fuel mix for each commodity associated with a supplier.

To record fuel mixes for associated commodities:

1 Select **Materials > Setup > Suppliers**
2 Select the supplier for which to record fuel mixes, and then click the **Fuel Mix** tab.
3 Click **Add Record**.
4 Specify this information:

Commodity
Specify the commodity for which to record fuel mixes.

Fuel Type
Select the type of fuel used for the associated commodity.

Daily Capacity
Specify the amount for the daily capacity. The system automatically populates the daily capacity **UOM** and **% of Total Capacity**.

Date Effective
Specify the date this record will become effective. The system automatically populates **Date Expired**.

5 Click **Submit**.

Associating account numbers to suppliers

Associate an account number to a supplier for a specific store.

To associate account numbers to suppliers:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier for which to associate an account number, and then click the **Account Number** tab.
3 Click **Add Account Number**.
4 Specify this information:

Account Number
Specify a unique code identifying the supplier account.

Store
Specify the store to associate to the supplier account.

Payment Method
Specify the supplier's method of payment for this account.

5 Click **Submit**.

Associating equipment with suppliers

Associate equipment that is serviced by a supplier.

To associate equipment with a supplier:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier with which to associate equipment, and then click the **Equipment** tab.
3 Click **Add Equipment**.
4 Specify this information:

Equipment
Specify the equipment to associate with the supplier.

5 Select the **Apply Supplier to Children** check box to apply the supplier to all of the children of the selected equipment as well.
6 Select the **Skip this Level** check box to indicate that the supplier is not relevant for the selected equipment but may be for its children.
7 Click **Submit**.

Associating service codes with suppliers

To associate service codes with suppliers:

1 Select **Materials > Setup > Suppliers**.
2 Select the supplier with which to associate service codes, and then click the **Service Codes** tab.
3 Select a **Service Code** to associate with the supplier.
4 Click **Submit**.

Creating service code exclusions for suppliers

Specify service codes that are not delivered by the supplier for specified equipment.

To create service code exclusions for a supplier:

1 Select **Materials > Setup > Suppliers**.
2 Select the suppliers for which to specify service code exclusions, and then click the **Service Code Exclusions** tab.
3 Click **Add Record**.
4 Specify this information:

Equipment
Specify the equipment for which to exclude a service.

Service Code
Specify the service code for the excluded service.

5 Click **Submit**.

Managing stock information

Stock refers to the basic information on items contained within a store (or group of stores in the same company). Think of stock as a subset of parts. Every item in stock must be a part, but not every part must be in stock. Stock is a list of items held; a parts list is your list of items available for purchase from outside sources or items that you generally do not stock.

You can associate stores with parts and enter automatic reorder information for parts. Consider how the stock item is reordered. The inventory unit of measure may be 'each' but the purchasing unit of measure may be based on item, case, or gross. If the maximum level is 20 and your minimum level is 10, but you reorder the item by the case (with 24 items per case), you need to adjust levels.

Consider the vendor lead time. Some stock items may be reordered every 60 days and others may be reordered every 30 days. You may want to order a higher quantity of items for those 60-day periods. Also, some items take longer to procure and you may have to increase reorder amounts to have enough on hand.

Specify the stock replenishment method for the part. You can set the stock method to Min/Max, Reorder Level, or On-Demand.

If you are using LIFO/FIFO as your pricing method for stock, the system records the unit price of each receipt transaction for stock so that each subsequent inventory transaction is recorded at the appropriate unit price.

See "Understanding time-based inventory valuation (LIFO/FIFO)."

Associating stores with parts

Associating stores with parts enables you to specify detailed inventory information for specific parts, such as minimum stock levels and reorder quantities that determine how your company's stock levels are maintained.

Additionally, you can also define part prices at the stock level enabling you to enter and update pricing information for each store in which the part is held.

Additionally, if you select Last in first out price (LIFO) or First in first out price (FIFO) as the **Price Type** for the part in the store, the system inserts a record for the part in the **R5FIFO** table when the part is received to stock that includes the part, price, quantity, store, and transaction date. The transaction date indicates the date the stock is inserted into inventory upon which all future LIFO/FIFO transactions for the part are based. For FIFO pricing, the system locates the record that was inserted into inventory first. For LIFO pricing, the system locates the record that was most recently inserted into inventory.

Depending on your system configuration, set the stock replenishment method for the part in stock and specify minimum and maximum quantities, a reorder level, and/or an order quantity as necessary.

The INVMETH installation parameter determines the default stock method for new parts in stock in all stores as Reorder Level (-). Modify the stock method for a part in stock in any store as necessary. If you have not modified the INVMETH parameter or do not specify a stock method for a stock record, the system automatically sets the stock method to Reorder Level.

Additionally, the system does not implement any of the stock methods for a part until you enter the information required to implement the stock method for the part. For example, if you set the stock method of a part in stock to Min/Max, you must enter a value **Minimum Qty.** and **Maximum Qty.** to implement the stock method for the part.

To associate stores with parts:

1. Select **Materials > Parts**.
2. Select the part for which to define store information, and then click the **Stores** tab.

3 Click **Add Store**.

4 Specify this information:

Store
Specify the store for the part. The system automatically populates the store description, **Store Org.**, **Stock Date** with the current system date, and **Base Price** with the appropriate price of the part. The system also populates **Stock Value** with the current value of the quantity on hand for the part using the base price of the part in stock. The system populates **Credit Balance** with the amount of credit associated with the part for an invoice line.
Note: Credit Balance is applied to the **Average Price** of the part based on the INCREDIT installation parameter upon approval of a new invoice and/or a credit or debit note applied to an invoice or an invoice line.

Core Value
Specify the core value of the part at the store level. The core value is the value of the part while it is in stock awaiting repair (for both external and internal repairs). For example, you have a part CS-ST-SPROCKET-249x284 IN part that is a carbon steel skip tooth sprocket .249" x .284" thickness valued at $200. The core value of CS-ST-SPROCKET-249x284 IN is $70. You issue one CS-ST-SPROCKET-249x284 IN valued at $200 to a piece of equipment. You also return one CS-ST-SPROCKET-249x284 IN taken off of the piece of equipment for repair. Because the CS-ST-SPROCKET-249x284 IN must be sent to the machine shop for repair, the system does not issue an inventory credit of $200. Instead, the system issues a credit of the $70 core value to your inventory.

Stock Class
Specify the stock class for the part.

Preferred Supplier
Specify the preferred supplier for the part.

Preferred Store
Specify the preferred store for the part.
Note: You cannot enter a value for both **Preferred Supplier** and **Preferred Store**. **Preferred Supplier** and **Preferred Store** are both used for automatically generating requisitions from low stock to provide different information for the requisition. Entering a **Preferred Supplier** for the part in store indicates that the requisition type for the part is Goods Requested. Entering a **Preferred Store** indicates that the requisition type for the part in store is a Store-to-Store transfer.

Lead Time (Days)
Specify the average number of days that the store needs to provide the part. The **Lead Time (Days)** indicates a number of days that are needed internally for inventory deliveries or transfers of the part from the store. **Lead Time (Days)** is only used for store-to-store requisitions.
Note: You can also enter **Lead Time (Days)** on the **Record View** page of the **Stores** form. The setting of **Lead Time (Days)** on the **Stores** page of the **Parts** form overrides the setting of **Lead Time (Days)** on the **Record View** page of the **Stores** form.

ABC Class
Select the class (A, B, or C) with which to associate the stock items. The system uses this information to perform ABC analysis.

Stock Method
Select one of the following stock method types:

Option	Description
Min/Max	Select to replenish low stock based on a specified minimum and maximum quantity of a part to keep in stock. When the quantity of a part in stock reaches a level that is less than the specified minimum level, the system reorders the necessary quantity of the part to replenish the quantity to the specified maximum level. **Reorder Level** and **Order Qty.** are read-only when **Stock Method** is Min/Max.
Reorder Level	Select to replenish low stock based on a specified reorder level and order quantity. When the quantity of a part in stock reaches the reorder level, the system reorders the part in increments of the specified order quantity until the quantity of the part in stock reaches a level that is greater than or equal to the reorder level. **Maximum Qty.** is read-only when **Stock Method** is Reorder Level.
On Demand	Select to replenish low stock only when there is a demand for it on a work order or store-to-store requisition. **Reorder Level** and **Maximum Qty.** are read-only when **Stock Method** is On Demand.

Reorder Level
Specify the quantity at which the system is to reorder the part. The value entered for **Reorder Level** specifies the quantity of a part that, when reached, triggers a purchase action for acquiring more of that part.

Prevent Issue from Default Return Bin
Select this checkbox to prevent the part from being issued from the default return bin.

Order Qty.
Specify the standard quantity of this part ordered at one time.

Condition
Specify the condition if the part is a condition tracked parent part. The system automatically populates **Part** and **Part Org.** If the part is a condition tracked child part, the system automatically populates **Condition**,**Part**, and **Part Org.**
Note: If the asterisk (*) condition is entered, store records will be created for each condition tracked child associated with the part. Also, the system will automatically populate **Part** and **Part Org.** for each store record with the values of the condition tracked child part and part organization. The condition for each store record will be the same as the condition for each condition tracked child.

If the condition entered is not an asterisk (*), **Part** and **Part Org.** will be automatically populated with the part and part org. of the child part condition associated with the selected condition.

Conditions to Include in Reorder
Specify the conditions to include when the part is reordered if the part is tracked by condition. Only **Qty. on Hand** for part conditions listed in the **Conditions to Include in Reorder** will be considered.

Record Stockouts
Select to enable the system to create a record of the part, store, and date on which the inventory level for this part reached zero. You can view this information on a separate form.

Label Printer
Specify the default printer for printing barcode labels.

Label Template (Issue)
Specify the default label template for printing barcode labels for issues.

Label Template (Receipt)
Specify the default label template for printing barcode labels for purchase order receipts.

Label Printing Default
Select the default method for printing labels when the part is received to the selected store.

Default Bin
Specify the default bin for the part. The system automatically populates the **Default Bin Qty.** with the quantity of the parts located in the selected bin.

Label Template (Non-PO Receipt)
Specify the default label template for printing barcode labels for non-purchase order receipts.

Label Template (Core Return)
Specify the default label template for printing barcode labels for core returns.

Label Template (Warranty Return)
Specify the default label template for printing barcode labels for warranty returns.

5 Click **Submit**.

Note: You cannot delete a store associated with a part if a stock record exists for the part in that store.

Click **Add/Edit Comments** to enter comments.

To add, edit, view, or associate a document to the STOC entity, click **Add/Edit Documents**.

Entering stock information for parts

When you enter stock information for parts, you can select the **Store**, **Bin**, and **Lot** for the part in store. The system automatically enters the price based on the calculated base price of the part, and you can modify the price as necessary.

If you do not enter a **Qty. on Hand** for the part when entering a stock record, the system creates a new stock record for the part but does not create a stock transaction.

If you are using LIFO/FIFO as your pricing method, the system creates a record for the part in the **R5FIFO** table and creates a receipt transaction for the stock initialization of the part.

To enter stock information for parts:

1. Select **Materials > Parts**.
2. Select the part for which to define stock information, and then click the **Stock** tab.
3. Click **Add Stock Record**.
4. Specify this information:

   Store
   Specify the store for the part. The system automatically populates the store description and the **Store Org.**

   Condition
   Specify the condition if the part is a condition tracked parent part. The system automatically populates **Part** and **Part Org.** If the part is a condition tracked child part, **Condition** will be automatically populated with the condition of the selected part.
   Note: If the asterisk (*) condition is entered, store records will be created for each condition tracked child associated with the part. Also, the system will automatically populate **Part** and **Part Org.** for each store record with the values of the condition tracked child part and part org. The condition for each store record will be the same as the condition for each condition tracked child. If the condition entered is not an asterisk (*), **Part** and **Part Org.** will be automatically populated with the part and part org. of the child part condition associated with the selected condition.

   Bin
   Specify the bin number storing the part.

   Lot
   Specify the lot number or batch of the part.
   Note: The SHOWLOT installation parameter determines whether lots are used for stock information for parts. The default setting for SHOWLOT is Y. If SHOWLOT is set to N, the system disables **Lot**, and it is hidden.

   Qty. on Hand
   Specify the available quantity of the part.

   Core Qty.
   If the part is core tracked, specify the number of core parts that are currently in this **Bin** location. These are parts that you plan to repair on internal repair work orders or to send to a supplier on external repair requisitions. The value of **Core Qty.** is available for work orders and requisitions. The system automatically populates **UOM**.
   Note: You can only specify a value for **Core Qty.** when inserting a stock record. You cannot edit or modify **Core Qty.** after saving the record.

   The system does not create a stock transaction for the part when you specify a value for **Core Qty.**, nor does it make any price updates until the part is repaired and received back to **Qty. on Hand**.

   If you attempt to delete the stock record for the part, the system verifies both the **Qty. on Hand** and the **Core Qty.**. If both the **Qty. on Hand** and the **Core Qty.** are not equal to 0, the system will not allow you to delete the stock record for the part.

5. Click **Submit**.

Note: If you specify a value greater than zero for **Qty. on Hand**, the system also creates a receipt transaction of type RECV for the part. However, if you specify zero as the quantity or do not specify a value for **Qty. on Hand**, the system creates a stock record for the part but does not create a receipt transaction for the part.

The system does not create a receipt transaction for the part when you specify a value for **Core Qty.**, nor does it make any price updates.

The system treats the stock information specified for this part as a stock receipt and updates the **Last Price** of the part.

To delete a stock, select the stock to delete, and then click **Delete Stock Record**. You cannot delete a stock record for a part if the quantity on hand of the part is greater than zero.

The system displays an **Asset ID** if the part is tracked by asset.

The system populates **Price** based on the setting of the PRICELEV installation parameter. If PRICELEV is set to `P`, the system populates **Price** with the base price of the part from the **Prices** tab of the **Parts** form. If PRICELEV is set to S, the system populates **Price** with the base price of the part from the **Stores** tab of the **Parts** form, and you can change the price as necessary.

To record a stockout for a store, select the store, and then click **Record Stockouts**.

Recording stockouts for parts

Record a stockout when the part's **Qty. on Hand** is not enough to fill the demanded **Part Qty.**

To record stockouts for parts:

1. Select **Materials > Parts**.
2. Select the part for which to record a stockout, and then click the **Stock** tab.
3. Select a store, and then click **Record Stockout**. The system automatically populates **Store**, **Part**, and **Part Org.**
4. Specify this information:

   Stockout Qty.
   Specify the number of parts missing that are required to complete the transaction.

   Date/Time
   Specify the date and time the stockout occurred, i.e., the day there was not enough of the part in inventory to issue to fill the demand.

5. Click **Submit**.

Calculating economic order quantity (EOQ)

Calculate the EOQ for a store to determine the most efficient quantity to order for inventory items. EOQ represents the ideal balance between ordering costs and inventory holding costs for items being demanded annually at a constant rate. EOQ helps manage inventory by minimizing order costs and holding costs for each item.

To calculate EOQ:

1 Select **Materials > Process > Calculate EOQ**.

2 Specify this information:

Organization
Specify the organization for which to calculate EOQ if you use multi-organization security.

Date From
Specify the date of the item's first analysis.

Date To
Specify the date of the item's last analysis.

Store
Specify the store for which to calculate EOQ.

Part
Specify the part for which to calculate EOQ.

Stock Class
Specify the class of the stock for which to calculate EOQ.

ABC Class
Select the class of the stock (A, B, or C) for which to calculate EOQ.

3 Choose one of these options:

Option	Description
% of Average Price	Select to calculate EOQ with a percentage of average price. Skip step 11. **Note:** The system uses this equation to calculate EOQ based upon % of Average Price. **Holding Cost %** is required. **Holding Cost** % is required. $EOQ = \sqrt{\frac{2 * Annualized\,Qty.Demanded * OrderCost}{AveragePrice * (HoldingCost\% / 100)}}$ If Average Price = 0 then EOQ = 0. EOQ=
Fixed Value	Select to calculate EOQ with a fixed value. Skip step 10. **Note:** The system uses this equation to calculate EOQ based upon Fixed Value. **Holding Cost** is required. **Holding Cost** is required. $EOQ = \sqrt{\frac{2 * Annualized\,Qty.Demanded * OrderCost}{HoldingCost}}$ EOQ =

4 Specify the following:

Holding Cost %
Specify the cost for the holding percentage.

Holding Cost
Specify the holding cost.

Fixed Order Cost
Specify the fixed order cost.

Print Calculated EOQ
Select to print the EOQ report.

5 Click **Process**.
6 Select each store for which to update the order quantity.
7 Click **Update Order Qty.** The system updates the order quantity on the **Stores** page of the **Parts** form for each selected parts record with the value in **New Order Qty.**

Scrapping parts

Scrap parts that are beyond repair.

Note: Parts must be repairable spares to scrap.

To scrap parts:

1 Select **Materials > Parts**.
2 Select the part to scrap, and then click the **Stock** tab.
3 Select the specific stock to scrap, and then click **Scrap Part**. The system automatically populates **Part**, **Description**, **Qty. for Repair/UOM**, and **Asset ID** if the part is tracked by asset.
4 Specify this information:

Scrap Qty.
Specify the quantity of parts to scrap.

5 Click **Submit**.

Associating nonconformity types with parts

Associate nonconformity types that are applicable for a part. For example, you can specify nonconformites such as leaking, corroded, or broken for a pipe and omit irrelevant nonconformities such as rotting wood.

To associate a nonconformity type with a part:

1 Select **Materials > Parts**.
2 Select a part with which to associate nonconformity types, and then click **Nonconformity Types**.
3 Select a **Nonconformity Type**.

4 Click **Submit**.

Transferring parts between bins

Transfer parts between bins within the same store. Transferring parts between bins does not create a stock transaction, because inventory levels for the part remain the same.

To transfer parts between bins:

1 Select **Materials > Parts**.
2 Select the part to transfer between bins, and then click the **Stock** tab.
3 Select the store, bin, and lot from which to transfer the part, and then click **Transfer Part between Bins**.
4 Specify this information:

   New Bin
   Specify the bin receiving the item.

   Transfer Qty.
   Specify the number of parts to transfer from the sending bin to the receiving bin. If the part to issue is tracked by asset, the system automatically selects **Track By Asset**, specifies 1 as the **Transaction Quantity** and **Available Quantity**, and displays the asset number by which the part is tracked for **Asset ID**.
   Note: You cannot specify a **Transaction Quantity** greater than 1 when issuing parts tracked by asset. If you want to issue multiple quantities of a part tracked by asset, you must transfer the part with a **Transaction Quantity**of 1 until you have transferred the total number of the part tracked by asset that you wish to transfer from the sending bin to the receiving bin.

5 Click **Submit**. The system transfers the specified quantity of the part from the sending bin to the receiving bin, and updates the **Qty. on Hand** of the selected bins in the Stock list.

Transferring parts without requisitions

Transfer parts from store to store without requisitioning them. Parts transferred using the **Quick Store-to-Store Transfer** form never achieve in-transit status. Since this tracking feature is not used for this type of transfer, store-to-store transfers should be reserved for very quick material movements. Quantities available both in the sending and receiving warehouses are adjusted immediately after the system saves the transaction.

When you transfer parts from store-to-store, the system creates a stock record for the transferred part in the receiving store for which the price type defaults to the price type of the receiving store. By default, the price type for a store is defined by the PRICELEV installation parameter; however, you can modify the price type for each store as necessary

Using the **Quick Store-to-Store Transfer** form, define a transfer header and then add as many part records as there are parts to transfer. Before submitting your transaction, you can edit part records by selecting the part in the Transaction Details list. The system displays the part record in the detail section where you can edit information related to the transfer as necessary.

Note: If you are using multi-organization security, you can only transfer parts between stores without requisitions using the **Quick Store-to-Store Transfer** form if the stores you are transferring the parts between are in the same organization, if the parts belong to the common organization, and the organizations have the same currency.

To transfer parts without requisitions:

1. Select **Materials > Transactions > Quick Store-to-Store Transfer**.
2. Specify this information:

   Transfer Desc.
   Specify a description of the transfer.

   From Store
   Specify the store from which to transfer parts.
   Note: If a **Default Bin** is defined for the **From Store**, the system populates **From Bin** with the **Default Bin**, and the system populates the **On Hand Qty.** and **Core Qty.** based on the **From Bin**. The system will also populate the **Bin**.

   To Store
   Specify the store to which to transfer parts.

3. Click **Add Part**.
4. Specify this information:

   Part
   Specify the part to transfer. The system automatically populates **From Bin**, **To Bin**, **Lot**, **Price**, and **On Hand Qty.** If the selected **Part** is core tracked, the system enables **Transfer Core Qty.** and populates **Core Qty.** with the number of parts designated as for repair in the **From Bin**.
   Note: The value displayed for **On Hand Qty.** indicates the current quantity of the part that is available for the specified **To Bin** and **Lot**, which is equal to the **On Hand Qty.** minus any quantity of the part that is currently allocated to any work orders.

   If you delete the **From Bin**, the system clears **Lot** and then calculates the **On Hand Qty.** and **Core Qty.** for the **From Store**, which is the sum of the quantities of the part in all the bins in the **From Store**.

   The system calculates the **Core Qty.** as the difference between quantity for repair in the **From Bin** and the number parts that are assigned on the **Repair Parts** page of a Repairable Core work order and the number of parts that are currently on External Repair requisitions.

   Condition
   Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

   From Bin
   Modify the bin from which to transfer the part if necessary. If you modify **From Bin**, the system removes the part.

   To Bin
   Modify the bin to which to transfer the part if necessary. If you modify **To Bin**, the system removes the part.

Lot
Modify the lot of the part to transfer if necessary. If you modify **Lot**, the system removes the part.

Price
Modify the price of the part to transfer if necessary. If you modify **Price**, the system removes the part.
Note: When PRICELEV is set to S, the system automatically populates **Price** with the base price of the part in the receiving store.

Asset ID
Specify the code identifying the asset associated with the part to transfer. If the part is tracked by asset, the system enables **Asset ID** and you must specify an asset ID number for the part before you can specify values for **Transfer On Hand Qty.** or **Transfer Core Qty.**

Transfer On Hand Qty.
Specify the number of parts to transfer from the quantity of the parts available in the **From Store**.
Note: If the part is an asset part, you can only transfer one part at a time. The system automatically displays a transfer quantity of "1" for asset parts. **On Hand Qty.** shows how many parts are available in the store or store, bin, and lot.

Transfer Core Qty.
Specify the number of parts to transfer from the quantity of the parts designated for repair in the **From Store**.
Note: You can only specify a value for **Transfer On Hand Qty.** or **Transfer Core Qty.**, but not both. When you specify a value for either **Transfer On Hand Qty.** or **Transfer Core Qty.**, the system protects the other field.

If you specify a **Transfer Core Qty.**, the system clears the **From Bin**, **To Bin**, **Asset ID**, **Serial Number**, **Lot**, and **Expiration Date**, and you must specify values for these fields manually.

If a **Default Bin** is defined for the **To Store** and you have not specified a value for **Transfer Core Qty.**, the system populates **To Bin** with the **Default Bin**.

If no **Default Bin** is defined for the part in the **To Store** and you have not specified a value for **Transfer Core Qty.**, the system populates **To Bin** depending on whether more than one bin stock record is defined for the part in the **To Store**. If more than one bin-stock record is defined for the part in the **To Store**, the system leaves the **To Bin** blank. If only one bin-stock record is defined for the part in the **To Store**, the system populates **To Bin** with the **Bin** from the bin-stock record.

5. Click **Add to List**.
6. Click **Submit Transaction**. The system immediately adjusts quantities available in the sending and receiving warehouses.

Generating requisitions

Generate requisitions from low stock levels to automatically create requisitions based on a stock replenishment method and specified generation options. The system provides three stock replenishment methods: Min/Max, Reorder Level, and On-Demand. The system also enables you to generate requisitions for external repairs of core tracked parts.

To generate requisitions from low stock, the system examines current stock levels in stores, reserved parts, and parts specified on requisitions, purchase orders, and in transit. The system then generates a default requisition for all parts below the acceptable level to reach the specified stock level for the parts. The system will either generate a requisition for a standard order quantity until the specified stock level is reached, or it will simply order the necessary number of parts depending on the information you have specified for the stock record.

Note: If you are using the On-Demand method, there is no minimum quantity of the part to maintain. The system generates a requisition for the part when there is demand for the part, such as when there is a reservation for the part, but there is not enough of the part in stock to fill the reservation. If you make reservations for an event in the distant future, the system generates a requisition for the required materials. Infor EAM recommends the implementation of company policies to restrict reservation usage to a reasonable time frame in order to minimize excessive inventory.

To implement a stock replenishment method, you must specify a stock method for the part and specify a **Minimum Qty.**, **Maximum Qty.**, **Order Qty.**, and/or a **Reorder Level** on the stock record, depending on the stock method you have selected. You also must specify a **Preferred Supplier**.

Set **Auto Req. Status** on the **Stores** form to Approved, and all stock requisitions automatically generated for that store are created with a status of Approved. Otherwise, you must manually approve all purchase requisitions generated with a status of Unfinished.

When generating requisitions, the system may generate more than one requisition. Based on the parameters you specify on the **Generate Requisitions** form, the system may select part lines with multiple store, supplier, and/or buyer combinations. When you click **Generate**, the system generates a different requisition for each individual store/supplier/buyer combination. The following table illustrates this concept.

Store	Supplier	Buyer	Req. Created
Store 1	Supplier 1		10000
Store 1	Supplier 2		10001
Store 2	Supplier 1		10002
Store 2	Supplier 1	Buyer 1	10003
Store 2	Supplier 1	Buyer 2	10004

Note: User limits do not apply on the **Generate Requisitions** tab.

To generate requisitions:

1. Select **Materials > Process > Generate Requisitions**.
2. Select the saved selection parameters from the **Parameter List**.
3. Specify this information:

   Organization
   Specify the organization from which to generate the requisition if you use multi-organization security.

   Requesting Store
   Specify the store for which requisitions should be generated.

Note: To generate requisitions for all stores that begin within a specific letter, specify the letter followed by a percentage sign. For example, if you want to generate requisitions for all of your Houston locations, you specify 'H%' in **Store**.

Supplier
Specify the supplier for which requisitions should be generated.

Buyer
Specify the buyer of the parts for which requisitions should be generated.

Preferred Store
Specify the store for which requisitions should be generated if the part in store is a store-to-store transfer.

ABC Class
Select the A, B, or C class of the parts for which requisitions should be generated.

Part Class
Specify the class of the parts for which requisitions should be generated.
Note: To generate requisitions for all part classes that begin within a specific letter, specify the letter followed by a percentage sign.

Requested By
Specify the name of the person requesting the requisitions.

Default Approver
Specify the name of the person approving the requisitions.
Note: The system uses the information you supply in **Default Approver** to populate **Approved By** on the **Requisitions** form. If **Auto Req. Status** on the **Stores** form is set to A (Approved) and you do not specify a default approver, the system will populate **Approved By** on the **Requisitions** form with your **User ID**.

Cost Code
Specify the cost code for the requisition.

Consignment Items
Select to generate requisitions for consignment items only.

Non-consignment Items
Select to generate requisitions for non-consignment items only.

All Items
Select to generate requisitions for both consignment and non-consignment items.

Generate Part Requisitions
Select to generate part requisitions.
Note: To generate a requisition for parts that need to be purchased, you must set up a **Preferred Supplier** on the **Stores** page of the **Parts** form or a **Preferred Supplier** on the **Record View** page of the **Parts** form.

Generate Service Requisitions
Select to generate service requisitions.

Generate External Repair Requisitions
Select to generate external repair requisitions.
Note: If you select both **Generate Part Requisitions** and **Generate External Repair Requisitions**, the system processes the external repair requisitions first so that the core tracked parts will be repaired, rather than ordering new parts. Also, if you have selected both **Generate Purchase Requisitions** and **Generate External Repair Requisitions** and you need more than the quantity designated for repair, the system generates one requisition with both a repair line and a purchase line.

To generate external repair requisitions for core tracked parts, the core tracked parts must meet the specified parameter criteria. The following information must also be true or set up for a core tracked part on the **Repair Details** page of the **Parts** form to generate a requisition for the part: **Core Qty.** must be greater than 0, **External Repair** must be selected, you must have specified a **Supplier** for the part, and the **Core Qty.** must be greater than or equal to the **Min. Repair Qty.**

If you set up a **Preferred Supplier** on the **Repair Details** page of the **Parts** form, but you have not on the **Stores** page of the **Part** form, the system only generates lines of type **External Repair** regardless of whether you selected both **Generate Purchase Requisitions** and **Generate External Repair Requisitions**. If you have set up a **Preferred Supplier** on the **Stores** page of the **Parts** form, but not on the **Repair Details** page of the **Parts** form, the system only generates lines of type Stock Purchase regardless of whether you selected both **Generate Purchase Requisitions** and **Generate External Repair Requisitions**.

If you specified a **Min. Repair Qty.** on the **Repair Details** page of the **Parts** form, the system only generates repair requisitions if the **Core Qty.** is greater than the **Min. Repair Qty.**

If you selected **Auto-Assign** for a part on the **Repair Details** page of the **Parts** form, the system will assign repair details for external repair parts automatically.

Generate Store-to-Store Requisitions
Select to generate store-to-store requisitions.
Note: If you selected **Generate Store-to-Store Requisitions**, the system uses the same formula used to calculate **Requested Qty.** for purchase requisitions.

Include Child Store(s) Qty.
Select to include the quantities for all child stores of the selected Store in the requisition generation process.

Auto Select Records on Preview
Select to automatically select all records on the **Parts Preview** and **Services Preview** tabs.

Print Requisition
Select to print the generated requisitions.

4 Click **Process**. Depending on the generation options you have selected, the system retrieves part lines for low stock items and/or core tracked parts to be repaired externally that are not listed on an existing requisition.

The system calculates the parts to be added to the requisition based on the following equation and the generation options you have selected:

```
(Qty. on Hand + Qty. at Shop + Qty. at Supplier + the quantity of the part
on requisitions + the quantity of the part on purchase order without req
```

```
uisitions + in transit Qty. without requisitions) – (Reserved Qty. + Qty.
Requisitioned from store) = Quantity
```

If you are using the reorder level method
The system generates a requisition if the **Quantity** is less than or equal to the Reorder Level. The system calculates the **Requested Qty.** as a multiple of the **Order Qty.** that is necessary for the **Quantity** to reach a stock level greater than the **Reorder Level**.

If you are using the min/max method
The system generates a requisition if the **Quantity** is less than the **Minimum Qty.** The system calculates the **Requested Qty.** as the difference of the **Maximum Qty.** and the **Quantity**.

If you are using the on-demand method
The system generates a requisition if the **Quantity** is less than the quantity demanded. The system calculates the **Requested Qty.** as being equal to the difference of the qty. demanded and the **Quantity**.

5 Select the part lines for which to generate requisitions. The system automatically selects all of the part lines. You may remove individual lines from the list by unselecting the line. The system does not generate requisitions for unselected lines. The system automatically selects all of the part lines. You may remove individual lines from the list by unselecting the line. The system does not generate requisitions for unselected lines.

Note: The system never generates a requisition line for parts if **Prevent Reorders** is selected on the **Parts** form.

6 Click **Process**.

Note: Depending on your system configuration, the system may require an electronic signature to authorize status initiations for requisitions. The system displays the eSignature popup when assigning a status for each requisition created.

Previewing parts for requisitions

View parts associated with requisitions being generated on the **Generate Requisitions** screen.

To view services for the requisition:

1 Select **Materials > Process > Generate Requisitions**.
2 Specify the requisition parameters on the **Parameters** tab, and then click the **Parts Preview** tab.
3 Select **Print Requisition** to print all the requisitions after generation.
4 Review the list of parts to be include in the requisition, and then click **Generate**.

Previewing services for requisitions

View services associated with requisitions being generated on the **Generate Requisitions** screen.

To view services for the requisition:

1 Select **Materials > Process > Generate Requisitions**.

2 Specify the requisition parameters on the **Parameters** tab, and then click the **Services Preview** tab.
3 Select **Print Requisition** to print all the requisitions after generation.
4 Review the list of services to be include in the requisition, and then click **Generate**.

Creating requisitions

Create requisitions on the **Requisition** form to request materials or services from outside vendors. A requisition consists of a requisition header and requisition lines. You can create a requisition for stock items, direct materials, or services. Stock items are materials that are kept in store and are tracked for inventory. Direct materials are items that you requisition specifically for work orders.

The life cycle of a requisition is controlled by the requisition status. When you create a requisition, the system assigns Unfinished as the status of the requisition. After adding all of the necessary line items to the requisition, you can update requisition status as necessary based on your status change authorization privileges. Status change authorizations are set up on the **Status Authorizations** form.

When updating requisition status, you can also update other information on the requisition. However, the system enables and/or protects the fields available for update based on whether or not lines have been added to the requisition, as well as the status to and from which you are updating.

In addition to having the appropriate status change authorization to change the status of a requisition, a user must also be granted sufficient monetary approval limits for requisitions on the **User** form to approve a requisition. The LIMITLEV installation parameter determines whether the system validates requisition approval limit authorizations on the header level or at the line level, and if the total value of a requisition exceeds a user's requisition approval at either the header or the line level, then the user cannot approve the requisition.

The system automatically sets the currency of the requisition header and lines based on the currency of the organization for which the requisition is being created. You can modify the currency of a requisition line to enable you to requisition specific materials in a different currency than the organization of the requisition header, as long as a valid exchange rate has been defined for the currency to which you are changing the requisition line.

Once the requisition has been reviewed and updated as necessary, change the status to Ready for printing and print the requisition if necessary. Then, change the status to Approved/active to make the requisition available for purchasing. After the requisition is approved, you can add it to a purchase order to be forwarded to a supplier.

Creating requisition headers

Create requisition headers to specify the supplier(s) from which to requisition parts.

To create requisition headers:

1 Select **Materials > Requisitions**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization for which to create the requisition. The organization you select must be a specific organization to which you belong. The system automatically populates **Entered By** with the **User ID** of the logged in user and inserts the current date in **Date Requested**.

Requisition
Specify a description of the requisition in the adjacent field. The system assigns a requisition number after you save the record.

Status
Specify the status of the requisition.

Store
Specify the receiving store for the requisition if necessary.
Note: If a **Default Store** is associated with the logged in user, the system will automatically populate the **Store**. You can assign a **Default Store** to a **Department** record. The **Default Store** can then be associated to a **User ID** by assigning a user to a **Department**, which will then associate a **Default Store** with the **User ID**. However, if no **Default Store** is associated with the logged-in user, then the system does not automatically populate **Store**, and you must enter the **Store** manually.

Requested By
Specify the employee requesting the items on the requisition.

Attention To
Specify the name or department that is receiving the part.

Delivery Address
Specify the address to which to deliver the items.

Supplier
Specify the supplier for the requisition. The system automatically populates **Supplier Org.**
Note: When you select a supplier on the requisition header, the system automatically assigns the selected supplier to each of the requisition lines, but you can modify the supplier for requisition line items as necessary.

Class
Specify the class of the requisition. The classes shown belong to the REQ entity.

Cost Code
Specify the cost code with which to associate the cost of the requisition.

Work Order–Activity
Specify the work order and activity for which the items are being requisitioned.
Note: When you specify a work order and activity at the requisition header level, the system automatically assigns the selected work order and activity to each of the requisition lines, and you cannot modify the work order or activity for requisition line items.

Additionally, you can only select work orders of type JOB or PPM with a status of Released or Closed for which the **Date Completed** on the work order is earlier than the number of days set in the REQDAYS installation parameter.

If the selected **Work Order–Activity** is a multiple equipment work order, the system enables **Equipment** and it is required.

Job
Enter the job for the selected work order-activity.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:

- Specify a specific equipment to which to distribute the cost of the requisition.
- Specify All Equipment to evenly distribute the cost of the requisition to each equipment record on the work order.
- Specify WO Header Equipment to distribute the cost of the requisition to the equipment on the work order header only.

Default Approver
Specify the name of the person who will approve the requisition.

4 Click **Save Record**.

Note: The system populates and/or updates the following fields as parts and services are added to the requisition, or when the status of the requisition is changed or approved: **Part Lines**, **Service Lines**, **Requisition Lines**, **Total Part Value**, **Total Service Value**, **Total Req. Value**, **Approved By**, and **Date Approved**.

If the status of the requisition is set to **Rejected**, **Reject Reason** becomes required, and you must enter a reason for why the requisition was rejected.

After you have added the requested parts/services to the requisition, click **Generate PO** to manually generate a requisition.

The system automatically selects **Printed** if you print the requisition.

Adding parts to requisitions

Add parts to requisitions after creating the requisition header.

If you do not know the part number of the part(s) to add to the requisition, you can search for the part(s) using the supplier catalog reference number or the manufacturer part description.

The system automatically populates some fields on the requisition line with information entered on the requisition header. For example, if a supplier is entered on the requisition header, the system automatically designates that supplier as the supplier for each requisition line. While the status of an individual requisition line is Unfinished, you can complete or update information on the requisition line as necessary. However, the system protects some fields that can be automatically populated from the requisition header.

Additionally, when you requisition a part cataloged on the **Part** form, the system also retrieves information from the part record and automatically populates many fields. If you need to requisition a part you have not yet created on the **Part** form, you can manually create a new part as necessary. After adding all of the necessary parts to the requisition, update the Status of the requisition as necessary based on your status change authorization privileges. Status change authorizations are set up on the Status Authorizations. However, the system enables and/or protects the fields available for update based on the status from which you are updating the requisition.

To add parts to requisitions:

1 Select **Materials > Requisitions**.

2 Select the requisition to which to add parts, and then click the **Parts** tab.

3 Click **Add Part Line**.

Note: If the requisition line is generated from an RFQ, the system populates **RFQ**, **RFQ Org.**, **Quotation**, **Quotation Org.**, and **Quotation Line** when the line is created.

If an RFQ is generated from the requisition, the system populates **RFQ**, **RFQ Org.**, and **RFQ Line** once the RFQ line is created. When a Quotation line is awarded for an associated RFQ line, the Quotation information is populated.

4 Specify this information:

Supplier
Specify the supplier for the part.

Manufacturer
Specify the manufacturer for the part.

Supp. Catalog Reference
Specify the reference number for the part from the supplier catalog. If you enter a **Supp. Catalog Reference**, the system populates the **Part**, the part description, **Supplier**, **Exchange Rate**, and the **Price** from the supplier's catalog.
Note: If the part has no price in the supplier's catalog, the system retrieves the price from the stock record of the part.

If you have entered a **Supplier** and you also enter a new **Supplier Catalog Reference**, the system creates a new record of the part in the supplier's catalog.

Manufacturer Part Number
Specify the manufacturer part number for the part. If you enter a **Manufacturer Part Number**, the system populates the **Manufacturer** and the part description.
Note: If you have entered a **Manufacturer** and you also enter a new **Manufacturer Part Number**, the system creates a new part record for the manufacturer.

Part
Specify the part to add to the requisition. The system automatically populates the part description and **Part Org.** and **New Orders Not Allowed** if the system is flagged to prevent reorders of this part. If the part has been flagged to prevent reorders, select a substitute part to continue.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Type
Select the part type for the requisitioned line.
Note: If you select Direct materials as the **Type** for the requisition line, you must enter a value for **Work Order-Activity**.

Line
Modify the line number of the part on the requisition if necessary. The system automatically assigns the next incremental line number based on the setting of the INCRLINO installation parameter.
Note: You can only edit the **Line** number when inserting a record. After the record is saved, the system protects **Line** and it is read only.

Requested Qty.
Specify the requested quantity of the part.

Price
Specify the price of the part. The system automatically populates the currency of the organization on the requisition header in the adjacent field.
Note: If you select a supplier on either the requisition line or header, the system automatically populates **Price** with the part price from the supplier's catalog. Update the supplier on the requisition line as necessary.

Additionally, if the EXRTUPDT installation parameter is set to YES, you can also update the exchange rate for a requisition line when you modify the currency of the requisition line. If you update the exchange rate for a requisition line, the system recalculates the value of the requisition header based on the value of the new exchange rate.

Status
Specify the status of the part. The system automatically assigns Unfinished as the status of the part, or the equivalent user code status.

Requested Before
Specify the date before which the requisitioned part must be received.

Attention To
Specify the name or department that is receiving the part.

Exchange Rate
Specify the exchange rate for the part on the requisition.

Cost Code
Specify the cost code with which to associate the cost of the requisition.

Work Order–Activity
Specify the work order and activity for which the items are being requisitioned.
Note: If a work order and activity are entered on the requisition header, the system also populates **Work Order-sActivity** with the work order and activity from the requisition header and automatically set the **Type** for the requisition line to **Direct Purchase (PD)**. However, you can change the **Type** to **Stock Purchase (PS)**, and the system automatically clears the **Work Order-Activity**.

If the selected **Work Order-Activity** is a multiple equipment work order, the system enables **Equipment** and it is required.

Job
Specify the job for the selected work order-activity.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:
- Specify a specific equipment to which to distribute the cost of the part.
- Specify All Equipment to evenly distribute the cost of the part to each equipment record on the work order.
- Specify WO Header Equipment to distribute the cost of the part to the equipment on the work order header only.

Note: If the selected **Part** is tracked by asset, then the system clears **Equipment**, **Equipment Org.**, and **Related Work Order** because you cannot distribute a part tracked by asset across multiple equipment.

Blanket Order–Line
Specify the blanket order line to associate with the part.
Note: If you select a **Blanket Order-Line**, the system automatically populates the **Supplier**, **Supplier Catalog Reference**, **Part**, **Description**, **Part Org.**, **Requested Qty.**, **Price**, **UOM**, **Currency**, and **Buyer** from the blanket order line. **Part** and **Description** are protected.

If you enter a **Part** and then select a **Blanket Order-Line**, the system overwrites the selected **Part** with the part from the blanket order line.

Quotation Indicator
Select one of the following options to indicate whether a supplier quotation is required for requisitioning the part:

Option	Description
Price quote not requested	Select if a quotation is not required prior to requisitioning the part.
Request a price quote	Select if a quotation is required prior to requisitioning the part.
Price quote requested before PO	Select if a quotation is preferred but not required prior to purchasing the part.

Comments
Specify comments as necessary.

5 Specify the **Buyer**, **Delivery Address**, **Expense Type**, **Commodity**, and **Comments**.
6 Select the **Inspection** check box to indicate that the part requires inspection.
7 Select the **Warranty** check box to indicate that the part is covered under warranty.
8 Select the **Track by Asset** check box to indicate that the part is tracked by asset.
9 Click **Submit**. The system calculates the cost of the part line and populates **Part Line Total** with the cost of the total value of the line.

Note: To manually create a part for a requisition when the part isn't listed in the supplier catalog reference, or cataloged on the **Parts** form, click **Create Part**.

To add multiple parts to a requisition, click **Select Parts**.

To add an iProcure part, click **Add Parts (iProcure Items)**.

To update iProcure Items in the parts catalog, click **Update iProcure Items**.

To view iProcure sync errors, click **View iProcure Sync Errors**.

To select a substitute part for a part that has been prevented from reordering, click **Select Substitute Part**.

Adding multiple parts to requisitions

Select and retrieve multiple parts for requisitions.

To add multiple parts to requisitions:

1 Select **Materials > Requisitions**.
2 Select a requisition for which to add multiple parts, and then click the **Parts** tab.
3 Click **Select Parts**.
4 Select the parts to add to the requisition.
5 Specify the **Requested Qty**.
6 Select **Planned Part** to add the parts to the WO-Activity as planned parts. This is only available when Parts are defaulted in as Direct Materials.
7 Click **Submit**. The system creates a requisition line for each part.

Manually creating parts for requisitions

Manually create parts for requisitions when parts aren't listed in the supplier catalog reference or cataloged on the **Parts** form.

To manually create parts for requisitions:

1 Select **Materials > Requisitions**.
2 Select the requisition for which to create parts, and then click the **Parts** tab.
3 Click **Create Part**. The system automatically populates **Part** with a sequential Part number.
4 Specify this information:

Part Description
Specify a description for the part.

Part Org.
Modify the part organization as necessary.

Type
Select the part type for the requisitioned line.

Line
Specify the line number for the part.
Note: Line type cannot be External Repair.

Requested Qty.
Specify the requested quantity part of the part.

Price
Specify the price of the part. The system automatically populates the currency of the organization on the requisition header in the adjacent field.

Requested Before
Specify the date before which the requisitioned part must be received.

Attention To
Specify the name or department that is receiving the part.

Work Order-Activity
Specify the work order and activity for which the items are being requisitioned.

Note: If a work order and activity are specified on the requisition header, the system also populates **Work Order-Activity** with the work order and activity from the requisition header and automatically set the **Type** for the requisition line to Direct Purchase (PD). However, you can change the **Type** to Stock Purchase (PS), and the system automatically clears the **Work Order-Activity**. If the selected **Work Order-Activity** is a multiple equipment work order, the system enables **Equipment** and it is required.

Equipment
Choose one of the equipment options if the work order is a multiple equipment work order:

- Specify a specific equipment to which to distribute the cost of the part.
- Specify All Equipment to evenly distribute the cost of the part to each equipment record on the work order.
- Specify WO Header Equipment to distribute the cost of the part to the equipment on the work order header only.

Note: If the selected **Part** is tracked by asset, then the system clears **Equipment**, **Equipment Org.**, and **Related Work Order** because you cannot distribute a part tracked by asset across multiple equipment.

Exchange Rate
Specify the exchange rate for the part on the requisition.

Cost Code
Specify the cost code with which to associate the cost of the requisition.

Blanket Order-Line
Specify the blanket order line to associate with the part.
Note: If you select a **Blanket Order-Line**, the system automatically populates the **Supplier**, **Supplier Catalog Reference**, **Part**, **Description**, **Part Org.**, **Requested Qty.**, **Price**, **UOM**, **Currency**, and **Buyer** from the blanket order line. **Part**and **Description** are protected.

If you specify a Part and then select a **Blanket Order-Line**, the system overwrites the selected **Part** with the part from the blanket order line.

Buyer
Specify the buyer for the part.

Delivery Address
Specify the delivery address for the part.

Inspection
Select to indicate that the part requires inspection.

Warranty
Select to indicate that the part is covered under warranty.

Track by Asset
Select to indicate that the part is tracked by asset.

Expense Type
Specify the expense type for the part.

Commodity
Specify the commodity for the part.

Quotation Indicator
Select one of the options to indicate whether a supplier quotation is required for requisitioning the part:

Option	Description
Price quote not requested	Select if a quotation is not required prior to requisitioning the part.
Request a price quote	Select if a quotation is required prior to requisitioning the part.
Price quote requested before PO	Select if a quotation is preferred but not required prior to purchasing the part.

Comments
Specify comments as necessary.

5 Click **Submit**. The system calculates the cost of the part line and populates **Part Line Total** with the cost of the total value of the line.

Note: To delete a part, select the part to delete, and then click **Delete Part Line**.

To add a comment, click **Add/Edit Comments**.

To add an iProcure part, click **Add Parts (iProcure Items)**.

To update iProcure Items in the parts catalog, click **Update iProcure Items**.

To view iProcure sync errors, click **View iProcure Sync Errors**. View the errors, and then click **Close**.

Selecting substitute parts

Select a substitute part for a requisition.

Note: The system only displays parts that have been associated as substitutes on the **Parts** form. The system does not display parts with **Prevent Reorders** selected on the **Parts** form.

To select substitute parts:

1 Select **Materials > Requisitions**.
2 Select the requisition to which to add parts, and then click the **Parts** tab.
3 Select the part line for which to substitute the part, and then click **Select Substitute Part**.
4 Select the part to substitute, and then click **OK**. The system replaces the value for **Part** with the newly selected part.

Adding services to requisitions

Add services to requisitions when your organization needs to hire external labor.

Note: You can only add services to requisitions that have a status of Unfinished.

Requisition entry limits apply to adding services. Contact your system administrator if you do not have sufficient requisition entry limits.

To add services to requisitions:

1. Select **Materials > Requisitions**.
2. Select the requisition to which to add a service, and then click the **Services** tab. The system automatically populates **Requested Before** with the current date, **Status** with Unfinished, and **Type** with Hours from service.

   Note: The system automatically populates **Work Order-Activity** if a work order and activity were entered on the selected requisition record.

   If the system populates **Work Order-Activity**, it also populates **Trade**, **Price**, **Task**, and **Hours Requested** based on information entered for the selected **Work Order-Activity** and associated **Task**.
3. Click **Add Service Line**.

   Note: If the requisition line is generated from an RFQ, the system populates **RFQ**, **RFQ Org.**, **Quotation**, **Quotation Org.**, and **Quotation Line** when the line is created.

   If an RFQ is generated from the requisition, the system populates **RFQ**, **RFQ Org.**, and **RFQ Line** once the RFQ line is created. When a Quotation line is awarded for an associated RFQ line, the Quotation information is populated.
4. Specify this information:

   Supplier
   Specify or modify the supplier for the service if necessary. If a supplier is entered on the requisition header, the system automatically populates **Supplier** with the designated supplier from the header. Specifying a supplier adds more detail to the search criteria for assigning lines to requisitions.
   Note: The system automatically populates **Supplier Org.** with the organization of the selected supplier. The system also populates **Supplier Catalog Reference** if a catalog reference exists for the supplier.

   Work Order-Activity
   Specify the work order and activity for the service. If **Work Order-Activity** is entered on the requisition header, the system automatically populates **Work Order-Activity** with the designated work order/activity from the header.

   Note: The system can only automatically populate the requisition line with both the work order/activity on the requisition header if **Hired Labor** is selected for the activity on the work order. If the activity is not authorized for hired labor services, the system leaves **Activity** blank, and you must either create or enter a valid activity.

   To create a work order and activity, click **Create Work Order/Activity**.

   If you select or create a **Work Order-Activity**, the system can automatically populate a number of fields from the work order/activity depending on the data entered on the work order/activity, such as the **Equipment**, **Trade**, **Task Qty.** (and the unit of measure), **Price** (from the task record), **Requested Before**, **Equipment Org.**, **Department**, **Task**, **Buyer**, **Warranty**, and **Commodity**. The system also automatically populates the Service Line Total with the total cost of the services on the service line. If the work order/activity is associated with a project and budget, the system populates the **Project** and **Budget** from the work order/activity.

If the selected **Work Order-Activity** is a multiple equipment work order, the system enables **Equipment** and it is required.

Job
Specify the job attached to the work order activity.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:

- Enter a specific equipment to which to distribute the cost of the services.
- Enter All Equipment to evenly distribute the cost of the services to each equipment record on the work order.
- Enter WO Header Equipment to distribute the cost of the services to the equipment on the work order header only.

Note: When associating an order line with a multiple equipment work order, the system copies the purchase order line to only the parent multiple equipment work order activity. The system does not populate the purchase order line for the related work order activities.

Line
Modify the line number of the service on the requisition if necessary. The system automatically assigns the next incremental line number based on the setting of the INCRLINO installation parameter.
Note: You can only edit the **Line** number when inserting a record. After the record is saved, **Line** is protected.

Price
Specify the price of the service.
Note: If a supplier and work order/activity is associated with a trade but not a task, the system populates **Price** with the supplier rate for the specified **Trade**. If a supplier does not exist, the system populates **Price** with the rate specified for the trade and department.

Requested Before
Specify the date before which the requisitioned service must be completed.

Status
Select the status of the service.

Cost Code
Select the cost code for the service. If a **Cost Code** is entered on the requisition header, the system automatically populates **Cost Code** with the designated cost code from the header.

Delivery Address
Select the delivery address for the service. If a **Delivery Address** is entered on the requisition header, the system automatically populates **Delivery Address** with the designated delivery address from the header.

Expense Type
Select the expense type of the service.

Quotation Indicator
Select one of the following options to indicate whether a supplier quotation is required for requisitioning the service:

Options	Description
Price quote not requested	Select if a quotation is not required prior to requisitioning the service.
Request a price quote	Select if a quotation is required prior to requisitioning the service.
Price quote requested before PO	Select if a quotation is preferred but not required prior to purchasing the service.

Type
Select one of the following options:

Options	Description
Contractor hire	Select if the requisitioned service is under contract. If you select Contractor hire, you must enter a **Trade**. You cannot enter **Work Order-Activity**.
Fixed price	Select if the requisitioned service is to be paid at a fixed price. If you select Fixed price, you must enter a **Work Order-Activity**. The system automatically populates **Hours Requested** with 1 and **Price** based on the rate entered for the selected **Trade**. **Note:** If you enter a **Supplier**, the system populates **Price** based on the supplier's catalog rate entered for the selected **Task**. If you do not enter a **Task**, the system populates **Price** based on the supplier's rate entered for the selected **Trade**.
Hours from service	Select if the requisitioned service is to be paid at an hourly rate. If you select Hours from service, you must enter a **Work Order-Activity**.

Hours Requested
Specify the number of estimated hours to complete the service.

Note: If **Estimated Hours** have been specified for the task, the system establishes a ratio enabling you to enter **Task Qty.**, which will then adjust the **Hours Requested**. This ration is always based on the **Task**, never the activity. Likewise, if you enter a value for **Hours Requested**, then the reverse will be true, and the system will adjust the **Task Qty.** If there are no **Estimated Hours** specified for the **Task**, then the **Task Qty.** and **Hours Requested** are not connected. The system calculates the ratio between the **Task Qty.** and **Hours Requested** based on the following formula:

```
Hours Requested / Task Qty. = Ratio
```

For example, if the **Hours Requested** are 1.5 and the **Task Qty.** is 1, the system calculates the ratio between the two as follows:

```
1.5 / 1 = 1.5
```

If you update the **Hours Requested** to 4, then the system calculates the **Task Qty.** as follows:

```
4 / 1.5 = 2.67
```

Since the reverse is true if you update the **Task Qty.**, if you update **Task Qty.** to 4, then the system calculates the **Hours Requested** as follows:

```
4 x 1.5 = 6
```

If you clear **Hours Requested**, the system retains the current value for **Task Qty.**

Buyer
Specify or modify the buyer of the service.

Warranty
Select if the service is covered under warranty.

Commodity
Specify or modify the commodity of the service.

5 Click **Submit**.

Copying requisitions

Copy requisition details to a new requisition.

To copy requisitions:

1 Create a requisition.
2 Right-click anywhere on the **Requisitions** form, and then select **Copy Requisition**.
3 Specify this information:

New Requisition
Specify the name of the new requisition. The system automatically populates the **New Requisition** description.

4 Select the record types to copy, and then click **Submit**.

Creating work orders and activities on the Services page

Quickly create a work order and activity on the **Services** page of the **Requisitions** form without having to open the **Work Order** form.

To create work orders and activities on the **Services** page:

1 Select **Materials > Requisitions**.
2 Select the requisition for which to create a work order and activity, and then click the **Services** tab.
3 Click **Create Work Order/Activity**.
4 Specify the information necessary to create the work order.

Note: If you enter a linear equipment record, the system displays Linear Reference Details. Enter the linear equipment information.

5 Specify the information necessary to add the first activity to the work order.
6 Click **Submit**. The system populates Work Order-Activity on the **Services** page of the **Requisitions** form.

   Note: Click **Reset** to clear all of the fields on the form.

Manually assigning repair details for core tracked parts on requisitions

Manually assign repair details for core tracked parts on requisitions. If you did not select **Auto-Assign** on a core tracked part record, you must manually assign repair details for the repair parts on requisitions. Manually assigning repair details for parts enables you to designate the store, bin, lot, and asset information to identify the parts to repair and their location.

You can also change repair details that were created during the system's automatic assignment process using the Repair Details popup.

To manually assign repair details for core tracked parts on requisitions:

1 Select **Materials > Requisitions**.
2 Select the requisition to which to assign repair details, and then click the **Parts** tab.
3 Select the part to which to manually assign repair details. The system populates the **Part Details** with the part information.

   Note: You can modify **Requested Qty.** for a repair part if necessary. If you make any changes to **Requested Qty.**, you can use the Repair Details popup to edit **Qty. Assigned** as necessary.

   You can only assign repair parts for Approved requisition lines.

4 Click **Assign Repair Details**. The system displays the Repair Details popup.

   The system displays the **Part** and **Part Org.** of the selected part. **Track by Asset** is selected if the part is tracked by asset. The system automatically populates **Total Qty. to Repair** and **Total Qty. Assigned**. **Total Qty. to Repair** indicates the quantity of the part that is currently in stock for repair. The **Total Qty. Assigned** indicates the quantity of the part that is in stock for repair and has already been assigned to a repair bin location.

5 Select the store, bin, lot, and asset from which to assign a quantity of the part to repair.
6 Specify this information:

   Qty. Assigned
   Specify the quantity of the part to assign for repair.
   Note: The value specified for **Qty. Assigned** cannot be greater than **Core Qty.**.

7 Click **Submit**.

   Note: To delete a repair part line from the Parts on a requisition, select the repair part line to delete, and then click **Delete Repair Part**.

Viewing open repairs for requisitions

View information about assets associated with requisitions that are listed as needing repair. This tab will only display details when the associated PO Line has not been fully received

To view open repairs for requisitions:

1 Select **Materials > Requisitions**.
2 Select the requisition for which to view open repairs, and then click the **Open Repairs** tab.
3 View the assets needing repair.

Viewing transactions for requisitions

View return transactions for the selected requisition.

To view transactions for requisitions:

1 Select **Materials > Requisitions**.
2 Select the requisition for which to view transactions, and then click the **Transactions** tab.
3 View the transactions information.

Generating RFQs from requisitions

From a requisition, generate a request for quotations for parts and services.

To generate RFQs from requisitions:

1 Select **Materials > Requisitions**.
2 Select the requisition for which to request quotations, and then click the **Record View** tab.
3 Right-click anywhere on the form, and then select **Generate RFQ**. The system automatically populates **Organization**, **Status**, and **Store**.
4 Specify this information:

RFQ Description
Specify a description of the RFQ.

Currency
Specify the currency for the quotation.

Populate Suppliers
Select to have all requisition suppliers populated on the RFQ.

Requested By
Specify the employee requesting the quotation.

Requested Response Date
Specify the date by which to receive the quotation.

Buyer
Specify the buyer for the quotation.

Delivery Address
Specify the delivery address for the quotation.

5 Click **Generate**. The system stores **RFQ**, **RFQ Org.**, and **RFQ Line** on the requisition line for the RFQ line created from that Requisition line. The system also updates the **Requisition System** to Q (Quoting), populates **RFQ** with the newly created RFQ number, and selects **RFQ Required**.

   Note: If **Populate Suppliers** is selected when a RFQ is being generated, the supplier associated with the requisition line is added to the RFQ on the **Suppliers** tab. If the same supplier is associated with multiple requisition lines, the supplier is added to the RFQ only once.

Approving and rejecting purchasing requisitions

View a list of requisitions awaiting approval, and then either accept or reject the requisitions.

Note: You must have sufficient status change authorizations to approve and reject requisitions, and you cannot approve requisitions that exceed your requisition approval limit.

Approving requisitions

To approve requisitions:

1 Select **Materials > Review/Approve Requisitions**.
2 Select the requisitions to approve, and then click **Approve**. The approved requisitions are removed from the list, and the system status of the requisitions is set to Approved.

   Note: Double-click a requisition to view its details.

Rejecting requisitions

To reject requisitions:

1 Select **Materials > Review/Approve Requisitions**.
2 Select the requisitions to reject, and then click **Reject**.
3 Specify the reason for rejection.
4 Specify this information:

   Use Reason for All
   Select if you are rejecting multiple requisitions and the reason for rejection applies to all of the requisitions.

5 Click **OK**. The removes the rejected requisitions from the list, and sets the system status of the requisitions to Rejected.

Understanding automatic purchase order generation

Users set up as buyers with the proper authorization can automatically generate purchase orders with Unfinished, Ready for printing, or Approved status (or equivalent user codes) from existing requisitions on the **Generate POs** form.

To grant users the authorization to generate and/or approve purchase orders from existing requisitions, you must create the appropriate status change authorizations for generation for the PORD entity on the **Status Authorization** form. You can also create equivalent user codes for Unfinished, Ready for printing, or Approved status to which to assign to generated purchase orders.

You must also have sufficient monetary approval limits for the purchase order line or header level for **Purchase Order** or for **PO Approval** on the **Users** form to generate or approve the purchase order.

The LIMITLEV installation parameter determines whether approval limits are set at the header or line level. The system administrator can set LIMITLEV for **Purchase Order** and**PO Approval** at either the header level or the line level on the **Installation codes** form.

If you attempt to create a purchase order that exceeds your monetary approval limits for the purchase order line or header level, the system does not generate the purchase order.

Note: The scenarios for automatic purchase order generation apply to both the purchase order header and lines, and they are the same whether LIMITLEV is set to the header or line level for Purchase Order Limit.

Additionally, if the ASSETASS installation parameter is set to P and any of the approved requisition lines include parts tracked **By Asset** that have not been associated with objects, you must create an asset for each part tracked **By Asset**.

When generating automatic purchase orders, the system may generate more than one purchase order. Based on the search criteria you specify on the **Generate PO** form, the system may return requisition lines with multiple store and/or supplier combinations. When you select Create PO, the system generates a different purchase order for each individual store/supplier combination. The following table illustrates this concept.

Requisition Number	Line	Store	Supplier	PO to be Created
10000	1	Store 1	Supplier 1	10000
10000	2	Store 1	Supplier 1	10000
10001	1	Store 2	Supplier 1	10001
10002	1	Store 1	Supplier 2	10002
10002	2	Store 2	Supplier 2	10003

If a requisition line contains a repairable spare part to be repaired externally and there are no repair details assigned for the part via either the auto-assignment process or the Repair Details popup, the system processes external repair lines as follows:

- If **PO Status** is Unfinished in Purchase Order Options, the system adds the external repair part to a new or existing purchase order
- If the status of the purchase order is Ready for Printing, the system adds the external repair part to a new purchase order
- If the status of the purchase order is Approved, the system does not add the external repair part to either a new or existing purchase order, because a purchase order cannot be Approved without repair details.

If an external repair part line has repair details assigned, the system adds the external repair line to a new or existing purchase order when you generate the purchase order(s). When the purchase order is Approved, the **Requested Qty.** of the part is moved from **Qty. for Repair** to **Qty. at Supplier** on the stock record of the part, and it is also removed from the **Qty. for Repair** on the bin stock record of the part.

Creating a new purchase order from requisition line items

Create a new purchase order from existing approved requisition line items to quickly move the requisition to the purchasing module. Approved requisition lines can be generated using the **Requisitions** form.

Note: If the installation parameter POCURR is set to NO, the system requires that all requisition lines reference the same currency before it generates a purchase order.

Only users with the proper authorization can create purchase orders from existing requisitions with an Unfinished status or equivalent user code.

Note: To grant users the authorization to create purchase orders from existing requisitions with Unfinished status, you must create the appropriate status authorizations for the PORD entity on the **Status Authorization** form. You can also create an equivalent user code for the Unfinished status to which to assign to generated purchase orders.

You may set monetary approval limits for the purchase order line or header level for **Purchase Order** or for **PO Approval** on the **Users** form to generate and/or approve the purchase order. Purchase order limits are specified per user if you do not use multi-organization security. If you do use multi-organization security, purchase order limits are specified per user and organization. If your system administrator does not set monetary approval limits, users with proper authorization will be able to generate and/or approve purchase orders of any amount.

Note: The LIMITLEV installation parameter determines whether approval limits are set at the header or line level. The system administrator can set **Purchase Order** for generation and/or **PO Approval** for approval at either the header level or the line level using the LIMITLEV installation parameter on the **Install Parameters** form.

To create a new purchase order from requisition line items:

1. Select **Purchasing > Process > Generate POs**
2. Specify this information:

   Organization
   Specify the organization to which the requisition belongs if you use multi-organization security.

   Supplier
   Specify the supplier for which purchase orders should be created.

   Store, Buyer, Requested By, Requisition
   Specify the store, buyer, originator, and/or requisition for which to create the purchase order.
   Note: To generate purchase orders for all stores, buyers, originators, and/or requisitions that begin within a specific letter, enter the letter followed by a percentage sign. For example, if you want to generate purchase orders for all of your Houston stores, you enter ‘H%’ in **Store**.

Create PO
Select to create a new purchase order from the requisition lines.
Note: You may also select **Add to Existing PO**.

PO Status
Select the status of the purchase order to be created.

Originator
Specify the originator of the purchase order to be created.

Delivery Address, Buyer
Specify a delivery address and/or buyer for the purchase order to be created.

Print PO
Select to print a new purchase order from the requisition lines.

3 Click **Process**.
4 Select the requisition lines to associate with the PO. The system automatically selects all of the requisition lines for which a supplier is specified. You may remove individual lines from the list by unselecting the line. The line remains outstanding, and you can assign it to a future purchase order.

   Note: To select all the lines at once, check **Select**. To unselect all the lines at once, uncheck **Select**.

5 If a supplier is not specified for a part, select a supplier for the part. Press F9 to display the supplier lookup. The system automatically populates **Supplier Org.**

   Note: If the part does not currently exist in the supplier's catalog, the system creates a record for the part in the supplier's catalog.

   For parts that are included in a supplier's catalog but do not have a **Gross Price** (for purchases) or **Repair Price** (for repairs) recorded in the supplier catalog, the system updates/inserts the **Gross Price** or **Repair Price** for the part in the supplier catalog when the purchase order line is generated.

6 Click **Generate**. The system generates a purchase order, assigns the appropriate system status, and assigns the organization of the purchase order based on the organization of the store on the requisition.

   Note: Depending on your system configuration, the system requires an electronic signature to authorize status initiations for purchase orders. The system displays the eSignature popup when assigning a status for the purchase order.

Adding requisition line items to an existing purchase order

Add requisition line items to an existing purchase order to quickly move the requisition to the purchasing module. Requisition lines must be approved before they can be added to purchase orders.

Note: If the installation parameter POCURR is set to NO, the system requires that all requisition lines reference the same currency before it generates a purchase order.

To add requisition line items to an existing purchase order:

1 Select **Purchasing > Process > Generate POs**.
2 Specify this information:

Organization
Specify the organization to which the requisition belongs if you use multi-organization security.

Supplier
Specify the supplier for which purchase orders should be created.

Store, Buyer, Requested By, Requisition
Specify the store, buyer, originator, and/or requisition for which to create the purchase order.
Note: To generate purchase orders for all stores, buyers, originators, and/or requisitions that begin within a specific letter, enter the letter followed by a percentage sign,. For example, if you want to generate purchase orders for all of your Houston stores, you enter 'H%' in **Store**.

Add to Existing PO
Select to add the requisition lines to an existing purchase order.
Note: You may also select **Create PO**.

Existing PO
Specify the PO number of the PO for which to add requisition lines.

Print PO
Select to print a new purchase order from the requisition lines.

3 Click **Process** to retrieve the requisition lines.
4 Select the requisition lines to associate with the PO. The system automatically selects all of the requisition lines for which a supplier is specified. You may remove individual lines from the list by unselecting the line. Unselected lines remain outstanding, and you can assign them to a future purchase order.

   Note: To select all the lines at once, check **Select**. To unselect all the lines at once, uncheck **Select**.
5 If a supplier is not specified for a part, select a supplier for the part. Press F9 to display the supplier lookup. The system automatically populates **Supplier Org.**

   Note: If the part does not currently exist in the supplier's catalog, the system creates a record for the part in the supplier's catalog.

   For parts that are included in a supplier's catalog but do not have a **Gross Price** for purchases or **Repair Price** for repairs recorded in the supplier catalog, the system updates or inserts the **Gross Price** or **Repair Price** for the part in the supplier catalog when the purchase order line is generated.
6 Click **Generate**.

   Note: Depending on your system configuration, the system requires an electronic signature to authorize status initiations for purchase orders. The system displays the eSignature popup when assigning a status for the purchase order.

Receiving parts

Receive parts against existing purchase orders or for items purchased without a purchase order such as credit card purchases.

Receiving parts against purchase orders

Receive parts against existing purchase orders. First, create purchase order receipt headers so you can receive purchase orders to your location. Create your receipt header based on an outstanding purchase order or for a specific supplier.

Once you create a receipt header, the system allows you to retrieve outstanding PO lines on the **Active Lines** page. If you entered a purchase order on the receipt header, the system displays all outstanding part lines for the selected purchase order. If you entered a supplier and store on the receipt header, the system displays all outstanding part lines on all purchase orders for that supplier.

From the **Active Lines** page, select which parts to receive and identify bin and/or lot locations to which to receive them.

When you approve lines on a PO receipt, the system moves the lines from the **Active Lines** page to the **Processed Lines** page, changes the status of the receipt from Unfinished to Approved, and adds the received parts to stock unless otherwise indicated.

Note: An automatic update for requisitions and purchase orders assigns a status of Complete when all lines of the requisition or purchase order are received. If there are subsequent returns affecting the requisition or purchase order, the system opens the affected record and automatically changes the status accordingly. Four installation parameters apply to this automatic update: RQSTRECV, RQSTALLR, POSTRECV, and POSTALLR.

Step 1: Create a non-purchase order receipt

To create non-purchase order receipts:

1. Select **Materials > Transactions > Non-PO Receipts**.
2. Click **New Record**.

   Note: The system automatically populates **Date** with the current date.
3. Specify this information:

   Organization
   Select the organization for which to create the non-purchase order receipt if you use multi-organization security. The organization you select must be a specific organization to which you belong.

   Non-PO Receipt
   Specify a description of the non-PO receipt in the adjacent field. The system automatically assigns a number to the non-PO receipt after you save the record.

   Status
   Select the status of the non-PO receipt. The system automatically assigns an Unfinished status to the non-PO receipt, or the equivalent user code status.

   Supplier
   Specify the supplier from which the materials were purchased.

   Store
   Specify the store to which the materials were received.

Reference Number
Specify the reference number for the receipt transaction. The reference number can be a credit card approval number, a verification code, a transaction reference number, etc.

4 Click **Save Record**.

Step 2: Record packing slip information for PO receipts

Record the packing slip information for PO Receipts when the packing slip contains lines for a specific purchase order or contains lines from multiple purchase orders from the same supplier. Once the packing slip information is recorded, the system automatically populates the **Active Lines** page with the lines so that the lines may be received into inventory.

Note: If your company procedure does not use packing slips, skip the packing slip step.

To record packing slip information for PO Receipts:

1 Select **Materials > Transactions > PO Receipts**.
2 Select the PO Receipt for which to record the packing slip, and then click the **Packing Slip** tab.
3 Click **Retrieve Lines**. The system populates the Packing Slip list with outstanding part lines based on the information you specified on the PO receipt header. The system automatically populates **Part**, **Part Description**, **Outstanding Qty. (UOP)**, and **Condition**.
4 Specify this information:

Receipt Qty. (UOP)
Specify the number of items received in the unit of purchase.

Receipt Qty. (UOM)
Specify the number of the parts that were actually received.

Delivery Qty. (UOD)
Specify the number of delivery items, and then specify the unit of measure per unit of delivery.

UOP per Delivery UOD
Specify the unit of purchase for the part per the unit of delivery.

5 Click **Record Packing Slip**. The system records the packing slip lines, changes the system status of the PO Receipt header to R (Packing Slip Recorded), and creates active lines for the packing slip lines.

Note: The packing slip **Receipt Qty. (UOM)** is the value recorded for **Receipt Qty. (UOM)** on the **Active Lines** page.

To remove a packing slip line, select the line to remove, and then click **Remove Line**.

To remove all packing slip lines, click **Remove All Lines**.

To remove multiple packing slip lines, click **Remove Multiple Lines**. Select the lines to remove, and then click **Remove Selected Lines**.

Step 3: Retrieve outstanding PO lines (skip packing slip)

Retrieve outstanding PO lines on the **Active Lines** page after you create the PO receipt header. If you specified a purchase order on the receipt header, the system displays all outstanding part lines for the selected purchase order. If you specified a supplier and store on the receipt header, the system displays all outstanding part lines on all purchase orders for that supplier and store combination.

If you are receiving a part tracked by asset, the system displays the part in quantities of one. For example, you receive five motors that are tracked by asset, so the system displays the motor on five separate lines.

To retrieve outstanding PO lines:

1. Select **Materials > Transactions > PO Receipts**.
2. Select the PO receipt for which to retrieve PO lines, and then click the **Active Lines** tab.
3. Click **Retrieve Parts (Skip Packing Slip)**. The system populates the Active Lines list with outstanding part lines based on the information you specified on the PO receipt header.

   Note: If the purchase order line for which you are receiving parts is associated with a multiple equipment work order, then the system populates **Equipment**, **Equipment Org.**, and **Related Work Order** from the values on the purchase order line, and they are protected.

   To remove individual lines from the Active Lines list, select the line from the Active Lines list, and then click **Cancel Line**. The system cancels the record and updates the Active Lines list. The line remains outstanding and you can add it to a future PO receipt.

   To undo an individual line removal from the Active Lines list, click **Undo Cancel Line**. The system changes the status of the line to Unfinished if the line has a system status of Cancelled.
4. Select the part line for which to specify line details. The system populates the part information including the **Condition** from the purchase order in Active Line Details.

   Note: If the PDRCPTTO installation parameter is set to EVENT, the system automatically selects **Direct** for each direct material part, and it is updateable. If PDRCPTTO is set to STORE, the system automatically selects **Direct**, and it is updateable.

   If the part is tracked by lot, **By Lot** is selected and protected.
5. Verify the number of parts received for each line and edit the information for each part on the receipt as necessary.
6. Specify this information:

   Repair Condition
   Specify the repair condition if the part is for an external repair and condition tracked.

   Bin
   Edit the bin number for the part.
   Note: If you specified a default bin for the part in store on the part record, the system automatically populates **Bin** with the default bin.

   If the part is for an external repair and tracked by condition, the system automatically populates **Bin** with the default bin for the part associated with the repair condition.

   Receipt Qty. (UOM)
   The system automatically populates **Receipt Qty. (UOM)** with the number of the parts that were actually received. The system populates **Receipt Qty. (UOP)** with the actual number of items received in the unit of purchase, and it is protected.

For example, if you received one case of the item, and each case contains 12 items, then the system displays 12 as the **Receipt Qty. (UOM)** and 1 as the **Receipt Qty. (UOP)**.

Note:

If you received fewer or more parts than you ordered, edit the received quantity. To edit **Receipt Qty. (UOM)**, select the line to edit on the Active Lines list. The system populates the line information in the Active Line Details.

If you receive only a partial order, receive the materials, and then save the record. When the rest of the order comes in, create a new PO receipt to close the purchase order. You cannot modify the first PO receipt.

If the part to receive is tracked by asset, the system creates a separate line for each by asset part, populates the **Receipt Qty. (UOM)** with 1, and you must specify an **Asset ID** for each part to receive.

If you are receiving or scrapping core tracked parts from an external supplier repair that were assigned from the same lot in a core bin, the system creates one line for each part on the receipt and populates **Receipt Qty. (UOM)** with the outstanding quantity of the part from the purchase order. If the external repair parts were assigned from more than one lot in a core bin, the system also creates one line for each part/lot combination on the receipt, but the system does not populate **Receipt Qty. (UOM)**.

The system automatically populates the **Qty. per UOP** with the quantity of the part per unit of purchase from the purchase order line.

For parts tracked by asset, the **Receipt Qty. (UOM)** cannot be greater than the outstanding quantity of the part on the purchase order. However, for parts that are not tracked by asset, the **Receipt Qty. (UOM)** can be greater than the outstanding quantity of the part on the purchase order if the OVERRECV installation parameter is set to YES. If OVERRECV is set to NO, the **Receipt Qty. (UOM)** cannot be greater than the outstanding quantity on the purchase order.

Repair Price

If the part is a core tracked part to be repaired externally by a supplier, specify the supplier's price for repairing the part.

Note: Repair Price is only enabled if the RPPRCCAL installation parameter is set to YES and the part selected is a core tracked part from an external repair purchase order line. If the RPPRCCAL installation parameter is set to NO, **Repair Price** is protected regardless of whether the part is core tracked.

If a part is core tracked, the system enables **Scrapped Qty.** and protects **Lot**.

Asset Type

If the part is tracked by asset, specify the asset type for the part to receive.

Department

Specify the department for the part to receive.

Note: For parts tracked by asset, an **Asset ID** and **Department** must be specified. The system may automatically populate these fields depending on the ASSETASS and AUTOANUM installation parameters.

If the ASSETASS installation parameter is set to P for "Purchase Order", assets are created for parts tracked by asset at the time you create the purchase order of the parts to receive, and the assets are already associated with the parts to receive. So, when you click **Retrieve Parts**, the system automatically populates **Asset ID**, **Asset Type**, **Asset Org.**, and **Department** and they are protected. However, if the ASSETASS installation parameter is set to R for "Receipt", you must create the assets to associate with each part tracked by asset at the time of receipt, and you must

specify **Asset ID**, **Asset Org.**, and **Department**. **Asset Type** is also required, and the system automatically populates **Asset Type** with the Asset system type.

If the AUTOANUM installation parameter is set to YES, the system will automatically specify an asset number for each **Asset ID** when you click **Approve Parts**.

Manfacturer Lot
Specify the manufacturer lot for the part to receive.

Expiration Date
Specify the expiration date for the part to receive.

Return Qty.
Specify a return quantity for the part to create a return transaction for the part on the receipt. If you specify a **Return Qty.**, the system enables **Reason for Return**. If you specify a **Return Qty.** and **Reason for Return**, the system creates an approved return transaction for the supplier for all line types (direct materials, parts tracked by asset, and/or core tracked parts) when you click **Approve All Parts**.

Lot
Specify the lot for the part to receive as necessary.
Note: If LOTNRG is set to P, generate lot numbers for each receipt, or T, only generate lot numbers for parts tracked by asset, the system does not automatically populate **Lot** when you receive parts, and you can either specify a lot or select an existing lot for the part. If you do not specify a lot, the system generates a lot for the part when you click **Approve Parts**.

If you specify a new lot, the system creates a new lot record for the specified lot, and the lot will be available for future selection in the **Lot** lookups.

If LOTNRG is set to "-", the system validates the lot based on the existing lots lookup. However, if the SHOWLOT installation parameter is set to N, the system does not generate any lot numbers regardless of the setting of the LOTNRG installation parameter. **Lot** is hidden, and the system automatically populates **Lot**with an asterisk (*) in the database.

If the part to receive is core tracked, **Lot** is protected.

Asset ID
If the part is tracked by asset, specify the code identifying the asset to associate with the part. The system automatically populates **Asset Org.**

Scrapped Qty.
If the part is core tracked, you can specify the quantity of the parts to scrap because they cannot be repaired.

Print Qty.
Specify the quantity of the label(s) to print for the part to receive.
Note: The system automatically sets the **Print Qty.** based on the setting of **Label Printing Default** on the **Stores** tab of the **Parts** form:

Option	Description
If set to No Labels	**Print Qty.** is null.
If set to Single Labels	**Print Qty.** is set to 1.

Option	Description
If set to Label for Each Item	**Print Qty.** is equal to the **Receipt Qty. (UOM)**, but you can modify the **Print Qty.** as necessary. Updating **Print Qty.** does not affect the **Receipt Qty. (UOM)**.

Click **Print Label(s)** to print labels for the part(s) to receive, and the system will print labels based on your system configuration and the specified **Print Qty.**

7 After editing the part details for the part(s) on the receipt, click **Submit**.

8 Review the Active Lines list, and then click **Approve All Parts**.

Note: When you approve the receipt for external repair lines, the system moves **Receipt Qty.** from the **Qty. at Supplier** to **Qty. on Hand** on the stock record of the part. **Scrapped Qty.** is subtracted from **Qty. at Supplier** on the stock record, but it is not added to **Qty. on Hand**.

If the part is tracked by asset, the status of the associated asset is updated to Purchased/In Store. If you scrap the part tracked by asset, the status of the associated asset is updated to Withdrawn, and the status of any child assets in a hierarchy are also updated to Withdrawn.

If both **Receipt Qty.** and **Scrapped Qty.** are specified, the system creates one transaction line of type RECV for both a receipt and the scrap transactions.

If All Equipment is selected for **Equipment** on a line, the system creates a header and line transaction for each **Related Work Order** activity associated with the multiple equipment work order. Each transaction is used to receive the appropriate number of parts for each equipment on the multiple equipment work order. The quantity for each transaction is equal to the quotient of the **Receipt Qty (UOM)** and the number of equipment on the multiple equipment work order. The system automatically applies any remainder of the receipt quantity that cannot be evenly distributed to the last equipment record on the **Equipment** page of the **Work Orders** form.

If a specific **Equipment** record is selected, then the system creates a transaction for the **Related Work Order** associated with the selected **Equipment** and activity.

If **WO Header Equipment** is selected for **Equipment** on a line, then the system creates a transaction for only the work order on the purchase order line.

When you approve the receipt for external repair lines and the part is condition tracked, the system updates **Qty. at Supplier** for the purchase order line part instead of the repair condition part. **Qty. on Hand** is updated for the repair condition part instead of the purchase order line part. In addition, if the part is tracked by asset and received, the status of the associated asset is updated to Purchased/In Store. If you scrap the part tracked by asset, the status of the associated asset is updated to Withdrawn.

Viewing processed lines for PO receipts

View processed lines for PO receipts to see purchase order lines that have already been approved on a PO receipt. Once you approve a line on a PO receipt, the line cannot be used with any other PO receipt. The system automatically moves lines from the **Active Lines** page to the **Processed Lines** page when they are approved.

To view processed lines for PO receipts:

1 Select **Materials > Transactions > PO Receipts**.
2 Select the PO receipt for which to view processed lines, and then click the **Processed Lines** tab.
3 View the processed lines information.

The system displays the following information for each processed line in the Processed Lines list:

Field	Description
Line	Line number of the part on the receipt
Part	Code of the received part
Description	Description of the **Part**
Part Org.	Organization of the **Part**
Type	Type of part, such as Stock Items, Direct Materials, and External Repairs
Received Qty.	Quantity of the part that was received
Scrapped Qty.	If the part is a repairable spare part, the system displays the quantity of the part that was scrapped because it could not be repaired.
Repair Price	If the part is a repairable spare part, the system displays the price of repairing the part.
Originator	The **User ID** of the user from whom the stock transaction originated
Bin	Bin into which the part was received for the receipt transaction
Lot	Lot of the received part
Asset ID	Identification number of the associated asset
Asset Type	Type of the associated asset
Asset Description	Description of the associated asset
Asset Org.	Organization of the associated asset
Department	Department of the part/asset
Serial Number	Serial number of the part/asset
Manufacturer Lot	Lot of the part assigned by the manufacturer
Expiration Date	The date the price for the part expires
Purchase Order	Purchase order for which the part was received
Purchase Order Org.	Organization of the **Purchase Order**
Receipt Trans.	System-generated number identifying the part receipt

Field	Description
Return Trans.	System-generated number identifying the part return
Return Qty.	Number of the part that was returned for the receipt
Reason for Return	Explanation of why the part that was specified during the receipt/return transaction was returned
Work Order	Work order for which the part was purchased/received
Activity	Activity on the work order for which the part was purchased/received
Direct	Indicates that the received part was for a purchase order line type of Direct Materials
Equipment	The equipment for which the part was purchased/received if the associated **Work Order** and activity is a multiple equipment work order
Equipment Org.	Organization of the **Equipment** if the associated **Work Order** and activity is a multiple equipment work order
Related Work Order	Number identifying the system-generated MEC work order created for the **Equipment** if the associated **Work Order** and activity is a multiple equipment work order
Direct	Indicates that the received part was for a purchase order line type of Direct Materials
By Lot	Indicates that the part received is tracked by lot
Supplier Catalog Reference	Number of the part in the supplier's part catalog
Assigned To	Employee code of the employee to whom the work order is assigned
Name	Name of the employee to whom the work order is assigned

Creating non-purchase order receipts

Create non-purchase order receipts to receive parts into store without a purchase order to facilitate credit card purchases or any other type of purchase made without using a purchase order.

After creating a non-purchase order receipt, you can update the receipt status as necessary based on your status change authorization privileges. Status change authorizations are set up for the TRAN

entity on the **Status Authorizations** form. However, the system enables and/or protects the fields available for update based on the status from which you are updating the receipt.

Step 1: Create a non-purchase order receipt

To create non-purchase order receipts:

1 Select **Materials > Transactions > Non-PO Receipts**.

2 Click **New Record**.

Note: The system automatically populates **Date** with the current date.

3 Specify this information:

Organization
Select the organization for which to create the non-purchase order receipt if you use multi-organization security. The organization you select must be a specific organization to which you belong.

Non-PO Receipt
Specify a description of the non-PO receipt in the adjacent field. The system automatically assigns a number to the non-PO receipt after you save the record.

Status
Select the status of the non-PO receipt. The system automatically assigns an Unfinished status to the non-PO receipt, or the equivalent user code status.

Supplier
Specify the supplier from which the materials were purchased.

Store
Specify the store to which the materials were received.

Reference Number
Specify the reference number for the receipt transaction. The reference number can be a credit card approval number, a verification code, a transaction reference number, etc.

4 Click **Save Record**.

Step 2: Add parts to a non-purchase order receipt

To add parts to a non-purchase order receipt:

1 Select **Materials > Transactions > Non-PO Receipts**.

2 Select the non-PO receipt for which to add parts, and then click the **Parts** tab.

3 Click **Add Part**.

Note: To automatically create a new part record while adding the part to the Parts list, click **Create Part**. The system inserts a new Part Details record, creates a part record, assigns the part record a part number beginning with ‘N’, and protects the **Part** field from update.

4 Specify this information:

Part
Specify the part to add to the non-PO receipt. The system automatically populates the part description and **Part Org.**, and **Bin** based on the information you specified on the **Stores and Stock** pages of the **Parts** form.
Note: The system automatically selects **Track by Asset** for parts tracked by asset, and you must specify an **Asset ID**, **Asset Type**, and **Asset Org.**

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Receipt Qty.
Specify the quantity of the part that you received.
Note: For parts tracked by asset, the system only receives the part in quantities of 1. The system automatically assigns 1 as the **Receipt Qty.** You must manually add lines for each asset to receive if you want to receive more than one asset.

Bin
Specify the bin where the part should be stocked.

Lot
Specify the lot for the part.

Expiration Date
Specify the expiration date for the lot.

Department
Specify the department of the asset if the part is tracked by asset.

Manufacturer Lot
Specify the manufacturer lot for the part.

Print Qty.
Specify the quantity of the label(s) to print.
Note: The system automatically sets the **Print Qty.** based on the setting of **Label Printing Default** on the **Stores** tab of the **Part** form:

Option	Description
If set to No Labels	**Print Qty.** is null.
If set to Single Labels	**Print Qty.** is set to 1.
If set to Label for Each Item	**Print Qty.**is equal to the **Receipt Qty.**, but you can modify the **Print Qty.** as necessary. Updating **Print Qty.** does not affect the **Receipt Qty.**

5 Click **Print Label(s)** to print labels for the part(s) to receive, and the system will print labels based on your system configuration and the specified **Print Qty.**

6 Specify this information:

Price
Specify the price of the part.

Asset ID
Specify the asset ID number for the part if the part is tracked by asset.

Asset Type
Specify the asset type for the part if the part is tracked by asset.

Asset Org.
Specify the organization for the asset for the part if the part is tracked by asset.
Note: If the ASSETASS installation parameter is set to P, a by asset part must already be associated with an asset with a status of Awaiting Purchase to receive the part. If you want to receive a part tracked by asset, you must specify an **Asset ID**, but all other asset-related fields are protected. After selecting an **Asset ID**, the system automatically populates **Asset Type**, **Asset Org.**, **Description**, **Department**, and **Serial Number** (if applicable).

If the ASSETASS installation parameter is set to R, you can create assets when you are receiving a part tracked by asset. You can either associate an existing asset with the part, or you can manually specify asset information to create new assets. If you select an existing asset as the Asset ID, the system automatically populates the **Asset Type**, **Asset Org.**, **Department**, and **Serial Number** (if applicable) from the asset record. If you choose to manually specify the asset information, you must specify an **Asset ID**, **Asset Type**, **Asset Org.**, and **Description** for each asset. The system automatically populates **Asset Type** with type A (or the system equivalent); however, you can update the **Asset Type** as necessary.

If the AUTOANUM installation parameter is set to YES and the ASSETASS installation parameter is set to R, the system automatically generates asset numbers for parts tracked by asset, but you must specify an **Asset Type**, **Asset Org.**, and **Description** for each asset. You can also update **Asset ID** if necessary. The system automatically populates **Asset Type** with type A (or the system equivalent); however, you can update the **Asset Type** as necessary. When you save the record, the system saves the asset information on the receipt; however, the system does not actually create any assets until the receipt **Status** is Approved. Upon approval of the receipt, the system creates all of the new assets using the part descriptions.

Serial Number
Specify the serial number for the part if the part is tracked by asset.

7 Click **Submit**.

Note: To remove a part line, select the part line to remove, and then click **Remove Part**.

Issuing and returning parts

Issue parts from stores to work orders, equipment, or projects. Return unused parts and parts needing repair to stores.

Issuing parts to work orders, equipment, or projects

Issue parts to stores to work orders, equipment, or projects.

Note: If you have selected FIFO or LIFO as your pricing method, the system calculates the transaction price of issues to work orders, equipment, or projects using the **R5FIFO** table, rather than retrieving the base price from the **R5PARTS or R5STOCK** table.

To issue parts to work orders, equipment, or projects:

1 Select **Materials > Transactions > Issue/Return Parts**.

Transaction Type is automatically populated with Issue to enable issue functionality.

2 Specify this information:

Store
Specify the store from which to issue parts. If a default store is defined for the current user,**Store** is automatically populated with the user's default store.

Choose one of the following options to issue to a work order, piece of equipment, or project:

Option	Description
Issue to a work order	Specify the **Work Order-Activity**. The system automatically populates **Equipment**, **Equipment Org.**, **Project-Budget**, **Cost Code**, and **Department** from the work order, as well as the **Material List** or **Pick Ticket** if they have been associated with the **Activity**.
Issue to a piece of equipment	Specify the **Equipment**. The system automatically populates **Cost Code** and **Department** **Note:** If the selected **Equipment** is associated with a multiple equipment work order, then the system also populates **Equipment Org.** and **Related Work Order**. If you select All Equipment for **Equipment** and you are issuing a **By Asset** part, then the system clears the Transaction Details.
Issue to a project	Specify the **Project-Budget** and **Department**.

Issue To
Specify the code of the employee to whom to make the issue.

Reference Number
Specify a reference number for the issue. The reference number is simply an internal reference number that is not used by the system for any validation.

Material List
Specify the material list from which to issue. If a material list is already attached with the selected work order/activity, the system automatically populates **Material List** in the Issue From / Return To section and enables the **Material List** hyperlink in the **Transaction Details** section. You can modify **Material List** as necessary when the parts on the material list have been added to the Transaction Details list.

Pick Ticket
Specify the pick ticket from which to issue. If a pick ticket is already attached with the selected work order/activity, the system automatically populates **Pick Ticket** in the Issue From / Return To section and enables the **Pick Ticket** hyperlink in the **Transaction Details** section. You can modify **Pick Ticket** as necessary when the parts on the pick ticket have been added to the Transaction Details list.
Note: Pick tickets are not available for issuing parts to a project/budget.

If the selected **WO-Activity** associated with the **Pick Ticket** is a multiple equipment work order, then the system automatically populates **Equipment** with WO Header Equipment.

Department
Specify the department of the store, work order/activity, project/budget, or equipment. The system automatically populates **Department** if you have selected a work order/activity or piece of equipment.

Date
Modify the date on which to make the issue. The system automatically populates **Date** with the current date and time.

Choose one of the following options:

- If the parts have been included on a material list, click **Material List**
- If the parts have been included on a pick ticket, click **Pick Ticket**.
- If purchased parts were delivered and are ready for distribution, click **Held Items**.
- If stock parts are reserved for this work order, click **Reserved Items**.

Note: If none of these options apply, specify the part information manually. See the next step.

Part
Specify the part to issue. The system displays the available quantity, the bin location, and the lot number. Change the bin location and lot number as necessary. The system populates **Available Qty.** with the sum of the quantities of the part in all the bins in the selected Store minus any quantity of the part that is currently allocated to any work orders.

If the part to issue is tracked by asset, the system automatically selects **Track by Asset** and specifies 1 as the **Transaction Qty.**, and you must specify a value for **Asset ID** for the part. The system populates **Available Qty.** with the total quantity of the part that is currently available.

The system automatically populates **Available Qty. UOM** and **Transaction Qty. UOM**.

Note: You cannot specify a **Transaction Qty.** greater than 1 when issuing parts tracked by asset. If you want to issue multiple quantities of a part tracked by asset, you must add the part tracked by asset to the Transaction Details list on individual lines with a **Transaction Qty.** of 1 until you have reached the number of the part tracked by asset that you wish to issue for the transaction. **Track by Asset** is hidden by default.

If the part to issue is tracked as part of a kit, the system creates a single transaction line for the kit.

Bin
Select the bin from which to issue the part. The system specifies the default bin for the part if applicable.
Note: When you select a **Bin**, the system updates the **Available Qty.** with the quantity of the part in the selected **Bin** minus any quantity of the part that is currently allocated to any work orders from that **Bin**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Lot
Select the lot from which to issue the part. The system automatically populates **Expiration Date**, **Serial Number**, and **Manufacturer Lot**.

Transaction Qty.
Specify the number of parts to issue. The system automatically specifies the **Available Qty.** of the part if applicable.

Print Qty.
Specify the quantity of the label(s) to print. The system automatically sets the **Print Qty.** based on the setting of **Label Printing Default** on the **Stores** tab of the **Part** form:

Option	Description
If set to No Labels	**Print Qty.** is null.
If set to Single Labels	**Print Qty.** is set to 1.
If set to Label for Each Item	**Print Qty.** is equal to the **Receipt Qty.**, but you can modify the **Print Qty.** as necessary. Updating **Print Qty.** does not affect the **Receipt Qty.**

Print Core Return Qty.
Specify the quantity of the core return label(s) to print.

Failed Qty.
Specify the quantity of the part that failed.
Note: The system does not allow part failures on an Issue for parts tracked by asset.

Date Failed
Specify the date the part failed.

Problem Code
Specify the code of the problem for the failed part.

Failure Code
Specify the reason that the part failed.

Action Code
Specify the action taken to correct the problem.

Cause Code
Specify the problem cause code.

Failure Notes
Specify comments about the failure.

3 Click **Add to List**.

Note: The Transaction Details list acts as a buffer to temporarily store the parts to issue without actually issuing them until the transaction is submitted. You can add/remove parts for the issue as necessary before submitting the transaction and saving the information to the database. Click **Add Part**to add additional parts to the issue. To remove a part from the Transaction Details list, select the part record to remove from the issue, and then click **Remove from List**.

Additionally, you can also update information in the Issue To/Return From and the Issue From/Return To sections for the transaction as necessary before adding records to the Transaction Details list.

4 Click **Submit Transaction**. The system issues the part(s) and creates a stock transaction of type I for the issuing store with a negative quantity for the issue.

Note: To print labels for the issue transaction, click **Print Label(s)**.

To print labels for the core return transaction, click **Print Core Return Label(s)**.

To record a stockout for a part, select the part, and then click **Record Stockouts**.

Issuing parts to multiple equipment work orders

Issue parts from stores to multiple equipment work orders.

To issue parts to multiple equipment work orders:

1 Select **Materials > Transactions > Issue/Return Parts**.

2 Specify this information:

Store
Specify the store from which to issue the part(s). If a default store is defined for the current user, the system automatically populates **Store** with the user's default store.

The system automatically populates **Date** with the current system date and **Transaction Type** with **Issue** to enable issue functionality.

WO-Activity
Specify the multiple equipment work order/activity to which to issue the part.

The system automatically populates **Equipment** with All Equipment. The system also populates **Related Work Order**, **Cost Code**, and **Department** from the selected **WO-Activity**. **Equipment** is required and **Related Work Order** is protected.

If the selected multiple equipment **WO-Activity** is associated with a project/budget, then the system automatically populates **Project–Budget**, and it is protected.

If the selected **WO-Activity** is associated with a pick ticket, the system automatically populates **Pick Ticket** from the associated **WO-Activity** or **Equipment** record.

Note: The system does not display work orders in the **WO-Activity** lookup for which the value specified for the ISSDAYS installation parameter has been exceeded.

If the selected multiple equipment **WO-Activity** has reserved parts and not all parts have been issued, then the system enables the **Reserved Items** hyperlink. Click **Reserved Items** to retrieve the relevant part information to the Transaction Details list.

If the selected multiple equipment **WO-Activity** or any of its related work orders have direct material parts that have been purchased and All Equipment is selected for **Equipment**, then the system enables the **Held Items** hyperlink. Click **Held Items** to retrieve the relevant part information to the Transaction Details list.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:

- Specify a specific equipment to which to issue the **Transaction Qty.**
- Specify All Equipment to evenly to issue the **Transaction Qty.** to each equipment record on the work order.
- Specify WO Header Equipment to issue the **Transaction Qty.** to the equipment on the work order header only.

Note: The system automatically applies any remainder of the **Transaction Qty.** that could not be distributed evenly to the last equipment record on the **Equipment** page of the **Work Orders** form.

If you select All Equipment and at least one of the related work orders has a Completed status (or equivalent user status), the system displays a message enabling you to select whether to distribute the cost of the issue against all equipment or against only open related work orders regardless of whether the related work orders are Open or Completed (or their user-status equivalents).

Cost Code
Specify the cost code for which to issue the part. The system populates the description in the adjacent field.

Issue To
Specify the code of the employee to whom to make the issue.

Reference Number
Specify a reference number for the issue. The reference number is simply an internal reference number that is not used by the system for any validation.

Material List
Specify the material list from which to issue parts for the multiple equipment work order.

Pick Ticket
Specify the pick ticket from which to issue parts for the multiple equipment work order. The system automatically selects WO Header Equipment for **Equipment** and enables the **Pick Ticket** hyperlink in the Transaction Details.
Note: If a pick ticket is associated with the selected multiple equipment **WO-Activity**, then you cannot select another value for **Equipment** other than WO Header Equipment. Pick tickets cannot be used to issue parts across all equipment on a multiple equipment work order or to a specific equipment on a work order.

Department
Modify the department of the work order.

Date
Modify the date on which to make the issue.

Part
Specify the part to issue. The system displays the available quantity, the bin location, and the lot number. Change the bin location and lot number as necessary.

The system populates **Available Qty.** with the sum of the quantities of the part in all the bins in the selected **Store** minus any quantity of the part that is currently allocated to any work orders. **Asset ID** and **Tool Hours** are protected.

Note: You cannot distribute issues of parts tracked by asset to All Equipment on a multiple equipment work order. If All Equipment is selected for **Equipment**, then the lookup for **Part** displays only unique parts issued to the work order header or any of the related work orders.

If you are issuing a part tracked by asset to a specific **Equipment** on a multiple equipment work order, the lookup for **Part** displays only the parts issued to the individual equipment record on the **Related Work Order**.

Bin
Specify the bin from which to issue the part.

The system specifies the default bin for the part if applicable. When you select a **Bin**, the system updates the **Available Qty.** with the quantity of the part in the selected **Bin** minus any quantity of the part that is currently allocated to any work orders from that **Bin**.

The system automatically populates **Available Qty. UOM** and **Transaction Qty. UOM**.

Lot
Specify the lot from which to issue the part.

The system automatically populates **Expiration Date**, **Serial Number**, and **Manufacturer Lot**.

Transaction Qty.
Specify the quantity of the part to issue.

If the part to issue is tracked by asset, the system automatically selects **Track by Asset** and specifies 1 as the **Transaction Qty.**, and you must specify a value for **Asset ID** for the part. The system populates **Available Qty.** with the total quantity of the part that is currently available.

Note: You cannot specify a **Transaction Qty.** greater than 1 when issuing parts tracked by asset. If you want to issue multiple quantities of a part tracked by asset, you must add the part tracked by asset to the Transaction Details list on individual lines with a **Transaction Qty.** of 1 until you have reached the number of the part tracked by asset that you wish to issue for the transaction. **Track by Asset** is hidden by default.

When issuing parts to a multiple equipment work order for which All Equipment is selected, parts tracked by asset are not available for issue, and the system splits the **Transaction Qty.** equally among all the related work orders.

Print Qty.
Specify the quantity of the label(s) to print.

The system automatically sets the **Print Qty.** based on the setting of **Label Printing Default** on the **Stores** tab of the **Parts** form:

- If set to No Labels, **Print Qty.** is null.
- If set to Single Labels, **Print Qty.** is set to 1.
- If set to Label for Each Item, **Print Qty.** is equal to the **Receipt Qty.**, but you can modify the **Print Qty.** as necessary.

  Updating **Print Qty.** does not affect the **Receipt Qty.**

3 Click **Add to List**.

Note: The Transaction Details list acts as a buffer to temporarily store the parts to issue without actually issuing them until the transaction is submitted. You can add/remove parts for the issue as necessary before submitting the transaction and saving the information to the database. Click **Add Part** to add additional parts to the issue.

To remove a part, select the part record to remove, and then click **Remove from List**. The system updates the Transaction Details list.

4 Click **Submit Transaction**. The system issues the part(s) and creates a stock transaction of type I for the issuing store with a negative quantity for the issue.

Note: To print labels for the issue transaction, click **Print Label(s)**.

If the AUTOPART installation parameter is set to AUTO, then the system determines whether each part is associated with the equipment's Parts Associated list. If any of the parts are not associated with the equipment's Parts Associated list, the system updates the list with the parts and assigns the **Transaction Qty.** as the part's associated **Quantity**. If a part is already associated but the **Transaction Qty.** is greater than the existing associated **Quantity**, then the system updates the associated **Quantity** with the **Transaction Qty.** The system does not update the existing associated **Quantity** if the **Transaction Qty.** is not greater.

Adding parts on a material list to an issue

Add parts on a material list to an issue on the Issue/Return Parts form. If you enter a **Material List** on an issue header, the system enables the **Material List** hyperlink in the Transaction Details enabling you to add the parts on the material list to the issue. You can select which parts to add, and you can also modify the **Bin**, **Lot**, and **Transaction Qty.** for the part(s) to add to the issue.

You can issue parts on a defined material list to a **WO–Activity** multiple times. However, you can only issue parts on a temporary material list created by selecting parts for a work order to the work order for which the temporary list is created.

If the material list includes parts that are associated with equipment codes or equipment categories, the system only adds part records to the Transaction Details list that are associated with the equipment on the header or the equipment category or parts that are not associated with any equipment or equipment category.

Example:

You create MATERIAL LIST 1 with the following parts:

Line Number	Part	Quantity	Equipment
1	PART1	1	EQUIP1
2	PART2	1	EQUIP2
3	PART3	1	
5	PART4	2	EQUIP4
6	PART4	3	EQUIP1
7	PART4	4	
8	PART5	1	CATEGORY1
9	PART6	1	CATEGORY2

You then create a work order WO1 for EQUIP1 of CATEGORY1. After creating the WO1, you open the Issue/Return Parts form to issue parts to WO1. You enter MATERIAL LIST 1 as the **Material List**

on the issue header and then click the **Material List** hyperlink, and then the system retrieves the following parts and quantities:

Part	Quantity
PART1	1
PART3	1
PART3	1
PART4	3
PART4	4
PART5	1

Note: If a part on a material list is tracked by asset, then each by asset part on the material list is entered on a separate line regardless of the **Available Qty.** and the system automatically enters 1 as the **Transaction Qty.**

To add parts on a material list to an issue:

1. Select **Materials > Transactions > Issue/Return Parts**.
2. Specify a **WO–Activity**, **Project–Budget**, or **Equipment** as necessary.
3. Specify this information:

   Material List
   Specify the material list from which to issue parts.

   Department
   Specify the department against which to issue the parts from the material list.

   Date
   Modify the date as necessary.

4. Click **Material List**.
5. Select the part on the material list for which to update the transaction details.
6. Modify this information as needed:

   Bin
   Modify the bin from which to issue the parts on the material list if necessary.

   Lot
   Modify the lot from which to issue the parts on the material list if necessary.

   Transaction Qty.
   Update the number of parts to issue from the pick ticket as necessary.

7. Click **Add to List**.

   Note: The Transaction Details list acts as a buffer to temporarily store the parts to issue without actually issuing them until the transaction is submitted. You can add and remove parts for the issue before submitting the transaction and saving the information to the database.

To remove a part from the pick ticket from the Transaction Details list, select the part record to remove from the issue, and then click **Remove from List**.

8 Update additional parts from the material list as necessary.

Adding parts on a pick ticket to an issue/return

Add parts on a pick ticket to an issue/return on the **Issue/Return Parts** form. To issue parts from a pick ticket, the status of the pick ticket must be Approved, and a pick ticket can only be used for the work order or equipment for which it was created.

If you enter a **Pick Ticket** on an issue header, the system enables the **Pick Ticket** hyperlink in the Transaction Details for adding the parts on the pick ticket to the issue. You can select which parts to add, and you can also modify the **Bin**, **Lot**, and **Transaction Qty.** for the part(s) to add to the issue.

The setting of the PICKONCE installation parameter determines whether you can issue parts on a pick ticket for multiple transactions for the same **WO-Activity**. If PICKONCE is set to YES, the system will not automatically enter a **Pick Ticket** for the **WO-Activity** in the issue header if an issue transaction for the pick ticket already exists for the **WO-Activity**; and you cannot select the pick ticket from the **Pick Ticket** lookup. If PICKONCE is set to NO, then you can reuse the same pick ticket for more than one transaction for a **WO-Activity**, but the system will only retrieve parts to the issue transaction that were not previously issued.

Note: You can only issue more parts than the specified **Required Qty.** for the part on a pick ticket if there is a sufficient **Available Qty.** for the part.

Once a pick ticket has been fully issued and fully returned, the system sets the status of the pick ticket to Closed and the pick ticket is no longer available for use, even if PICKONCE is set to NO.

If a part on a pick ticket is tracked by asset, then each by asset part on the pick ticket is entered on a separate line regardless of the **Available Qty.** and the system automatically enters 1 as the **Transaction Qty.**

To add parts from a pick ticket to an issue:

1 Select **Materials > Transactions > Issue/Return Parts**.

2 Specify this information:

Pick Ticket
Specify the pick ticket from which to issue parts. The system enables the **Pick Ticket** hyperlink in the Transaction Details.

3 Click **Pick Ticket**. The system populates the Transaction Details list with the **Parts** on the pick ticket and protects all the information on the issue header.

4 Select the part on the pick ticket for which to update the transaction details. The system populates the Transaction Details.

The system automatically populates **Bin**, **Lot**, and **Transaction Qty.** The **Transaction Qty.** is equal to the **Required Qty.** specified for the part on the pick ticket.

The system automatically populates**Part**, **Part Description**, **Asset ID**, **Available Qty.**,**Transaction Qty. UOM**, and **Available Qty. UOM**; they are protected.

5 Modify this information as necessary:

Bin
Modify the bin from which to issue the parts on the pick ticket if necessary.

Lot
Modify the lot from which to issue the parts on the pick ticket if necessary.

Transaction Qty.
Modify the number of parts to issue from the pick ticket as necessary.

6 Click **Add to List**. The system updates the Transaction Details list.

Note: The Transaction Details list acts as a buffer to temporarily store the parts to issue without actually issuing them until the transaction is submitted. You can add/remove parts for the issue before submitting the transaction and saving the information to the database.

To remove a part from the pick ticket from the Transaction Details list, select the part record to remove from the issue, and then click **Remove from List**.

7 Update additional parts from the pick ticket as necessary.

Returning parts from multiple equipment work orders

Return unused parts from multiple equipment work orders.

To return parts from multiple equipment work orders:

1 Select **Materials > Transactions > Issue/Return Parts**.

2 Specify this information:

Store
Specify the store to which to return the part(s). If a default store is defined for the current user, the system automatically populates **Store** with the user's default store. The system automatically populates **Date** with the current system date and **Transaction Type** with Issue to enable issue functionality.

Transaction Type
Select Return to enable return functionality.

WO-Activity
Specify the multiple equipment work order/activity to which to return the part. The system automatically populates **Equipment** with All Equipment. The system also populates **Related Work Order**, **Cost Code**, and **Department** from the work order/activity. **Equipment** is required and **Related Work Order** is protected.

If the selected multiple equipment **WO-Activity** is associated with a project/budget, then the system automatically populates **Project–Budget**, and it is protected.

If the selected **WO-Activity** is associated with a pick ticket, the system automatically populates **Pick Ticket** from the associated **WO-Activity** or **Equipment** record.

Note: The system does not display work orders in the **WO-Activity** lookup for which the value specified for the RTNDAYS installation parameter has been exceeded.

Equipment
Choose one of these options if the work order is a multiple equipment work order:

- Specify a specific equipment to which to distribute the **Transaction Qty.**
- Specify All Equipment to evenly distribute the **Transaction Qty.** to each equipment record on the work order.
- Specify WO Header Equipment to distribute the **Transaction Qty.** to the equipment on the work order header only.

  Note: The system automatically applies any remainder of the return quantity to the last equipment record on the **Equipment** page of the **Work Orders** form.

  If you select All Equipment and at least one of the related work orders has a Completed status (or equivalent user status), the system displays a message enabling you to select whether to distribute the cost of the return against only open related work orders or against all equipment, regardless of whether the related work orders are Open or Completed (or their user-status equivalents).

Reference Number
Specify a reference number for the return.

Material List
Specify the material list from which to return.

Pick Ticket
Specify the pick ticket if a pick ticket is associated with the **WO-Activity** and **Equipment**. Because the **WO-Activity** is a multiple equipment work order, the system automatically selects WO Header Equipment for **Equipment**. If the PICKONCE installation parameter is set to YES, then the system does not display the associated pick ticket in the **Pick Ticket** lookup. If PICKONCE installation parameter is set to NO, the system enables you to select the associated pick ticket from the **Pick Ticket** lookup. However, once you select a value for **Pick Ticket**, the system only displays parts issued for the pick ticket in the **Part** lookup, and you can only return the parts issued from the pick ticket.

Department
Specify the department to which to return parts.

Date
Modify the date on which to make the return if necessary.

Part
Specify the part to return. The system displays parts in the **Part** lookup based on the setting of the RTNANY installation parameter and whether you are returning to a work order, a piece of equipment, or a project.
Note: Because the selected **WO-Activity** is a multiple equipment work order, **Equipment** is automatically populated with All Equipment, and the system displays only parts issued to the work order header or any of the related MEC work orders in the **Part** lookup. When you select the part to return, the system automatically populates **Transaction Qty.**, **Bin**, and **Lot**. The **Transaction Qty.** is the difference of the total quantity issued to all equipment on the work order and the quantity already returned from all equipment on the work order. You can modify the **Transaction Qty.**, **Bin**, and **Lot** as necessary and add additional equipment to the Parts list.

If the part to return is tracked by asset, the system automatically selects **Track By Asset**, specifies 1 as the **Transaction Qty.**, and you must specify a value for **Asset ID** for the part. The system populates **Available Qty.** with the total quantity of the part that is currently available.

The system automatically populates **Transaction Qty. UOM**.

Note: You cannot specify a **Transaction Qty.** greater than 1 when returning parts tracked by asset. If you want to return multiple quantities of a part tracked by asset, you must add the part tracked by asset to the Transaction Details list on individual lines with a **Transaction Qty.**of 1 until you have reached the number of the part tracked by asset that you wish to return for the transaction.

When returning parts to a multiple equipment work order for which All Equipment is selected, parts tracked by asset are not available for return, and the system splits the **Transaction Qty.** equally among all the related work orders.

If you submit a return transaction for a repairable spare part with **Return for Repair** unselected, the system processes the return as a normal return.

If the Part is designated as a Tool, then **Tool Hours** is enabled.

Bin
Modify the bin to which to return the part if necessary.

Lot
Modify the lot to which to return the part if necessary. The system automatically populates **Bin** and **Lot** with the bin and lot numbers associated with the original issue transaction for the part.

Transaction Qty.
Specify the number of parts to return.

Transaction Qty. is automatically populated with the original issue quantity of the part. If you have already returned a partial quantity of the part from the original issue, **Transaction Qty.** is populated with the original quantity of the part issued minus the quantity of the part that has already been returned.

Note: Transaction Qty. can be limited based on the setting of the RTNANY installation parameter. For returns from multiple equipment work orders, if RTNANY installation parameter is set to Yes and All Equipment is selected for **Equipment**, then the system evenly distributes the return quantity to all equipment records on the work order.

If RTNANY installation parameter is set to No and All Equipment is selected for **Equipment**, you can only return a part that was previously issued and for which there is a sufficient quantity issued to the equipment.

Tool Hours
If the part you are returning is identified as a tool, specify the number of hours the tool was in use. The system applies the **Tool Hours** to the equipment on the multiple equipment work order based on the value specified for **Equipment**.

Print Qty.
Specify the quantity of the label(s) to print.

The system automatically sets the **Print Qty.** based on the setting of **Label Printing Default** on the **Stores** tab of the **Parts** form:

Option	Description
If set to No Labels	**Print Qty.** is null.
If set to Single Labels	**Print Qty.** is set to 1.

Option	Description
If set to Label for Each Item	**Print Qty.** is equal to the **Receipt Qty.**, but you can modify the **Print Qty.** as necessary. Updating **Print Qty.**does not affect the **Receipt Qty.**

3 Click **Add to List**.

Note: The Transaction Details list acts as a buffer to temporarily store the parts to return without actually returning them until the transaction is submitted. You can add/remove parts for the return before submitting the transaction and saving the information to the database. Click **Add Part** to add additional parts to the return.

To remove a part, select the part to remove, and then click **Remove from List**.

Additionally, you can also update information in the Issue To / Return From and/or Issue From / Return To sections for the transaction as necessary before adding records to the Transaction Details list.

4 Click **Submit Transaction**. The part(s) are returned, and a stock transaction of type I is created for the return store with a positive quantity for the return.

Issuing parts from a stock record of a part

Issue parts from a stock record of a part on the **Stock** page of the **Parts** form using the Issue Part popup.

Note: If you have selected FIFO or LIFO as your pricing method, the system calculates the transaction price of issues using the **R5FIFO** table, rather than retrieving the base price from the **R5PARTS or R5STOCK** table.

To issue parts from a stock record of a part:

1 Select **Materials > Parts**.

2 Select the part to issue, and then click the **Stock** tab.

3 Select the store, bin, and lot from which to issue the part, and then click **Issue Part**.

Note: If the part selected to issue is a core tracked part and the RRISSWAR installation parameter is set to Yes, the system displays a message indicating that the part is a core tracked part and that a part may also need to be returned for repair.

4 Specify this information:

Work-Order Activity, Project-Budget, Equipment, Job
Specify the work order/activity, project-budget, equipment, or job against which to issue parts.
Note: You must select a valid combination for **Work Order–Activity**/**Equipment** or for **Work Order–Activity**/**Project–Budget** to submit the issue. You can also select to make the issue to an individual piece of **Equipment** or an individual **Project–Budget**.

Department
Specify the department from which to issue parts.

Issue To
Specify the code of the employee for which to make the issue.

Issue Qty.
Specify the number of parts to issue.

If the part to issue is tracked by asset, the system automatically populates **Issue Qty.** with 1 and it is protected. You must specify the asset by which the part is tracked for **Asset ID**. You cannot modify the **Issue Qty.** when issuing a part tracked by asset from a stock record.

5 Click **Submit**.

Returning parts from a stock record of a part

Return parts from a stock record of a part on the **Stock** page of the **Parts** form using the Return Part popup.

Note: If you have selected FIFO or LIFO as your pricing method, the system calculates the transaction price of returns using the **R5FIFO** table, rather than retrieving the base price from the **R5PARTS or R5STOCK** table.

To return parts from a stock record of a part:

1 Select **Materials > Parts**.
2 Select the part to return, and then click the **Stock** tab.
3 Select the store, bin, and lot to which to return the part, and then click **Return Part**.
4 Specify this information:

Return Condition
Specify the condition of the part you are returning.

Work Order-Activity, Project-Budget, Equipment, Job
Specify the work order/activity, project/budget, equipment, or job against which to return parts.
Note: You must select a valid combination for **Work Order-Activity**/**Equipment** or for **Work Order-Activity**/**Project-Budget** to submit the return; or you can select to make the return to an individual piece of **Equipment** or an individual **Project-Budget**.

Department
Specify the department to which to return parts.

Return Qty.
Specify the number of parts to return. If the part to return is tracked by asset, the system automatically populates the **Return Qty.** with 1 and it is protected. You must specify the asset by which the part is tracked for **Asset ID**. You cannot modify the **Return Qty.** when returning a part tracked by asset from a stock record.

5 Click **Submit**.

Returning parts from work orders, equipment, or projects

Return unused parts issued to work orders, equipment, or projects to stores.

Note: If you have selected FIFO or LIFO as your pricing method, the system calculates the transaction price of returns from work orders, equipment, or projects using the R5FIFO table, rather than retrieving the base price from the R5PARTS or R5STOCK table.

See "Understanding time-based inventory valuation (LIFO/FIFO)."

To return parts from work orders, equipment, or projects:

1 Select **Materials > Transactions > Issue/Return Parts**.

2 Specify this information:

Transaction Type
Select **Return** to enable return functionality.

Store
Specify the store to which to return the parts. The system automatically populates **Date** with the current system date. If a default store is defined for the current user, the system automatically populates **Store** with the user's default store.

3 Choose one of the return options:

Option	Description
Return from a work order	Specify the **Work Order-Activity**. The system automatically populates the **Equipment**, **Project-Budget**, **Cost Code**, and **Department** from the work order, as well as the **Material List** or **Pick Ticket** if they have been associated with the **Activity**. **Note:** The system will only display work orders in the **WO-Activity** lookup for which the value specified for the RTNDAYS installation parameter has been exceeded. If selected **WO-Activity** is a multiple equipment work order, then the system also populates **Related Work Order** and it is protected.
Return from a piece of equipment	Specify the **Equipment**. The system automatically populates **Description**, **Department**, and **Cost Code** from the equipment record. If selected **Equipment** is associated with a pick ticket, the system automatically populates **Pick Ticket** from the associated **Equipment** record. **Note:** If the selected **Equipment** is associated with a multiple equipment work order, then the system automatically populates **Equipment Org.** and **Related Work Order**. See "Returning parts from multiple equipment work orders." If you select All Equipment for **Equipment** and you are issuing a **By Asset** part, then the system clears the Transaction Details.
Return from a project	Select the **Project-Budget** and **Department**.

4 Specify this information:

Reference Number
Specify a reference number for the return.

Material List
Specify the material list from which to return.

Pick Ticket
Specify the pick ticket if a pick ticket is associated with the return. If you are returning parts from a work order or piece of equipment that is associated with a pick ticket and the PICKONCE installation parameter is set to YES, then the system does not display the associated pick ticket in the **Pick Ticket** lookup.

If you are returning parts from a work order or piece of equipment that is associated with a pick ticket and the PICKONCE installation parameter is set to NO, the system enables you to select the associated pick ticket from the **Pick Ticket** lookup. However, once you have selected a value for **Pick Ticket**, the system only displays parts issued for the pick ticket in the **Part** lookup, and you can only return the parts issued from the pick ticket.

Note: If there are no parts on the selected pick ticket, or if no parts on the pick ticket are held in store, the system displays an error message when you click **Pick Ticket** hyperlink.

If the work order associated with the selected **Pick Ticket** is a multiple equipment work order, then the system automatically populates **Equipment** with the WO Header Equipment.

Department
Specify the department to which to return parts. The system automatically populates **Department** if you have selected a work order/activity or piece of equipment.

Date
Modify the date on which to make the return. The system automatically populates **Date** with the current date and time.

Part
Specify the part to return. The system displays parts in the **Part** lookup based on the setting of the RTNANY installation parameter and whether you are returning to a work order, a piece of equipment, or a project.
Note: If the **Work Order** selected for the return is a multiple equipment work order, the system displays only parts issued to the header work order or any of the related MEC work orders in the list of values, because **Equipment** is automatically populated with All Equipment. When you select the part to return, the system automatically populates **Transaction Qty.**, **Bin**, and **Lot**. The **Transaction Qty.** is the difference of the total quantity issued to all equipment on the work order and the quantity already returned from all equipment on the work order. You can modify the **Transaction Qty.**, **Bin**, and **Lot** as necessary and add additional equipment to the Parts list.

If the part to return is tracked by asset, the system automatically selects **Track By Asset**, specifies 1 as the **Transaction Qty.**, and you must specify a value for **Asset ID** for the part. The system automatically populates **Available Qty.** of 1 until you have reached the number of the part tracked by asset that you wish to return for the transaction.

If the part is a core tracked part, the system enables **Core Return**. If you select **Core Return**, the system populates **Bin** with the **Default Core Bin**. If the **Default Core Bin** overwrites a different bin, then the system clears the **Lot**, **Expiration Date**, and **Manufacturer Lot**.

If you unselect **Core Return**, the system populates **Bin** with the **Default Bin**. If the **Default Bin** overwrites a different bin, then the system clears the **Lot**, **Expiration Date**, and **Manufacturer Lot**.

If the part is tracked by asset and you unselect **Core Return**, the system also clears the **Asset ID** and **Serial Number**.

The system automatically populates **Transaction Qty. UOM**.

Note: If you submit a return transaction for a core tracked part with **Core Return** unselected, the system processes the return as a normal return.

Bin
Specify the bin to which to return the part.

Return Condition
Specify the return part condition.

Lot
Specify the lot to which to return the part. The system automatically populates **Bin** and **Lot** with the bin and lot numbers associated with the original issue transaction for the part. You can change the bin location and lot number as necessary, and then click **Add to List**.

Transaction Qty.
Specify the number of parts to return. The system automatically populates **Transaction Qty.** with the original issue quantity of the part. If you have already returned a partial quantity of the part from the original issue, the system populates **Transaction Qty.** with the original quantity of the part issued minus the quantity for the part that has already been returned.
Note: Transaction Qty. can be limited based on the setting of the RTNANY installation parameter. If RTNANY is set to YES, you can return any quantity of any parts to any store for which there is a part record on the Stores tab of the Parts form (the system requires that a part record exists for the part in the store, not that a bin-stock record exists for the part in the store). If RTNANY is set to NO, you can only return the quantity of the part that was originally issued to that entity to the same store. When issuing a part, you issue to an entity (work order, equipment, etc.) from a store. When returning a part, you return from an entity (work order, equipment, etc.) to a store.

If you select a work order on the header, the system displays only the parts that were previously issued to the work order in the **Part** lookup. When you select a part, the system automatically calculates the **Transaction Qty.** based on the difference of the quantity of the parts issued and the quantity of the part that has already been returned.

Print Qty.
Specify the quantity of the label(s) to print.

The system automatically sets **Print Qty.** based on the setting of **Label Printing Default** on the Stores tab of the Parts form:

Option	Description
If set to No Labels	**Print Qty.** is null.
If set to Single Labels	**Print Qty.** is set to 1.
If set to Label for Each Item	**Print Qty.** is equal to the **Receipt Qty.**, but you can modify the **Print Qty.** as necessary. Updating **Print Qty.** does not affect the **Receipt Qty.**

5 Click **Add to List**. The system adds the record to the Transaction Details list.

Note: The Transaction Details list acts as a buffer to temporarily store the parts to return without actually returning them until the transaction is submitted. You can add/remove parts for the return as necessary before submitting the transaction and saving the information to the database. Click

Add Part to add additional parts to the return. To remove a part from the Transaction Details list, select the part to remove from the return, and then click **Remove from List**.

Additionally, you can also update information in the Issue To/Return From and/or Issue From/Return To sections for the transaction as necessary before adding records to the Transaction Details list.

6 Click **Submit Transaction**. The system returns the part(s) and creates a stock transaction of type I for the return store with a positive quantity for the return.

When you submit a return transaction for a core tracked part with **Core Return** selected, the system adds the transaction quantity to the repair quantity of the part held in bin stock. The returned parts are added to **Core Qty.** on the **Repair Details** tab of the **Parts** form rather than **Qty. on Hand** on the **Stores** tab of the **Parts** form.

If the part is core tracked and is also tracked by asset, the asset status is changed to **To Be Repaired**, and the system also updates the status of all dependent children and grandchildren of the asset if the part tracked by asset is the parent in an asset hierarchy.

Note: If the returned part is a LIFO/FIFO part, the system determines the price for the return based on the original issue transaction. LIFO/FIFO pricing does not assign a LIFO/FIFO price to a core tracked part returned for repair. The transaction price for the return will be the **Core Value** of the part.

To print labels for the return transaction, click **Print Warranty Return Label(s).**

If you are creating a return for a multiple equipment work order and the RTNANY installation parameter is set to NO and All Equipment is selected for **Equipment**, you can only return a part that was previously issued and for which there is a sufficient quantity issued to the equipment.

Returning parts to a supplier

Return damaged or incorrect parts to a supplier.

Note: Before you can return parts, receive them using the **PO Receipts** form and assign them a status of Approved/Complete.

The system does not allow you to return goods received via the **Non-PO Receipts** form because you have no purchase order number or requisition as a reference. To return such items, you need to make an arrangement between your company and your supplier.

Once satisfied with the contents of the return, change the **Status** on the **Record View** page of the return to Ready for Printing and then Approved. You must save the record after each change of status to commit the status change. The system does not update the inventory records until the return has been approved.

Step 1: Create a supplier return header

To create a supplier return header:

1 Select **Materials > Transactions > Supplier Returns**.

2 Click **New Record**.

3 Specify this information:

Organization
Specify the organization to which the supplier return belongs if you use multi-organization security.

Supplier Return
Specify a description of the supplier return in the adjacent field. A supplier return number is assigned after you save the record.

Purchase Order
Specify the purchase order number of the return.

Return From
Choose on these options:

Option	Description
Store	Select to return the parts from a store. **Store** is selected by default. **Note:** If you are returning parts from a store, then all received part lines are available for return. If a part is related to a purchase order line associated with a multiple equipment work order, then the system populates **Equipment**, **Equipment Org.**, and **Related Work Order**, and they are protected.
Work Order	Select to return the parts from a work order. If you choose **Work Order**, the system removes **Store** and displays **Work Order**. **Note:** If you are returning parts from a work order and the work order is a multiple equipment work order, then the system automatically populates the return with all of the part lines from the purchase order that were received directly to the work order.

Store
If you selected **Store** for **Return From**, update the store from which to return the materials if necessary. If you update **Store**, the system clears **Purchase Order**.

Work Order
If you selected **Work Order** for **Return From**, specify the work order from which to return materials. **Note:** If the selected **Work Order** is a multiple equipment work order, the system populates **Equipment**, **Equipment Org.**, and **Related Work Order** from the Purchase Order line. If the work order is not a multiple equipment work order, then the system populates **Equipment** and **Equipment Org.** from the work order.

The system does not display MEC work orders in the **Work Order** lookup.

Also, the system does not allow you to specify the manner in which the return is distributed to the work order equipment. The system determines the cost distribution method for the work order costs based on the value specified for **Equipment** on the purchase order line.

Class
Specify the class of the return. The classes shown belong to the TRAN entity.

4 Click **Save Record**.

Step 2: Add parts to a supplier return

To add parts to a supplier return:

1 Select **Materials > Transactions > Supplier Returns**.

2 Select the supplier return for which to add parts, and then click the **Parts** tab.

3 Click **Retrieve Parts**. The system populates the Parts list with part lines that have been received against the purchase order specified on the **Record View** page.

Note: You can also click **Add Part** to add a single part to the supplier return rather than retrieving all the lines that have been received to a purchase order. Adding a single part to a supplier return is helpful in return situations for which you may have had a purchase order with a large number of items against which you only need to return a few parts.

For externally repaired parts to be returned from a purchase order and store, the system retrieves part lines received against the purchase order and store on the header. **Available Qty.** is calculated as the number of parts received for this purchase order that are in the selected store and are not for repair. If the part is also tracked by asset, the system only retrieves the part that match the specified **Asset ID**. If the part was scrapped at the time at which it was received, the part cannot be returned.

For parts to be returned from a work order, the system retrieves only direct material parts that have been received directly to the work order against the purchase order on the header.

4 Select the part to be returned from the Parts list. The system populates the part information in the **Part Details** section. The system automatically populates **Return Qty.** with the quantity of the part received against the purchase order and available in a specific bin and lot for return, **Order Qty.** with the original quantity of the part ordered, **Available Qty.** with the number of parts in stock in a specific bin and lot, and **Price** with the price at which the part was received. The system selects **Direct** if the part has been received to a work order and **Track by Asset** if the part is tracked by asset.

5 Specify this information:

Return Qty.
Specify the quantity of the part to be returned.
Note: If you are returning a part tracked by asset, the system displays the part in the Parts list in quantities of one. For example, you received five motors that are tracked by asset, so the system displays the motor on five separate lines. The system automatically populates **Return Qty.** with one if you are returning a part tracked by asset, and the system also protects the field from update.

Bin
Specify the bin to which to return the part.

Lot
Specify the lot to which to return the part.

Reason for Return
Specify the reason for returning the part.

Asset ID
Specify the asset ID for the part tracked by asset. If the selected part is tracked by asset, the system automatically populates **Bin**, **Lot**, **Department**, **Asset Type**, **Asset Org.**, and **Serial Number** from the equipment record.

6 Click **Submit**.

Note: To remove a part, select the part to remove, and then click **Remove Part**.

Defining part condition templates

Define part condition templates when your organization reuses parts and needs to track the parts by their condition. Part condition templates define which conditions you can use to track parts. You can track parts throughout their life cycle. For example, the part condition can be new, used, rebuilt less than five times, or rebuilt more than five times.

When creating parts, **Tracked by Condition** must be selected. When a part is tracked by condition, the system creates a child record for each condition that is added to the part condition template.

To define part condition templates:

1. Select **Materials > Setup > Part Condition Templates**.
2. Click **New Record**.
3. Specify this information:

   Part Condition Template
   Specify a unique code identifying the part condition template, and then enter a description in the adjacent field.

   Organization
   Specify the organization of the part condition template.

   Suffix Separator
   Specify a unique suffix separator code for the part condition template. The suffix separator is used in the child part code. For example, if the parent part code is TIMBEAR12, the suffix separator is a dash (-), and the condition suffix code is an A, the child part code would be TIMBEAR12-A.

   Out of Service
   Select this checkbox if you do not want the part condition template to appear in the lookups.

4. Click **Save Record**.

Adding conditions to part condition templates

Add conditions after defining part condition template details. Multiple conditions can be added to part condition templates.

To add conditions to part condition templates:

1. Select **Materials > Setup > Part Condition Templates**.
2. Select the part condition template for which to add conditions, and then click the **Conditions** tab.
3. Click **Add Condition**.
4. Specify this information:

   Condition
   Specify a unique code identifying the condition, and then enter a description in the adjacent field.

Suffix Code
Specify a unique suffix code for the condition. The suffix code is used in the child part code. For example, if the parent part code is BEARINGAXL, the suffix separator is a dash (-), and the condition suffix code is an A, the child part code would be BEARINGAXL-A.

5 Specify the **Return to Store Condition List**, **Return to Store Condition Default**, **Core Return Condition List**, **Core Return Condition Default**, **Receive Repairs Condition List**, and **Receive Repairs Condition Default**.
6 Select the **Prevent Reorders** check box to prevent the part from being reordered
7 Select the **Prevent Issues** check box to prevent the part from being issued.
8 Click **Submit**.

Changing conditions for parts

Modify conditions for parts when it is determined that the part condition in the system does not match the actual physical condition of the part. For example, use the **Change Part Condition** popup if the actual physical condition of the part on hand is poor or fair, but the condition in the system is good.

To change conditions for parts:

1 Select **Materials > Parts**.
2 Select the part for which to change the condition, and then click the**Stock** tab.
3 Select the stock record for which to change the condition, and then click **Change Part Condition**. The system automatically populates **Part**, **Part Org.**, **Condition**, **Qty. on Hand**, and **Asset ID**.
4 Specify this information:

New Condition
Specify the new condition for the part.

Change Qty.
Specify the number of parts the change will affect.
Note: When changing the condition for **Tracked by Asset** parts, the system will automatically update **Change Qty.** to 1. The only valid change quantity is 1.

5 Click **Submit**.

Creating greenhouse gas records

Create greenhouse gas records to establish and monitor the relationship between greenhouse gas emissions and its carbon dioxide equivalent.

To create greenhouse gas records:

1 Select **Materials > Setup > Greenhouse Gases**.
2 Click **New Record**.
3 Specify this information:

Greenhouse Gas
Specify a unique code identifying the greenhouse gas, and then enter a description of the greenhouse gas in the adjacent field.

CO2e Ratio
Specify a ratio by which to calculate the carbon dioxide equivalency relationship to the greenhouse gas.

Out of Service
Select to mark the greenhouse gas as out of service.

4 Click **Save Record**.

Defining greenhouse gas emissions for parts

Parts emit certain greenhouse gases into the atmosphere through leakage. Specify and record greenhouse gases and the emission amount emitted by parts.

To define greenhouse gas emissions for parts:

1 Select **Materials > Parts**.
2 Select the part for which to define greenhouse gas emissions, and then click the **Greenhouse Gas** tab.
3 Click **Add Greenhouse Gas Emitted**.
4 Specify this information:

Greenhouse Gas Emitted
Specify the greenhouse gas the part emits. The system automatically populates the **Description** of the greenhouse gas emitted.

Emission Amount
Specify the amount of greenhouse gas the part emits. The system automatically populates the **UOM** of the emission amount, **CO2e Amount**, and **CO2e Ratio**.

5 Click **Submit**.

Note: To delete a greenhouse gas emissions record, select the greenhouse gas emitted, and then click **Delete Greenhouse Gas Emitted**.

Defining kit template parts

Define a combination of parts and quantities of those parts to create a kit.

To define kit templates:

1 Select **Materials > Parts**.
2 Select the part kit for which the kit template will be defined, and then click the **Kit Template** tab.

Note: **Part** must be **Track as Kit** on the **Parts** form to add to the kit template.

3 Click **Add Part**.

4 Specify this information:

Part
Specify the part to add to the kit. The system automatically populates **Organization** and the part description.

Quantity
Specify the quantity of the part to add to the kit. When a kit is built from this template, the system will require this quantity of the part specified to build the kit. The system automatically populates the quantity UOM.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Notes
Specify any notes regarding the part or kit.

5 Click **Submit**.

Building kits

Build a kit from a stock of parts within a store using a pre-defined kit template.

To build a parts kit:

1 Select **Materials > Kits > Build Kit**.

2 Specify this information:

Store
Specify the store from which to pull the parts and build the kit. The system automatically populates the store description in the adjacent field.

Session ID
Specify the session ID if this was a previously saved session.

Kit Part
Specify the part that identifies the kit to be built. The system automatically populates the kit part description, kit part organization, **Condition**, and **Max Kits Available** based on the parts required and the availability of stock in all bins in the store.
Note: This part must be designated as a kit part on the **Parts** form.

Kit Lot Description
Specify a description of the kit lot where the part is stored. The system automatically populates **Kit Lot Description** based on the value of Organization Option KITLDESC, if defined.

Kit Bin
Specify the bin into which to the newly built kit will be stored.

Number of Kits to Build
Specify the number of kits to build.

Note: If any of the parts defined in the kit template are **Track by Asset** parts, **Number of Kits to Build** must be set to 1.

Kit Lot Expiration Date
Specify the expiration date of the kit lot.

3 Click **Retrieve Parts**. The system creates a **Session ID** if this is a new session. The system populates the Parts list with relevant parts.

4 Specify this information:

Pulled
Select to pull parts to satisfy quantity required to build the kit.
Note: The system defaults the value of **Pulled** to selected or unselected based on the value in the Organization Option KITPPULD.

Part Bin
Specify the bin that contains the part. The part will be pulled from this bin.
Note: Click F9 to invoke the BIN list of values.

Part Lot
Specify the lot that contains the part from which to pull the part.
Note: Click F9 to invoke the LOT list of values.

Asset ID
Specify the asset ID if the part is **Track as Asset**.
Note: Click F9 to invoke the Asset list of values.

Issue Qty.
Specify the quantity of the part to issue to build the kit.

5 Click **Build Kit**. The system assigns a unique kit lot number.

Breaking up kits

Return parts allocated to a kit. Once the parts or kit is received, inspect the component parts and return the kit to stock or return the parts to stock and/or repair and account for usage.

To break up kits:

1 Select **Materials > Kits > Breakup Kit**.

2 Specify this information:

Store
Specify the store to which to return the kit part to stock.

Kit Part
Specify the kit part to be broken up.

Kit Lot
Specify the specific kit to which to return the kit part.

Work Order - Activity
Specify the work order and activity to which the kit lot was last issued.

Job
Specify the job to which the kit lot was last issued.

Default Full Qty. to Qty. to Store
Select to default the full quantity of parts retrieved to the quantity to issue back to the store (**Qty. to Store**).

Default Full Qty. to Qty. Used
Select to default the full quantity of parts retrieved to the quantity used or consumed (**Qty. Used**).

3 Click **Retrieve Parts**.
4 Select the part, and then specify this information:

Qty. Used
Specify the quantity of the part consumed.

Qty. to Store
Specify the quantity of the part to reissue to the store.

Store Bin
Specify the store bin to which to return the part.
Note: Click **F9** to invoke the Bin list of values.

Qty. to Repair
Specify the quantity of the part to be repaired.

Repair Bin
Specify the repair bin to which to return the parts for repair.
Note: Click **F9** to invoke the Repair Bin list of values.

5 Click **Breakup Kit**. The system dismantles the kit and returns the parts to inventory into the designated areas. A transaction line of type Issue is created for each parts line. The system deletes the kit lot.
6 Click **Print Restock List** to print a list of parts retrieved and returned after the kit was broken up.

Creating store groups

A store group is a group of stores that share the same transfer fees. Create store groups to determine if transfer fees apply for transferring parts between stores in situations where shipping fees may or may not apply.

To create store groups:

1 Select **Materials > Setup > Store Groups**.
2 Click **New Record**.
3 Specify this information:

Store Group
Specify a unique name identifying the store group, and then enter a description in the adjacent field.

Class
Specify the class to which the store group belongs. The system automatically populates **Class Org.**

Out of Service
Select to indicate the store group is no longer in service.

4 Click **Save Record**.

Defining transfer fees for store groups

Define the percentage to charge for a part transfer between two stores. The transfer fee is accessed when a part is transferred using the Store-to-Store Issues, Store-to-Store Receipts, and Quick Store-to Store-Transfer forms.

The fee is a percentage of the base price of the part. For example, for a part with a base price of $100 and a **% of Base Price** of 10 (%), the system accesses a $10 transfer fee to transfer the part between stores.

You may enter a transfer fee for stores that belong to the same store group.

To define transfer fees for store groups:

1 Select **Materials > Setup > Store Groups**.
2 Select the store group for which to define transfer fees, and then click the **Transfer Fees** tab.
3 Click **Add Transfer Fee**. The system automatically populates **From Store Group**.
4 Specify this information:

To Store Group
Specify the store group to which to transfer the part.

Transaction Class
Specify the class of the transaction. The system automatically populates **Transaction Class Org.**

% of Base Price
Specify the charge percentage.

5 Click **Submit**.

Note: To delete a transfer fee, select the transfer fee to delete, and then click **Delete Transfer Fee**.

Creating store-to-store requisitions

Create store-to-store requisitions to transfer stock parts from one store to another, including stores within different organizations. A store-to-store requisition consists of the requisition header and requisition lines. Create the requisition header first, and then add part lines.

A typical store-to-store requisition goes through a number of status changes during the lifecycle of the requisition. User status change authorizations are established on the **Status Authorizations** form. See the following list for a description of store-to-store requisition statuses:

Option	Description
Unfinished	The status of the store-to-store requisition at creation. The status of the store-to-store requisition header must remain Unfinished until lines are added to the requisition.
Request Approval	Lines have been added to the store-to-store requisition, and it is ready for approval.
Approved	The store-to-store requisition is approved and ready for fulfillment. Upon approval, all fields on the store-to-store requisition are protected, except **Status**, and all of the lines that are not Cancelled or Rejected are set to Approved. **Note:** You cannot approve a requisition if any store-to-store issues have been made against the requisition and the parts are still in-transit (issued but not yet received).
Cancelled	The entire store-to-store requisition is cancelled.
Rejected	The store-to-store requisition is rejected. The system protects all fields on the requisition, and you must enter a **Reject Reason** for the requisition.

Note: You can also change the status of individual store-to-store requisition lines.

Creating store-to-store requisition headers

Create store-to-store requisition headers to specify information related to the entire requisition.

The status of the requisition header indicates the progress of the requisition through its cycle. You may change the status of the requisition based on your status authorization and requisition approval limits. You can only delete requisitions with a status of Unfinished.

Note: Requisition approval limits can be set at the header or the line level depending on the setting of the LIMITLEV installation parameter.

The system enforces several business rules that prohibit changing the status of a requisition header from Unfinished to any status other than Cancelled before adding any lines to the requisition. Additionally,

the system enables or protects certain fields based on the requisition status. The system also populates fields on the requisition header with values from the requisition lines.

The system assigns a requisition number.

To create store-to-store requisition headers:

1 Select **Materials > Store-to-Store Requisitions**.
2 Click **New Record**.
3 Specify this information:

To Organization
Specify the organization to which to send the parts on the store-to-store requisition. The organization you enter must be a specific organization to which you belong.

Requisition
Specify a description of the requisition in the adjacent field. The system automatically enters a default requisition description based on the setting of the REQDESC installation parameter. The system assigns a requisition number after you save the record.

Status
Select the status of the requisition.

From Store
Specify the store from which to issue the materials on the requisition.

To Store
Specify the store to which to issue the materials on the requisition.

Requested By
Specify the employee requesting the items on the requisition.
Note: The system automatically populates **Entered By** with the login ID of the user entering the requisition. If the user assigned for **Entered By** has a corresponding employee record, the system will automatically populates **Requested By** with the employee code of the user.

Delivery Address
Specify the address to which to deliver the items.

Class
Specify the class of the requisition. The classes shown belong to the REQ entity.
Note: The system automatically populates **Date Requested** with the system date.

Cost Code
Specify the cost code with which to associate the cost of the requisition.

Reject Reason
Specify an explanation of the reason that the requisition is being rejected if necessary. **Reject Reason** is protected when the status of the requisition is Unfinished or Cancelled. However, the system enables **Reject Reason** and it becomes required if you change the status of the requisition to Rejected.
Note: The system automatically selects **Printed** when this requisition is printed.

Default Approver
Specify the name of the person who will approve the requisition.
Note: The system automatically populates **Approved By** with the employee code identifying the person who approves the requisition and **Date Approved** with the system date when the requisition **Status** is Approved.

The system displays the total number of the lines containing parts on the requisition in **Requisition Lines** and populates **Total Req. Value** with the total cost of the items on the requisition in the default currency of the **Organization**.

4 Click **Save Record**.

Adding parts to store-to-store requisitions

Add the requested parts to the requisition after creating the requisition header.

You may change the status of the requisition line based on your status authorization and requisition approval limits. You can only delete a requisition line if the status of the requisition header is Unfinished.

Note: Requisition approval limits can be set at the header or the line level depending on the setting of the LIMITLEV installation parameter.

The system enforces several business rules that prohibit changing the status of a requisition header from Unfinished to any other status but Cancelled before adding any lines to the requisition. However, if the status of the requisition header is set to Cancelled, all the lines on the requisition are also cancelled. The system enables or protects certain fields based on the requisition status. The system also populates fields on the requisition header with certain values from the requisition lines.

To add parts to store-to-store requisitions:

1 Select **Materials > Transactions > Store-to-Store Requisitions**.
2 Select the requisition to which to add parts, and then click the **Parts** tab. The system automatically populates **Requested Before** with the current system date. The system automatically populates **Delivery Address** and **Cost Code** from the requisition header.
3 Click **Add Part**.
4 Specify this information:

Part
Specify the part to add to the requisition. The system automatically populates the part description, **Part Org.**, **Price**, **UOM**, **Buyer**, **Commodity**, **Tax Code**, and **Expense Type**.

The system populates **Line** with the next incremental line number of the part on the requisition.

If the part is tracked by asset, the system automatically selects **Track by Asset**.

If the **Part** is a core tracked part, the system enables **Core Qty.** You can either enter a value for **Quantity** or **Core Qty.**, but not both. When you enter a value for either **Quantity** or **Core Qty.**, the system protects the other field. The system populates **Price** with the **Core Value** of the part (not the **Repair Price**). The origin of the **Core Value** price is determined by the setting of the PRICELEV installation parameter.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Line
Specify the line number for the part on the requisition line. The system automatically assigns the next incremental number to the line based on the setting of the INCRLINO installation parameter.

Status
Specify the status of the requisition line.
Note: You can update the status of a requisition line at any time unless the status of the header is set to Rejected or Cancelled.

If the requisition contains more than one line, changing the status of a line does not affect the status of the header. However, if the requisition contains only one line, and you change the status of the line, then the system sets the status of the header to the status of the line.

You cannot update any field on the requisition line other than **Status** if the status of the line is anything other than Unfinished.

Quantity
Specify the requested quantity of the part.

Requested Before
Specify the date by which you are requesting to receive the part.

Exchange Rate
Modify the exchange rate for the part if necessary. The system automatically populates **Exchange Rate** with the exchange rate specified on the **Exchange Rate** tab of the **Currency** form.
Note: If the EXRUPDT installation parameter is set to YES and you modify the exchange rate, the system recalculates the header value based on the updated exchange rate.

Buyer
Specify the employee code identifying the buyer of the part.

Delivery Address
Specify the address to which to deliver the item.

Cost Code
Specify the cost code with which to associate the cost of the requisition.
Note: If applicable, the system automatically populates **Tax Code** and **Receipt Qty.** for the part. The system populates **Price** with the base price of the part in the From Store.

If no **Cost Code** is selected for the line and a **Cost Code** is either added or updated on the header, then the system updates the **Cost Code** on the line with the **Cost Code** of the header. Updating the **Cost Code** on a requisition line does not affect the header.

Expense Type
Select the expense type for the requisitioned line.

Commodity
Specify the commodity code for the requisitioned line.

Note: The system displays the total cost of the item on the requisition in **Part Line Total**. The **Part Line Total** is the product of the **Requested Qty.** and the **Price**.

Core Qty. is protected unless the selected part is a core tracked part to be issued for repair or reconditioning. If the part is core tracked, you can select and unselect **Core Qty.** as necessary. If **Core Qty.** is selected, the **Price** of the part is the **Core Value** of the part on the part record rather than the **Base Price**.

5 Click **Submit**.

Creating store-to-store issues

Create store-to-store issues to create electronic records of the issue of stock part transfers from one store to another, including stores within different organizations. You can create a store-to-store requisition before creating a store-to-store issue.

The **Store-to-Store Issues** form enables you to create and manage transactions to transfer parts such as stock parts, repairable spare parts, and parts tracked by asset between stores, including stores within different organizations.

Note: You can create multiple issues for the same store-to-store requisition as necessary.

After creating and approving the store-to-store issue transaction, the issuing store then physically issues the requested parts to the receiving store, in which the parts must be received.

Note: The **Store-to-Store Receipts** form enables you to create and manage transactions to receive parts, repairable spare parts, and parts tracked by asset from other stores, including stores within different organizations.

Creating store-to-store issue headers

Create store-to-store issue headers to specify information related to the entire issue transaction. The status of the issue header indicates the progress of the issue transaction through its cycle.

The system assigns a store-to-store issue number.

To create a store-to-store issue header:

1 Select **Materials > Transactions > Store-to-Store Issues**.

2 Click **New Record**. The system automatically populates **Date Issued** with the current system date and time.

3 Specify this information:

From Organization
Specify the organization from which to send the parts for the issue. The organization you enter must be a specific organization to which you belong.

Store-to-Store Issue
Specify a description of the store-to-store issue in the adjacent field. The system automatically enters a default store-to-store issue description based on the setting of the TRANDESC installation parameter. The system also assigns a store-to-store issue number after you save the record.

Status
Select the status of the issue. The system automatically assigns a Status of Unfinished.

Changing the status of a store-to-store issue may affect additional system checks and field changes in these ways:

Option	Description
Unfinished	While the store-to-store issue has an Unfinished status, most of the fields on the header are editable. However, when you save the issue with Unfinished status, the system protects the **From Organization** and **From Store**. The issue must maintain Unfinished status until lines are added to the issue on the **Parts** tab.
Cancelled	Change the status of the issue to Cancelled to cancel the issue and all of the part lines. The system protects all fields on the issue when you change the status to Cancelled.
Ready for Printing	Change the status of the issue to Ready for Printing after adding the parts to issue on the **Parts** tab. When the status of the issue is Ready for Printing , only **Status**, **Description**, **Class**, and **Reference Number** are editable.
Approved	The system populates **Approved By** and **Date Issued** with the **User ID** of the approver and the date and time that the store-to-store issue **Status** is set to Approved, moves parts in-transit, and changes the status of any asset(s).

Requisition
Specify the store-to-store requisition for which to issue the parts. If you select a **Requisition**, the system automatically populates **From Store**, **To Store**, and **To Organization**.

From Store
Specify the store from which to issue the part.

To Store
Specify the store to which to issue the part. The system automatically populates **To Organization**.

Reference Number
Specify a reference number for the store-to-store issue transaction.

Class
Specify the class of the requisition. The classes shown belong to the TRAN entity.

4 Click **Save Record**.

Adding parts to store-to-store issues

Add parts to store-to-store issues to designate the parts to issue from one store to another.

To add parts to store-to-store issues:

1. Select **Materials > Transactions > Store-to-Store Issues**.
2. Select the issue to which to add parts, and then click the **Parts** tab.
3. Click **Add Part**.
4. Specify this information:

   Part
   Specify the part to add to the store-to-store issue. The system automatically populates the part description, **Part Org.**, and **Track by Asset**. The system populates **On Hand Qty.** with the quantity of the part from the **From Bin** and **Lot**.

   If the selected **Part** is core tracked, the system calculates **Core Qty.** as the quantity of parts that are designated for repair in **From Store** on the issue header, **From Bin**, and **Lot** minus any parts that are allocated to repair work orders and parts assigned to external repair requisitions.

   Note: If you entered a **Requisition** on the store-to-store issue header, you can click **Retrieve Parts** to retrieve all the part lines from the selected **Requisition**.

   If you attempt to retrieve all the part lines from a requisition and the specified **Issue Qty.** is greater than the **On Hand Qty.**, or if the **Issue Core Qty.** is greater than the **Core Qty.**, the system sets the **Issue Qty.** equal to the available **On Hand Qty.** or sets the **Issue Core Qty.** equal to the available **Core Qty.** If there are no parts or core tracked parts to issue, the system does not add the line from the requisition.

   If you have already issued some parts for a requisition but you have not added the complete quantity of the parts requested, click **Retrieve Parts** to create a new line for the remaining quantity of the parts to issue from the selected **Requisition**.

   The system populates **Price** and **Currency** with the **Base Price** of the selected **Part** in the **From Store**. The **Base Price** in the **From Store** is determined by the setting of the PRICETYP and PRICELEV installation parameters. The system populates the currency of the price in the adjacent field with the **Currency**.

   Note: If the part is a core tracked part, the transaction price for the core tracked part is the **Core Value** of the part, rather than the price of a new part.

   Condition
   Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

   Line
   Specify the line number for the part on the issue. The system automatically assigns the next incremental number to the line based on the setting of the INCRLINO installation parameter.

   Issue Qty.
   Specify the quantity of the part(s) to issue.
   Note: If you selected a **Requisition** on the store-to-store issue header, the system populates **Issue Qty.** with the **Quantity** of the part from the store-to-store requisition minus any of the quantity of the part that has been received, scrapped, and any parts that are currently in-transit or that are on an unfinished store-to-store issue for the selected **Requisition** and **Part**.

Issue Core Qty.
Specify the quantity of the for repair part(s) to issue.
Note: If the selected **Part** is core tracked, the system enables **Issue Core Qty.** and populates **Core Qty.** with the quantity of the parts available to be issued for repair.

You cannot issue parts that have already been assigned to work orders or external repair requisitions, even if the parts have not yet been moved to the **Qty. at Shop** or **Qty. at Supplier**. Also, you cannot issue parts that are on any Unfinished store-to-store issues (including the current issue).

From Bin
Modify the bin from which to issue the part if necessary. If you modify **From Bin**, the system removes the part.
Note: If you clear **From Bin**, the system also clears **Lot** and recalculates **On Hand Qty.** and **Core Qty.** for the **From Store**, which is the sum of all the parts in all of the bins in the **From Store**.

When only **From Store** is entered and **From Bin** is blank, the system calculates **On Hand Qty.** and **Core Qty.** as the sum of the quantities of the **Part** in all the bins in the **From Store**.

If you defined a **Default Bin** or **Default Core Bin**, the system populates **From Bin** with that bin.

Note: If you select a **From Bin**, the system updates **On Hand Qty.** and **Core Qty.** for the **Store** and **From Bin**. Likewise, if you select a **Lot**, the system updates **On Hand Qty.** and **Core Qty.** for the selected **Store**, **Bin**, and **Lot** combination.

If a **Default Core Bin** is defined for the **Part** in the **From Store**, and you have not entered a value for **Issue Core Qty.**, then the system populates **From Bin** with the **Default Core Bin**. If more than one bin-stock record is defined for the **Part** in the **From Store**, the system also populates **Lot** from the bin-stock record. If the **Default Bin** for the part does not have a bin-stock record in the **From Store**, the system leaves **From Bin** blank.

Lot
Specify the lot from which to issue the part if necessary.

The system automatically populates the **Manufacturer Lot** and **Expiration Date**.

Note: If you clear **Lot**, the system recalculates **On Hand Qty.** and **Core Qty.** for all lots in the selected **From Bin**.

Asset ID
Specify the code identifying the asset associated with the part to transfer. If the selected **Part** is tracked by asset, the system enables **Asset ID**, and you must enter an **Asset ID** for the part.

If the selected **Asset ID** has a status of In Store or Purchased/In Store, the system enters 1 as the issue **On Hand Qty.** If the selected **Asset ID** has a status of To Be Repaired, the system enters 1 as the **Issue Core Qty.** To issue multiples of a by asset part, you must add an individual line for each part to issue.

If the selected **Asset ID** is tracked by serial number, the system populates **Serial Number** with the serial number of the equipment. The system also populates the **From Bin** and **Lot** from the **Asset ID**, and if you clear the **From Bin** or the **Lot**, the system automatically clears the **Asset ID**.

Note: You can use the **Quick Store-to-Store Transfer** form to transfer equipment with child equipment in an equipment hierarchy within the same organization.

5 Click **Submit**.

Note: You can add and delete parts on the issue as necessary, as long as the status of the issue is Unfinished.

Creating store-to-store receipts

Create store-to-store receipts to create electronic records for receiving stock part transfers from one store to another.

After creating the store-to-store issue transaction, the issuing store then physically issues the requested parts to the receiving store, in which the parts must be received. The receiving store then creates a store-to-store receipt transaction to receive the parts from the issuing store.

The **Store-to-Store Receipts** form enables you to create and manage transactions to receive parts (stock parts, repairable spare parts, and parts tracked by asset) from stores, including stores within different organizations.

Note: You can create multiple receipts for the same store-to-store requisition as necessary.

Creating store-to-store receipt headers

Create store-to-store receipt headers to specify information related to the entire receipt transaction.

The status of the receipt header indicates the progress of the receipt transaction through its cycle.

The system assigns a store-to-store receipt number.

To create store-to-store receipt headers:

1. Select **Materials > Transactions > Store-to-Store Receipts**.
2. Click **New Record**. The system automatically populates the **Date Received** with the current system date and time.
3. Specify this information:

   To Organization
   Specify the organization to which to receive the parts. The organization you select must be a specific organization to which you belong.

   Store-to-Store Receipt
   Specify a description of the store-to-store receipt in the adjacent field. The system automatically enters a default store-to-store receipt description based on the setting of the TRANDESC installation parameter.

   The system also assigns a store-to-store receipt number after you save the record.

   Status
   Select the status of the receipt.

   Changing the status of a store-to-store receipt may affect additional system checks and field changes in these ways:

Option	Table
Unfinished	While the store-to-store receipt has an Unfinished status, the fields on the header are editable. The receipt must maintain Unfinished status until lines are added to the receipt on the **Parts** tab.

Option	Table
Cancelled	Change the status of the receipt to Cancelled to cancel the receipt and all of the part lines. The system protects all fields on the receipt when you change the status to Cancelled.
Ready for Printing	Change the status of the receipt to Ready for Printing after adding the parts to receive on the **Parts** tab. When the status of the receipt is **Ready for Printing**, only **Status**, **Description**, **Class**, and **Reference Number**are editable.
Approved	The system populates **Approved By** with the **User ID** of the approver of the store-to-store receipt when the status is set to Approved, and all of the fields on the receipt are protected except Status.

The system also updates store quantities based on the receipt as follows: parts that are not for repair are moved from In Transit Qty. to Qty. on Hand; received parts that are for repair are moved from In Transit Qty. to Qty. for Repair; and all scrapped parts are moved out of the In Transit Qty., but the parts are not added back to inventory. The costs for the receipt transaction are updated for the To Store based on by the setting of the PRICETYP and PRICELEV installation parameters.

Note: The system does not update the price of repair parts. The price for the receipt transaction of the repairable spare part is the Core Value of the part.

If the PRICETIM installation parameter is set to I, the system updates prices at the time an invoice is created rather than at the time of a receipt. However, for a store-to-store receipt, the system updates prices as though PRICETIM is set to R because invoices do not apply to store-to-store transfers. Therefore, for store-to-store transfers, price updates always take place at the time the store-to-store receipt is approved.

For parts that are tracked by asset that are being transferred within the same organization, the system updates the Store on the asset to the new Store in the receiving organization, and the asset Status is set to In Store. If the by asset part needs repair, the asset is transferred to the new store with a Status of To Be Repaired.

For parts tracked by asset that are being transferred between different organizations, the system makes updates in almost the same manner that it does when transferring assets between organizations using the Transfer Equipment popup, with the following exceptions: electronic signatures are only required for the transfer if a signature is configured for inserting an asset with **In Store** or **To Be Repaired** status; the system copies all of the fields from the existing asset to a new record for the asset in the new organization, unless they are not valid in the new organization (in which case, the fields will remain null); and if the Department is not valid in the new organization, the system populates the **Department** with an asterisk (*).

Requisition

Specify the store-to-store requisition for which to receive the parts.

The system automatically populates **To Store**, **From Store**, and **From Organization**.

Note: If you update the **Requisition** with a different requisition number, the system overwrites **To Store**, **From Store**, and **From Organization** with the values from the new **Requisition**. Likewise, if you clear the **Requisition**, the system also clears **To Store**, **From Store**, and **From Organization**.

To Store
Specify the store to which to receive the materials.

From Store
Specify the store from which to receive the materials. The system automatically populates the **From Organization** with the organization of the **From Store**.

Reference Number
Specify a reference number for the store-to-store receipt transaction.

Class
Specify the class of the receipt. The classes shown belong to the TRAN entity.

4 Click **Save Record**.

Note: After approving a store-to-store receipt, click **Create Return Requisition** to generate a return requisition for issuing parts between stores for repairable spare parts and their replacement parts more efficiently.

Adding parts to store-to-store receipts

Add parts to store-to-store receipts to designate the parts to receive from one store to another.

Note: The **Parts** page of the **Store-to-Store Receipts** form enables you to create multiple lines for the same part on the receipt, but the sum of the quantities of the duplicate parts cannot be greater than the In **Transit Qty.** or **In Transit Core Qty.**

To add parts to store-to-store receipts:

1 Select **Materials > Transactions > Store-to-Store Receipts**.
2 Select the receipt to which to add parts, and then click the **Parts** tab.
3 Click **Add Part**.
4 Specify this information:

Part
Specify the part to add to the store-to-store receipt. The system automatically populates the part description, **Part Org.**, and **Track by Asset**.
Note: If you entered a Requisition on the store-to-store receipt header, click **Retrieve Parts** to retrieve all the part lines from the selected Requisition.

If you attempt to retrieve all the part lines from a requisition and all the parts have not been issued, the system sets the **Receipt Qty.** equal to the available **In Transit Qty.** (or the requested **Quantity** from the requisition, whichever is least) or sets the **Core Receipt Qty.** equal to the available **In Transit Core Qty.** (or the requested **Core Qty.** from the requisition, whichever is least). If there are no parts to receive, the system does not add the line from the requisition.

If you created a part line for a partial quantity of the parts to receive from a requisition, clicking **Retrieve Parts** will create a new line for the remaining quantity of the parts to receive from the selected Requisition.

The system populates **Price** with the price of the part at the time of the issue for the part.

Note: If the **Part** is core tracked, the transaction price for the receipt transaction for the core tracked part is the **Core Value** of the part.

The system populates the **To Bin** with the **Default Bin** from the stock record of the part on Stores page of the **Parts** form, or the **Default Core Bin** from the **Repair Details** tab of the **Parts** form if the part is core tracked.

The system populates **In Transit Qty.** with the quantity of the part that is currently in transit (not for repair) minus any parts that are on any unfinished store-to-store receipt (including the current receipt).

If the selected **Part** is core tracked, the system populates **In Transit Core Qty.** with the quantity of the part that is currently in transit for repair minus any parts that are received, scrapped, or on an unfinished store-to-store receipts (including the current receipt).

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Line
Specify the line number for the part on the issue if necessary. The system automatically assigns the next incremental number to the line based on the setting of the INCRLINO installation parameter.

Receipt Qty.
Specify the quantity of the part to receive.
Note: If you selected a Requisition on the store-to-store receipt header, then the system populates **Receipt Qty.** with the **In Transit Qty.** of the part from the store-to-store requisition minus any quantity of the part that is already on any unfinished store-to-store receipts for the selected **Requisition** and **Part**.

Core Receipt Qty.
Specify the quantity of the part to receive for repair.
Note: If the selected **Part** is core tracked, the system enables **Core Receipt Qty.** and populates **Core Receipt Qty.** with the **In Transit Core Qty.** for the selected **Requisition** and **Part**.

Scrap Qty.
Specify the quantity of the part to scrap rather than receive because the part could not be repaired.
Note: If the selected **Part** is core tracked, the system enables **Scrap Qty.**

To Bin
Modify the bin into which to receive the part if necessary.
Note: If you enter **Receipt Qty.**, the system populates the **To Bin** with the **Default Bin** for the part.

If the part is core tracked, the system populates the **To Bin** with the **Default Core Bin** for the part.

Lot
Modify the lot for which to receive the part if necessary. The system automatically populates **Manufacturer Lot** and **Expiration Date**.

Department
Specify the department of the asset.

Asset ID
Specify the code identifying the asset associated with the part to receive. If the selected **Part** is tracked by asset, and you must enter an **Asset ID** for the part.

If the selected **Asset ID** is in-transit and not for repair, the system enters 1 as the **Receipt Qty.** If the selected **Asset ID** is in-transit and for repair, the system enters 1 as the **Core Receipt Qty.** To receive multiple quantities of a by asset part, you must add individual lines for each part to receive.

If the selected **Asset ID** is tracked by serial number, the system populates **Serial Number** with the serial number of the equipment.

5 Click **Submit**.

Note: You can add and delete parts on the receipt as necessary, as long as the status of the receipt is Unfinished.

Creating a return requisition for core tracked parts from a store-to-store receipt

Create a return requisition for core tracked parts from a store-to-store receipt to create a requisition for sending good parts back to the store from which the parts for repair were received. A return requisition is used when a store needs to immediately send equivalent parts in good working order to the store from which core tracked parts requiring repair were received, or when a store requests good parts first and then sends the broken parts for repair.

A return requisition is basically a reverse mirror image of the receipt on which the system will reverse the**Status** of the part lines. For example, parts with a **Status** of For Repair will be regular parts, or regular parts will become For Repair parts.

See the following scenario for an illustration of how a return requisition can be used:

STORE1 creates a store-to-store requisition for STORE2 for a quantity of 10 PUMP-MOTOR(s) that are for repair, and then STORE1 issues the parts to STORE2. STORE2 receives 8 of the PUMP MOTOR(s), and scraps two of the PUMP MOTOR(s) because they are beyond repair. STORE2 creates a return requisition, and the system adds lines for 10 PUMP MOTOR(s) that are in good working order. STORE2 then issues the 10 parts to STORE1. STORE1 can then receive the 10 good PUMP MOTOR(s) against the return requisition created by STORE2.

This scenario could also be reversed and STORE2 could initiate the store-to-store transfer by creating a store-to-store requisition for issuing the 10 good PUMP MOTOR(s), in which case STORE1 could then create a return requisition to send the 10 broken PUMP MOTOR(s) to STORE2.

To create a return requisition for core tracked parts from a store-to-store receipt:

1 Select **Materials > Transactions > Store-to-Store Receipts**.
2 Select the receipt for which to create a return requisition, and then click the **Record View** tab.
3 Click **Create Return Requisition**. The system populates the following fields on the return requisition header:

Field	Description
Description	Populated based on the setting of the `REQDESC` installation parameter

Field	Description
Status	The system sets the **Status** of the return requisition to Unfinished.
Requested By	Populated with the value of **Requested By** from the original requisition. However, if the original employee code is not valid in the organization of the return requisition, the system populates **Requested By** with the user who creates the return requisition.
Entered By	Populated with user ID of the logged in user
Date Requested	Current system date and time

The system populates the following fields on the requisition lines:

Field	Description
Status	The system sets the **Status** of the return requisition line to Unfinished.
Requested Before	Current system date and time
Part	**Part** from the receipt line
Qty.	**Receipt Qty.** for regular parts, or the **Core Receipt Qty.** for core tracked parts
Core Qty.	Only for core tracked parts and populated with the **Receipt Qty.**
Price	**Price** from the original requisition
Exchange Rate	**Exchange Rate** from the original requisition

4 To view or update the return requisition, open the **Store-to-Store Requisitions** form, select the return requisition, and then view/update the **Record View and Parts** pages as necessary.

Creating internal repair receipts

Create internal repair receipts for fixed or scrapped repairable spare parts to record and update inventory information associated with repairing parts internally. An internal repair receipt consists of both a header and lines containing the parts to receive from an internal repair work order.

When repairing a part internally, a part to repair is taken from a store location to the shop to be repaired. During the repair process, either complete the repairs on a part, or scrap the part because you cannot repair the part to a usable state. You must receive the parts back into a store, which does not have to be the same store from which they were originally taken for repair.

Create an internal receipt header first, and then add part lines to the receipt. Update the **Status** of an internal repair receipt to indicate its progress through the receipt process and to initiate system actions based on receipt statuses.

Note: For parts tracked by asset, the system automatically changes the **Status** of the equipment by which the part is tracked to In Store when the part is received, or it changes the status to Withdrawn if the part is scrapped. If the equipment by which the part is tracked is part of an equipment hierarchy, the system cascades the status change for the parent equipment to all the dependent child equipment in the hierarchy.

If RPPRCCAL is set to YES, the system updates part prices in the same manner as it does a normal receipt. If RPPRCCAL is set to NO, internal repair receipts do not affect part prices.

Creating internal repair receipt headers

Create internal repair receipt headers for core tracked parts received for internal repair.

To create internal repair receipt headers:

1. Select **Materials > Transactions > Internal Repair Receipts**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the internal repair receipt belongs if you use multi-organization security.

   Internal Repair Receipt
   Specify a description of the internal repair receipt in the adjacent field. The system assigns an internal repair receipt number after you save the record.

   Status
   Select one of the options for the status:

Option	Description
Approved	When you approve an internal repair receipt, the system automatically updates store quantities and moves the repaired parts from **Qty. at Shop** to **Qty. on Hand** of the part in the store into which the part is received. The system also updates **Qty. Received** and **Qty. Scrapped** on the **Repair Parts** tab of the **Work Orders** form. The system updates the repair details assignments by matching the work order and lot and then by ordering by store and bin. If a part is tracked by asset, the system also matches the asset by which the part is tracked. **Note:** When you approve an internal repair receipt and the part is condition tracked, the system updates **Qty. at Shop** and **Qty. Completed** for the work order repair part instead of the repair condition part. **Qty. on Hand** is updated for the repair condition part instead of the work order repair part. In addition, if the part is tracked by asset and received, the status of the associated asset is updated to Purchased/In Store. If you scrap the part tracked by asset, the status of the associated asset is updated to Withdrawn, and the status of any child assets in a hierarchy are also updated to Withdrawn.
Cancelled	Select to indicate that the internal repair receipt is cancelled. If you select Cancelled, the system does not update any system quantities for parts or work orders.
Request Approval	After you have added part lines to the receipt, change the status to **Request Approval**. The system protects all fields except **Status**, **Description**, and **Class**.
Unfinished	The system automatically sets the Status of the receipt to Unfinished. Unfinished status indicates that the internal repair receipt is still in progress, and you cannot modify the **Status** of the receipt from Unfinished to anything but Cancelled until part lines have been added.

Work Order
Specify the work order for the internal repair receipt.

Store
Specify the store for the internal repair receipt.

Class
Specify the class of the commodity. The classes shown belong to the TRAN entity.

4 Click **Save Record**.

Adding parts to internal repair receipts

Add parts to internal repair receipts after creating the internal repair receipt header. Part lines on an internal receipt contain parts that have been repaired internally using work orders.

To add parts to internal repair receipts:

1 Select **Materials > Transactions > Internal Repair Receipts**.
2 Select the internal repair receipt for which to add a part, and then click the **Parts** tab.
3 Click **Add Part**.
4 Specify this information:

Part
Specify the part to add to the internal repair receipt. If the part is condition tracked, the system automatically populates **Condition**.
Note: You can add parts from the repair work order to the receipt individually, or you can retrieve all the parts from the repair work order to the receipt at once.

If you add or retrieve a core tracked part that is tracked by asset, the system automatically creates a line for each individual part and enters 1 as the **Outstanding Qty.** and **Receipt Qty.** for each line. You can change the **Receipt Qty.** to 0 and enter 1 as the **Scrapped Qty.** if necessary.

Repair Condition
Specify the repair condition if the part is condition tracked.

Repair Price
Specify the repair price of the part.
Note: You can only update the **Repair Price** for the part if the RPPRPCCAL installation parameter is set to YES.

If you entered an **Internal Repair Price** for a part on the **Repair Details** page of the **Parts** form, the system retrieves the **Repair Price** from the repair details for the part. If you did not specify an **Internal Repair Price**, the system retrieves the **Base Price** of the part for the **Repair Price**.

When you return a core tracked part to a store for repair, the internal repair return does not trigger a price update like a regular return. The system does not update the inventory price until the part has been repaired or scrapped on an internal repair receipt. The system uses the **Repair Price** to determine what cost should be used for the cost update. For example, if a LIFO part was originally issued at 10 USD, the part was returned for repair and repaired on a work order, and then the part was received on an internal repair receipt with a **Repair Price** of 5 USD, the system inserts a new cost record for the part into the **R5FIFO** table valued at 5 USD.

Bin
Specify the bin number storing the part.

Lot
Specify the lot number or batch of the part.

Note: The SHOWLOT installation parameter determines whether lots are used for stock information for parts. The default setting for SHOWLOT is Y. If SHOWLOT is set to N, the system disables **Lot**.

If parts were assigned from more than one lot in the assigned repair details, the system creates a line on the receipt for each lot associated with each line on the order. For example, if the work order contains a line with a quantity of 3 for which there are 3 different lots assigned in the assigned repair details for the work order, the system creates three lines with a quantity of 1 for each line. The system calculates the **Outstanding Qty.** as each line is added and then applies it to the **Qty. Assigned** for that lot in all stores and bins. The system then groups the assignments by lot, takes the assigned records sorts, them by store and then by bin.

Receipt Qty.
Specify the quantity of the part received for repair.

Scrapped Qty.
Specify the quantity of the part to be scrapped rather than repaired.
Note: The sum of the values entered for **Receipt Qty.** and **Scrapped Qty.** must be greater than 0; however, their sum cannot exceed the value of **Outstanding Qty.**

5 Click **Submit**. The system updates the internal repair receipt record with the part details. The system also creates a transaction of type RECV (goods received) for the parts on the receipt.

Creating pick tickets

Create pick tickets to identify a set of parts that are required for a work order activity. Pick tickets facilitate the acquisition of materials needed for a pending work order activity by enabling the worker assigned to a work order to create and print a list of parts required for the work order activity. The worker can then take the ticket to the store and have the parts waiting for pick-up in a short period of time, which makes a pick ticket different than a material list. You can also associate multiple pick tickets with a work order activity or piece of equipment.

After creating a pick ticket, you can update the pick ticket status as necessary based on your status change authorization privileges. **Status** change authorizations are set up on the **Status Authorizations** form.

Once the pick ticket has been reviewed and updated as necessary, change the status of the pick ticket to Approved. You can only issue parts listed on the pick ticket after the pick ticket is Approved.

Defining pick ticket headers

Define pick ticket headers to specify the store and supplier information for the pick ticket and the work order-activity or equipment for which the pick ticket is required. You must select either a work order-activity or equipment to create a pick ticket header.

To define pick ticket headers:

1 Select **Materials > Pick Tickets**.
2 Click **New Record**.
3 Specify this information:

Pick Ticket
Specify a description of the pick ticket in the adjacent field. The system assigns a pick ticket number after you save the record.

Store
Specify the store for which to create the pick ticket. The system automatically populates **Originator** with the **User ID** of the logged in user.

Status
Select the status of the pick ticket. The system automatically assigns Unfinished as the status of the pick ticket, or the equivalent user code status.

Date Required
Specify the date by which the list of parts is needed.

Class
Specify the class of the pick ticket. The classes shown belong to the PICK entity.

4 Choose one of the pick ticket options:

Option	Description
Define the pick ticket for a work order	Specify the **Work Order-Activity** for which to define a pick ticket. The system automatically populates **Equipment** with the equipment on the work order header.
Define the pick ticket for a piece of equipment	Specify the **Equipment** for which to define the pick ticket.

5 Specify this information:

Deliver to Supplier
Specify the supplier to whom to deliver the parts.

Delivery Address
Specify the address to which to deliver the parts.

Deliver to Employee
Specify the employee to whom to deliver the parts.

Default Approver
Specify the individual responsible for approving the pick ticket.

6 Click **Save Record**.

Note: The system populates and/or updates the **Total Value** of the pick ticket as parts are added to the pick ticket. The system also populates **Approved By** and **Date Approved** with the **User ID** of the approver and the date and time that the pick ticket **Status** is set to Approved.

Adding parts to a pick ticket

Add parts to a pick ticket to create the actual list of items needed for a work order–activity or piece of equipment.

After creating the parts list for the pick ticket, you can edit the parts list on the pick ticket as necessary to add or delete parts and update the **Required Qty.** if the status of the pick ticket is Unfinished. You cannot update the parts list for a pick ticket with a status other than Unfinished.

To add parts to a pick tickets:

1. Select **Materials > Pick Tickets**.
2. Open the **Pick Tickets** form.
3. Select the pick ticket for which to define parts, and then click the **Parts** tab.
4. Click **Add Part**.
5. Specify the **Part**, **Condition**, **Required Qty.**, and **Manufacturer**.
6. Specify this information:

   Manufacturer Part Number
   Specify the primary manufacturer's part number.
   Note: The system may automatically populate **Manufacturer** and **Manufacturer Part Number** depending on the MANUPART installation parameter. The system only displays **Manufacturer** and **Manufacturer Part Number** when MANUPART=Yes.

7. Click **Submit**.

   Note: When you save the record, the system automatically populates the **Unit Price** and the **Available Qty.** for each item on the pick ticket. The system also displays the **Qty. Issued** of the part on the pick ticket, as well as the **Available Qty.** of the part in the store.

   To delete a part, select the part to delete, and then click **Delete Part**.

Importing a parts list for a pick ticket

Import a parts list for a pick ticket to retrieve an existing list of parts defined elsewhere in the system to the parts list for the pick ticket. The source of the parts list can be a material list or parts associated with a piece of equipment on the equipment record.

The system verifies whether any of the parts to import already exist on the pick ticket and does not import any of the duplicate parts to the pick ticket.

To import a parts list for a pick ticket:

1. Select **Materials > Pick Tickets**.
2. Select the pick ticket for which to add parts, and then click the **Parts** tab.
3. Click **Import Parts List**.
4. Specify this information:

   From
   Select to import the parts list from an equipment record or a preplanned material list, and then specify the piece of equipment or material list from which to import the parts in the adjacent field.

The system automatically populates the parts list with the parts associated with the selected equipment or material list.

5 Select the parts to import.

Note: To select all lines at once, click **Select All**.

6 Click **Submit**. The system retrieves all of the parts displayed in the parts list to the pick ticket.

7 Add or delete additional parts for the pick ticket as necessary.

Performing a physical inventory

Performing a physical inventory involves physically counting the materials you have in store and comparing the inventory data that you gather during count with the data stored in your online inventory. The physical inventory process enables you to reconcile your online inventory with the actual stock on the shelves and in bins in your stores. This practice is commonly referred to as a cycle count.

After you finish the physical count, you can enter the actual physical quantities found in your cycle count. If you find that there are discrepancies between the **Expected Qty.** and the **Physical Qty.** of inventory items, you can reconcile all of the inventory discrepancies, and then approve the physical inventory record.

Generating a physical inventory counting sheet

Generate a physical inventory counting sheet to create a snapshot of the data in your online inventory that you will use to compare with the data you gather during your cycle count. Creating a physical inventory enables you to specify the store and inventory parameters that identify the materials for which you will perform your cycle count.

Specify inventory parameters as necessary to generate a more narrow or specific list of part data captured by the physical inventory snapshot. You can also specify a **Physical Inventory Date**. If you specify a date, the system only includes items in the physical inventory that have been specified into stock prior to the date specified.

Note: You can also specify wildcards for the **Part**, **Part Class**, **Stock Class**, **From Bin**, and **To Bin** inventory parameters as necessary to generate data. If you know all but one character, you can specify the characters you know, and substitute _ for the unknown character. If you only know a portion, you can specify the portion of the parameter that you know, and substitute % for the remaining portion. For example, if you specify P% for **Part**, the system retrieves all parts that begin with the letter "P." If you specify %PIP% for **Part**, the system retrieves all parts with codes that include the letters "PIP."

When you generate a physical inventory record, the system only saves the snapshot of your online inventory data generated by the physical inventory. It does not save the parameters you specify. You must specify the parameters upon which to base generation of a physical inventory record each time you want to generate a physical inventory record.

After you physically count your inventory, you can update your online inventory data on the **Parts** page of the **Physical Inventory** form to reconcile any discrepancies in your physical and online inventory. After reconciling any differences in your inventory data, you can update the status and/or approve the physical inventory based on your status change authorization privileges. However, the system enables

and/or protects the fields available for update based on the status from which you are updating the physical inventory. Status changes for physical inventory Status change authorizations are set up for the TRAN entity on the **Status Authorizations** form.

If you create a physical inventory record and are unable to perform the actual cycle count immediately, the system also enables you to refresh an existing physical inventory to update the expected quantities in the physical inventory data snapshot.

To generate a physical inventory counting sheet:

1. Select **Materials > Transactions > Physical Inventory**.
2. Click **New Record**.
3. Specify this information:

   Store
   Select the store for which to create the physical inventory.

   Physical Inventory
   Specify a description of the physical inventory in the adjacent field. The system assigns a physical inventory number after you save the record. The system automatically populates **Created By** and **Date Created**.

   Status
   Select the status. The system automatically assigns Unfinished status to the physical inventory, or the equivalent user code status.
   Note: If the SDATE installation parameter is set to YES, the system updates the **Physical Inventory Date** to the current date when the status of the physical inventory is set to Approved.

   Assigned To
   Specify the employee to assign to the physical inventory.

   Part
   Specify the part for which to create the physical inventory.

   Part Class
   Specify the part class for which to create the physical inventory.

   Stock Class
   Specify the stock for which to create the physical inventory.

   ABC Class
   Select the ABC class for which to create the physical inventory.

   Include Consignment Item(s)
   Select to include stock records for consignment items, or items in stock that haven't been paid for, in the physical inventory.

   From Bin
   Specify the bin from which to create the physical inventory.

   To Bin
   Specify the bin to which to create the physical inventory.

Note: Use **From Bin** and **To Bin** to indicate a bin range for which to create a physical inventory for numbered bins. For example if you have numbered your bins consecutively, such as 001, 002, 003, 004, 005, and you want to create a physical inventory taken from the inventory contained in bins 001 through 005, specify 001 for **From Bin** and 005 for **To Bin** to capture a physical inventory for the stock contained in bins 001 through 005.

Physical Inventory Date
Specify the reference date for the physical inventory. If you specify a date, the system selects only those parts whose **Stock Date** (the date the part is specified into stock) is before the date specified for **Physical Inventory Date**.

Include Child Store(s)
Select to include stock records for all child stores of the selected **Store** in the physical inventory.

Include Out of Service Item(s)
Select to include stock records for out of service parts in the physical inventory.

4 Click **Save Record**.

Note: After generating the physical inventory and printing the counting sheet, transactions such as issues, returns, and receipts may occur before the database is updated. To update the expected quantities to reflect the current levels in the database, you can select a physical inventory record to update, right-click on the form, and then select **Refresh Inventory**. The system updates the expected quantity of the parts on the physical inventory record on the **Parts** tab of the **Physical Inventory** forms to the current levels. However, you can only refresh the physical inventory if the **Status** is Unfinished.

Entering physical inventory quantities

Enter physical inventory quantities to update the actual physical quantities of inventory items found during your cycle count. You can only enter physical inventory quantities for physical inventory records with Unfinished status.

The setting of the STTKDISC installation parameters determines the manner in which the system handles discrepancies between the expected quantities and physical quantities of parts tracked by asset.

Note: Regardless of the setting of the STTKDISC installation parameter, the system cannot update the stock level for a part tracked by asset for which there is a discrepancy because parts tracked by asset are tracked individually and their movements and quantities must be accurately recorded.

To enter physical inventory quantities:

1 Select **Materials > Transactions > Physical Inventory**.
2 Select the record for which to enter physical inventory quantities, and then click the **Parts** tab.
3 Select the part for which to enter a physical inventory quantity, and then enter the actual quantity of the part found during the cycle count in **Physical Qty.** Specify the physical quantity for additional parts as necessary.
4 Click **Save Record**.

Refreshing existing physical inventory data

Refresh existing physical inventory data to update the expected quantities in the physical inventory data snapshot as necessary. Refreshing existing physical inventory data enables you to update an existing physical inventory if you have been unable to perform the actual cycle count for some time following creating the physical inventory record. You can only refresh physical inventory data for records with Unfinished status.

After refreshing existing physical inventory data, you can view the updated expected quantities for the physical inventory on the **Parts** page.

To refresh existing physical inventory data:

1. Select **Materials > Transactions > Physical Inventory**.
2. Select the record for which to refresh existing physical inventory data, and then click the **Record View** tab.
3. Right-click on the form, and then select **Refresh Inventory**. The system updates the quantities for the physical inventory on the **Parts** page.

Generating ABC analysis

Generate ABC analysis to create an ABC analysis report for reference purposes and/or to update the class assignments for part.

ABC inventory analysis is an inventory method that enables you to divide your stock inventory items into three groups or classes: A, B, and C. ABC class assignments are used as selection criteria for a number of material management functions, such as EOQ calculations, stock replenishment, repairable spares, and physical inventory counts.

To generate ABC analysis, specify a percentage value as the cutoff point for each of the three classes. The system then assigns parts to one of the ABC classes by comparing the part's value to the value of other parts. Parts assigned to class A represent the largest percentage of your total inventory value. Parts assigned to class B represent a moderate percentage of your total inventory value. Parts assigned to class C represent a small percentage of your total inventory value.

Depending on your preference, the system determines a part's ABC class based on either part value or part usage value. The system arranges the parts in descending order so that the part with the largest **Percentage of Value** is first, with other parts following in descending order according to their **Percentage of Value**. The system then assigns a class to each part based on the percentages specified for **A Cutoff Point %**, **B Cutoff Point %**, and **C Cutoff Point %**.

Note: The system determines part value percentages using the **Price Type** specified for each part. The system enables you to perform ABC Analysis for reference purposes without affecting the current class assignments of a store's parts, or you can click **Update ABC Class** to automatically update part ABC classes.

To generate ABC analysis:

1. Select **Materials > Process > Generate ABC Analysis**.
2. Specify this information:

Organization
Specify the organization for which to generate ABC analysis if you use multi-organization security.

Store
Specify store for which to perform ABC analysis.
Note: You can also specify "wildcards" for **Store** necessary to generate data. If you know all but one character, you can specify the characters you know, and substitute _ for the unknown character. If you only know a portion, you can specify the portion of the parameter that you know, and substitute % for the remaining portion. For example, if you specify P% for **Store**, the system retrieves all stores that begin with the letter "P." If you specify %PIP% for **Store**, the system retrieves all stores with codes that include the letters "PIP."

A Cutoff Point %
Specify the value of the cutoff point for A. The system automatically specifies 70 as the default value.

B Cutoff Point %
Specify the value of the cutoff point for B. The system automatically specifies 20 as the default value.

C Cutoff Point %
Specify the value of the cutoff point for C. The system automatically specifies 10 as the default value.
Note: The sum of the values specified for **A Cutoff Point %**, **B Cutoff Point %**, and **C Cutoff Point %** must equal 100%, and you must specify a value for all three points.

3 Select one of the following options:

Option	Description
Usage Based	Select to calculate ABC analysis based on usage. If you select Usage Based, the system displays the **Quantity** as the number of parts issued within the specified **From Date** and **To Date** range from the store minus the returns to store. The system calculates **Total Value** as the product of the **Price** and the **Quantity**. The **Cumulative Percentage** and **ABC Class** are determined based on the usage value for the part rather than the value on hand.
Value Based	Select to calculate ABC analysis based on values. If you select Value Based, the system displays the **Quantity** as the number of parts currently on hand in the store. The **Total Value** is the product of the **Price** and the **Quantity**. The **Percentage of Value**, **Cumulative Percentage**, and **ABC Class** are determined by the actual value of the parts currently in stock. The system arranges the parts so that the part with the largest percentage of total inventory value is on top with other parts following in descending order according to their percentage of total inventory value.

4 Specify this information:

From Date
To Date
Specify the starting and ending dates for the usage based analysis.

Print ABC Analysis
Select to print an ABC analysis report.

5 Click **Process**. The system displays the **Preview** page listing all of the parts for which to generate ABC analysis.
6 Select each part line for which you wish to generate ABC analysis. The system automatically selects all of the part lines. You may remove individual lines from the list by unselecting the line. The system does not update the class assignments for unselected lines.
7 Select **Print ABC Analysis** to print an ABC analysis report.
8 Click **Update ABC Class** to update the class assignments for parts. The system updates the class assignments and stores the calculated values for each selected part record in the **R5STOCK** table. If any errors occur during the updates, the system highlights the record in red and displays the error in **Error Message**.

Viewing and modifying materials information

View and modify materials information as necessary.

Viewing and modifying parts information

View and modify part information as necessary and specify revalued price information for parts.

You can change the default **Price Type** for a specific part and update the average, last, and standard pricing information for a part. However, you can only update **Average price**, **Last price**, and **Standard price** for parts if the PRICELEV installation parameter is set to P. **Price Type** defaults to the value specified for PRICETYP, but you can also update and specify default price types for individual parts as necessary.

When PRICELEV is S, prices are always set and updated on the **Stores** page of the **Parts** form. When PRICELEV is set to P, prices are set and updated on the **Record View** page of the **Part** form. However, if you are using multi-organization security (MOS) and PRICELEV is P, then part prices are set and updated on the **Prices** page of the **Part** form.

Revaluation of price information for parts is calculated either at the time of the approval of a receipt for a part or at the time of the approval of an invoice for a part, depending on the setting of the PRICETIM installation parameter. Part revaluation is also calculated according to the PRICETYP installation parameter, which specifies whether the system prices storeroom materials based on the average, last, or standard price.

Any update of price information specified for the average, last, or standard price for a part is copied to the base price of the part, which is the price of the part to be used as the basis for all transactions for the part.

Note: When updating price information, the system does not record a stock transaction for a part if there is no quantity of the part on hand in store or if the updates do not affect the base price of the part.

Delete part records as necessary. However, you cannot delete a part record after:

- it has been associated with a piece of equipment;

- parts have been recorded into stock;
- the part has been used in a pick ticket;
- the part is referenced by a purchase requisition;
- store transactions have been made against it; or
- the part has been allocated or reserved.

To view and modify part information:

1 Select **Materials > Parts**.
2 View the list of parts, and then double-click the row containing the part to view or modify.
3 View and modify part information as necessary.
   Note: Track by Asset can only be unselected when no asset or profile is associated with the part.
4 Click **Save Record**.

Viewing and modifying associated documents

View or edit documents associated to the entity.

Note: This popup is used when an entity does not have a Documents tab.

To view and modify associated documents:

1 Select **Materials > Parts**.
2 Select the part for which to view or modify a document, and then click the **Stores** tab.
3 Select a store, and then click **Add/Edit Documents**.
4 Choose one of these options as necessary:

Option	Description
To view or modify a document	Click **View/Edit Document**. Follow steps 5-10.
To associate a document to an entity	Click **Add Document**. Follow steps 5-10.
To create or upload a document	Click **Create/Upload Document**. See Uploading documents on page 323.

5 Specify this information:

   Document
   Specify the document to view or edit. The system automatically populates **Document Description**.

   Print with Work Order
   Select to print the document with the work order.

   Copy to Work Order
   Select to copy the document to the work order.

   Print with Purchase Order
   Select to print the document with the purchase order.

Copy to Purchase Order
Select to copy the document to the purchase order.

6 Click **Save**.

Note: To view the document, click **View/Edit Document**. Click **View Document**.

To remove or modify the document link, click **View/Edit Document**. Click **Remove Document Link**.

Viewing and modifying store information

View and modify store information as necessary.

When modifying store information, you can update the **Price Code** for a store. When updating **Price Code** for a store, the system verifies whether there are any outstanding store-to-store transactions, including receipts, for the store. If there are any outstanding store-to-store transactions, you must approve or cancel any outstanding store-to-store transactions before you can update **Price Code**.

You can also update the **Price Type** for the store to average, last, standard, last in first out, or first in first out as necessary if the PRICELEV installation parameter is set to S. If you modify the **Price Type** for the store, the system uses the **Price Type** for the store as the default value for **Price Type** on the **Stores** page of the **Parts** form. If PRICELEV is set to P, you cannot change the price type for the store and **Price Type** is hidden.

If you modify the **Parent Store** for store for which **Copy Parent's Reorder Details** is selected, the system automatically unselects **Copy Parent's Reorder Details**. Additionally, you can only select a **Parent Store** for the store that is not already designated as a child store in the store hierarchy for the store.

Delete stores as necessary. However, you cannot delete a parent store for which child stores exist, and you cannot delete a store when there is quantity on hand for a stock record within the store.

To view and modify store information:

1 Select **Materials > Setup > Stores**.
2 View the store list, and then double-click the row containing the store to view or modify.
3 View and modify store details as necessary.
4 Click **Save Record**.

Viewing and modifying stores associated with parts

View and modify stores associated with parts to review or update store information for a part.

The PRICELEV installation parameter determines the manner in which the system records prices for parts. The default value for PRICELEV is P, which indicates that prices are recorded at the part level, enabling you to specify the price for a part at the parts level on either the **Record View** page of the **Parts** form or the **Prices** page of the **Parts** form depending on whether you are using MOS. If PRICELEV is set to S, part prices are recorded at the stock level on the **Stores** page, enabling you to specify different prices for the same part in different stores.

Note: If PRICELEV is P, the system disables **Price Type**, **Average Price**, **Last Price**, **Standard Price**, and **Base Price** fields and hides them on the **Stores** page of the **Parts** form.

You can change **Price Type** for a part as necessary. However, if there is a quantity of the part on hand and changing the price type affects the base price of the part, the system records a MPTC stock transaction for the part. If there is no quantity of the part on hand or if changing the price type does not change the base price of the part, the system does not record a transaction for the price type change.

If there is a current quantity of the part on hand and you update the price type to last in first out (LIFO) or first in first out (FIFO), the system creates a stock record for the part in the **R5FIFO** table part and sets **Average Price** to the **Base Price**. The stock record includes the quantity of the part on hand and the price. If there is no quantity on hand, the system does not insert a record into the **R5FIFO** table.

If you change the price type from LIFO or FIFO to average, last, or standard, the system deletes the record of the part from the **R5FIFO** table. If any of the price fields are null, the system considers the price to be zero.

Additionally, if there is a current quantity of the part on hand and you change the price type to standard or last and then specify a **Standard Price**, the system records both a MPTC and CORR stock transaction.

Preferred Store and **Preferred Supplier** are used for automatic requisition generation for low stock items. Selecting a **Preferred Store** indicates that the requisition type for the part in store is a Store-to-Store transfer. Because Preferred Store and Preferred Supplier provide different information for a requisition, you can specify either a **Preferred Supplier** or **Preferred Store**. You cannot specify a value for both. Selecting a **Preferred Supplier** indicates that the requisition type for the part is Goods Requested. Selecting a **Preferred Store** indicates that the requisition for the part should be Store-to-Store.

To view and modify stores associated with parts:

1. Select **Materials > Parts**.
2. Select the part for which to modify store information, and then click the **Stores** tab.
3. Select the store for which to view or modify information.
4. Modify store information for the part as necessary.
5. Click **Submit**.

Viewing and modifying stock information for parts

View and modify stock information for parts to update the quantity of a part in stock. You can only update the **Qty. on Hand** when modifying stock information for parts. **Store**, **Bin**, **Price**, and **Lot** are protected. If you specify a new **Qty. on Hand** for the part, the system creates an approved stock transaction for the difference between the old quantity and the new quantity.

Note: You cannot delete a stock record for a part if the **Qty. on Hand** of the part is greater than zero.

If you set the **Price Type** for parts in the store to last in first out price or first in first out price, then the system inserts a stock record in the **R5FIFO** table for the parts. If you change the **Price Type** for parts in store from last in first out price or first in first out price to Average, Last, or Standard, then the system deletes the stock records for any parts in the store from the **R5FIFO** table.

To view and modify stock information for parts:

1 Select **Materials > Parts**.
2 Select the part for which to view and modify stock information, and then click the **Stock** tab.
3 Specify this information:

   Qty. on Hand
   Specify the new quantity of the part in stock.

4 Click **Submit**.

Viewing and modifying multiple prices of parts (MOS)

View and modify multiple prices of parts as necessary.

You can change the default **Price Type** for a specific part in its organization and update the average, last, and standard pricing information for the part. However, you can only update **Average price**, **Last price**, and **Standard price** for parts if the PRICELEV installation parameter is set to P.

Any update of price information specified for the average, last, or standard price for a part is copied to the base price of the part in its organization, which is the price of the part to be used as the basis for all transactions for the part in its organization.

Note: When updating price information, the system does not record a stock transaction for a part if there is no quantity of the part on hand in store or if the updates do not affect the base price of the part in its organization.

You can change **Price Type** for a part as necessary. However, if there is a quantity of the part on hand and changing the price type affects the base price of the part, the system records a MPTC stock transaction for the part. If there is no quantity of the part on hand or if changing the price type does not change the base price of the part, the system does not record a transaction for the price type change.

If there is a current quantity of the part on hand and you update the price type to last in first out (LIFO) or first in first out (FIFO), the system creates a stock record for the part in the **R5FIFO** table part and sets **Average Price** to the **Base Price**. The stock record includes the quantity of the part on hand and the price. If there is no quantity on hand, the system does not insert a record into the **R5FIFO** table.

If you change the price type from LIFO or FIFO to average, last, or standard, the system deletes the record of the part from the **R5FIFO** table. If any of the price fields are null, the system considers the price to be zero.

Additionally, if there is a current quantity of the part on hand and you change the price type to standard or last and then specify a Standard Price, the system records both a MPTC and CORR stock transaction.

Revaluation of price information for parts is calculated either at the time of the approval of a receipt for a part or at the time of the approval of an invoice for a part, depending on the setting of the PRICETIM installation parameter. Part revaluation is also calculated according to the PRICETYP installation parameter, which specifies whether the system prices storeroom materials based on the average, last, or standard price.

To view and modify multiple prices of parts (MOS):

1 Select **Materials > Parts**.

2 Select the part for which to view or modify prices, and then click the **Prices** tab.
3 View and modify the price information as necessary.
4 Click **Submit**.

Viewing and modifying part inspections

View and modify records for incoming part inspections.

To view and modify part inspections:

1 Select **Materials > Transactions > Part Inspections**.
2 Select the part inspection record to view or modify, and then click the **Record View** tab.
3 Specify this information:

Status
Select one of these options:

Option	Description
Unfinished (U)	Indicates that parts have not been inspected.
Fully rejected (FJ)	Indicates that, after inspection, all parts have been rejected.
Partially Rejected (PJ)	Indicates that, after inspection, only some parts have not been rejected.
Approved (A)	Indicates that all parts have been approved or that no parts for this order require inspection.

Part Location
Specify the code identifying the receiving location as necessary.

Inspection Qty.
Specify the number of parts inspected.

Rejected Qty.
Specify the number of parts rejected, if any.

Reason for Return
Specify the reason for rejecting or returning the part.

Class
Specify the class of the inspection.

Inspected By
Specify the employee who inspected the parts.

Date Inspected
Specify the date of the inspection.

4 Click **Save Record**. The system automatically populates **Updated By** and **Date Updated**.

Viewing usage and demand of parts

View usage and demand of parts stocked in stores within your organization. For each part, the system identifies each store to which the part has been issued or from which store the part has been returned, the day through which the part usage occurred, demand, and usage. To know how the system determines usage and demand, see the following formulas:

```
Usage = Issues - Returns
```

```
Demand = Quantity of Outgoing Parts – Quantity of Incoming Parts +/- Physical Inventory
```

```
(Outgoing Parts = Issues + Transfers Out + Supplier Returns)
```

```
(Incoming Parts = Returns, Transfers In, Receipts, and Stock Initializations)
```

To view usage and demand of parts:

1. Select **Materials > Parts**.
2. Select the part for which to view usage information, and then click the **Usage** tab.
3. Click **Generate Usage**.
4. View the part usage information.

   The system displays the following information for each part in the Usage list:

Field	Description
Store	The store for which usage transactions, such as issues and returns, have occurred
Month	The last day through which the usage occurred **Note:** The date displayed can never be the current date, because transactions can still occur or be occurring for the current date.
Usage	The difference between the total issues and the returns for the selected part and store during the given month
Demand	The difference between the quantity of incoming parts, such as receipts, returns, and incoming part transfers, and the quantity of outgoing parts, such as issues, transfers, returns to vendors, etc. **Note:** **Demand** also reflects part additions or subtractions due to physical inventories and stock initialization.

Viewing part details

View a list of stores where a part is currently in stock. The Part Details popup will display part quantities and availability.

To view part details:

1. Select **Materials > Parts**.
2. Select the part for which to view details, and then right-click on the form in the **Record View**.
3. Select **View Part Details**.
4. Specify this information:

   Store
   Specify the store for which to view part details.

5. View the part details information.
6. Click **Close**.

Viewing stock levels by part

To view stock levels by part:

1. Select **Materials > Parts**.
2. Select the part for which to view stock levels, and then click the **Overview** tab.
3. View the stock level information.

Viewing purchasing contracts for parts

To view purchasing contracts for parts:

1. Select **Materials > Parts**.
2. Select the part for which to view the purchasing contract, and then click the **Contracts** tab.
3. View the purchasing contract information.

Viewing requisitions for parts

View requisitions for parts as necessary. The system displays all requisitions, including store-to-store requisitions.

To view requisitions for parts:

1. Select **Materials > Parts**.
2. Select the part for which to view requisitions, and then click the **Requisitions** tab.
3. View the requisition information.

Viewing purchase orders for parts

View purchase orders for parts that have not been fully received.

To view purchase orders for parts:

1 Select **Materials > Parts**.
2 Select the part for which to view purchase orders, and then click the **Purchase Orders** tab.
3 View the purchase order information.

Viewing purchase order history for parts

View purchase order history for parts for both open and completed purchase orders.

To view purchase order history for parts:

1 Select **Materials > Parts**.
2 Select the part for which to view purchase order history, and then click the **PO History** tab.
3 View the purchase order history.

Viewing stock values for LIFO/FIFO parts

To view stock values for LIFO/FIFO parts:

1 Select **Materials > Parts**.
2 Select the part for which to view stock values, and then click the **Stock Value** tab.
3 View the stock value information.

Viewing when and where a part has been used

View when and where a part has been used on the **Where Used** page of the **Parts** form. When you associate one part with another part via a **Parts Associated** page, the system keeps a record of the association and displays the information on the **Where Used** page.

Note: The system only shows associations of equipment records.

To view when and where a part has been used:

1 Select **Materials > Parts**.
2 Select the part for which to view usage information, and then click the **Where Used** tab.
3 View when and where the part was used.

The system displays the following information for each part in the Where Used list:

Field	Description
Entity	The entity to which the part was associated

Field	Description
Code	The code of the record, to which the part was associated such as an asset ID, part number, work order
Organization	The organization record to which the part was associated
Description	The description of the **Code** to which the part was associated
Quantity	The quantity of the part that was associated to the entity, code, etc.
Component Location	The component or part location to which the part was associated
Comments	The comments entered when the part was associated
Type	The object type of the record to which the part was associated

Viewing stock transactions for parts

View stock transactions for parts within the past 30 days.

To view stock transactions for parts:

1. Select **Materials > Parts**.
2. Select the part for which to view stock transactions, and then click the **Transactions** tab.
3. View the stock transaction information.

   The system displays the following information for each part in the Transactions list:

Field	Description
Part	The code of the part associated with the part transaction
Part Org.	The organization of the part associated with the part transaction
Type	The type of transaction with which the part was associated such as Stock take, Issue or return, Goods received, etc.
Store	The code of the store with which the part transaction was associated
Description	The description of the **Store** associated with the part transaction

Field	Description
Store Org.	The organization of the **Store** associated with the part transaction
Condition	The condition of the part associated with the part transaction
Issued Part	The part associated to the condition for which it was originally issued
Transaction Qty.	The quantity of the part involved in the transaction. Positive quantities designate an increase in the quantity of the part in inventory, such as a receipt. Negative quantities indicate a decrease in the quantity of the part in inventory, such as an issue or return.
Date	The date on which the part transaction occurred
Price	The price of the part the system used for the transaction
Issued By	If the part transaction is an issue, the system displays the **User ID** of the user who issued the part.
Issued To	If the part transaction is an issue, the system displays the **Employee** code of person to which the part was issued.
Class	The class of the part
Class Org.	The organization of the **Class**
Transaction Number	The transaction number assigned to the transaction
Line	The line number of the part on the transaction involving the part such as the line number on the requisition, purchase order, work order, etc.
Status	The current status of the transaction involving the part
Pick Ticket	If the part was added to a pick ticket, the system displays the number.
Work Order	If the part was added to a work order, the system displays the number.
Activity	If the part was added to a work order, the system displays the work order number for which the part transaction occurred.
Purchase Order	If the part was added to a purchase order, the system displays the number.

Field	Description
PO Org.	The organization of the purchase order associated with the part transaction
Requisition	If the part was added to a requisition, the system displays the number.
Supplier	The supplier for the requisition associated with the part transaction
Bin	The bin involved in the part transaction. For issue transactions, the system displays the bin location from which the part is issued. For receipts, the system displays the bin location into which the part is received.
Lot	The lot of the part involved in the transaction
Asset ID	The code of the equipment associated with the transaction
Asset Org.	The organization of the **Asset ID** associated with the part transaction
Parent Work Order	If the transaction for the part is associated with a MEC work order, then the system displays the number identifying the parent multiple equipment work order associated with the transaction. **Note:** The system enables you to search for all transactions associated with a multiple equipment work order by defining a Quick Filter using Parent Work Order as part of the filter criteria.
Warranty	Indicates whether the part involved in the transaction is covered under warranty
Consignment	Indicates whether the part involved in the transaction is a part under consignment
Direct	Indicates whether the part involved in the transaction is a direct purchase item received directly to a work order, purchase order, etc.

Viewing stock in-transit for parts

View stock information for parts held in stores that are in-transit between stores.

To view stock in-transit for parts:

1 Select **Materials > Setup > Stores**
2 Select the store for which to view stock in-transit information, and then click the **Stock In-transit** tab.
3 View the stock information for the parts held in the selected store that currently have In-transit status.

The system displays the following information for each part in the Stock In-transit list:

Field	Description
Part	The code of the part that is in-transit
Part Description	The description of the part that is in-transit
Part Org.	The organization of the part that is in-transit
Quantity	The quantity of the part that is in-transit
For Repair Qty.	The quantity of a repairable spare part that is currently in-transit for repair. Repairable spare parts have repair details associated on the part record that specify whether a part is to be repaired internally or externally, and they include additional information about the system uses to generate repair work orders or requisitions for repairing the part. Therefore, a value displayed for **For Repair Qty.** indicates that the part is in-transit for repair internally or externally.
Destination	The entity of the destination such as PART, STOR
Destination Code	The code identifying the destination such as the part code or store code
Purchase Order	The purchase order associated with the transaction for which the part is in-transit
PO Org.	The organization of the purchase order associated with the transaction for which the part is in-transit
Requisition	The requisition associated with the transaction for which the part is in-transit
Equipment	The equipment associated with the transaction for which the part is in-transit
Equipment Org.	The organization of the equipment associated with the transaction for which the part is in-transit
Lot	The lot of the part that is in-transit

Viewing part reservations

View part reservations for parts in store that are reserved or allocated for work orders.

To view part reservations:

1. Select **Materials > Parts**.
2. Select the part for which to view part reservations, and then click the **Stores** tab.
3. Select the store for which to view part reservations, and then click **View Parts Reserved**.
4. View the work order reservations for the part in the selected store.

   Note: Part reservations can be initiated by material lists or reservations initiated on a work order.
5. Click **Close**.

Viewing parts associated with manufacturers

To view parts associated with manufacturers:

1. Select **Materials > Overview > Manufacturer Part Numbers**.
2. View the parts information.

Viewing parts associated with suppliers

To view parts associated with suppliers:

1. Select **Materials > Overview > Supplier Part Numbers**.
2. View the part information.

Viewing stock for stores

View stock for stores to view information about parts held in specific stores, such as the part number, the bin/lot combination for the part, and the quantity of the part on hand.

To view stock for stores:

1. Select **Materials > Setup > Stores**.
2. Select the store for which to view stock, and then click the **Stock** tab.
3. View the stock information for the parts held in the selected store.

Viewing stock levels by store

To view stock levels by store:

1. Select **Materials > Setup > Stores**.
2. Select the store for which to view stock levels, and then click the **Overview** tab.
3. View the stock level information.

Viewing stock transactions per store

View stock transactions per store. The system maintains a history of every stock transaction per store. View information such as when a specific part was received to stock, how much the part cost, and to what purchase order the part belonged.

To view stock transactions per store:

1. Select **Materials > Setup > Stores**.
2. Select the store for which to view stock transactions, and then click the **Transactions** tab.
3. View the stock transactions.

   The system displays the following information for each stock transaction in the Transactions list:

Field	Description
Type	The type of transaction with which the part was associated such as Stock take, Issue or return, Goods received, etc.
Part	The code of the part with which the transaction was associated
Description	The description of the **Part** associated with the stock transaction
Part Org.	The organization of the **Part** associated with the stock transaction
Transaction Qty.	The quantity of the part involved in the stock transaction. Positive quantities designate an increase in the quantity of the part in inventory, such as a receipt. Negative quantities indicate a decrease in the quantity of the part in inventory, such as an issue or return.
Date	The date on which the stock transaction occurred
Price	The price of the part the system used for the transaction
Originator	If the part transaction is an issue, the system displays the **User ID** of the user from whom the stock transaction originated.
Issued To	If the part transaction is an issue, the system displays the **Employee** code of the person to which the part associated with the stock transaction was issued.
Class	The class of the part the system used for the stock transaction
Class Org.	The organization to which the class used for the stock transaction belongs

Field	Description
Transaction Number	The number identifying the stock transaction
Line	The line number of the part on the stock transaction involving the part such as the line number on the requisition, purchase order, work order, etc.
Status	The current status of the stock transaction involving the part
Pick Ticket	If the stock transaction was associated with a pick ticket, the system displays the number.
Work Order	If the stock transaction was associated with a work order, the system displays the number.
Activity	If the stock transaction was associated with a work order, the system displays the activity on the work order for which the part transaction occurred.
Purchase Order	If the stock transaction was associated with a purchase order, the system displays the number.
Purchase Order Org.	The organization of the purchase order associated with the part transaction
Requisition	If the stock transaction was associated with a requisition, the system displays the number.
Supplier	The supplier for the requisition associated with the part transaction
Bin	The bin involved in the part transaction. For issue transactions, the system displays the bin location from which the part is issued. For receipts, the system displays the bin location into which the part is received.
Lot	The lot of the part involved in the transaction
Asset ID	The code of the equipment associated with the transaction
Asset Org.	The organization of the **Asset ID** associated with the stock transaction

Field	Description
Parent Work Order	If the transaction for the store is associated with a MEC work order, then the system displays the number identifying the parent multiple equipment work order associated with the transaction. **Note:** The system enables you to search for all transactions associated with a multiple equipment work order by defining a Quick Filter using Parent Work Order as part of the filter criteria.
Scrapped Qty.	The number of repairable spare parts that were scrapped for the stock transaction
Warranty	Indicates whether the part involved in the transaction is covered under warranty
Consignment	Indicates whether the stock transaction was associated with a part under consignment
Direct	Indicates whether the stock transaction was associated with a direct purchase item received directly to a work order, purchase order, etc.

Viewing bin stock

View bin stock per lot. For each lot, the system displays parts contained within that lot and specifies their store and bin location.

To view bin stock:

1. Select **Materials > Setup > Lots**.
2. Select the lot for which to view bin stock, and then click the **Bins Per Store** tab.
3. View the bin stock information.

Managing iProcure items in the Infor EAM application

iProcure allows customers to plan work, track parts usage, manage stock levels, and replenish stock via the Internet. Now Infor EAM customers with iProcure can manage part information in Infor EAM.

Note: This section covers functionality available in iProcure. If you have not purchased iProcure, you do not have access to all of the functionality covered in this section.

Creating iProcure vendors

Create iProcure vendors in Infor EAM.

To create iProcure vendors:

1. Select **Materials > Setup > iProcure Vendors**.
2. Click the **Record View** tab.
3. Click **Download iProcure Vendors**.
4. Click **OK**.

   Note: To create Infor EAM suppliers, click **Create Infor EAM Suppliers**.

Creating Infor EAM suppliers for iProcure vendors

Create a new supplier for each iProcure vendor that currently does not have an associated supplier record.

To create Infor EAM suppliers for iProcure vendors:

1. Select **Materials > Setup > iProcure Vendors**.
2. Click the **Record View** tab.
3. Click **Create Infor EAM Suppliers**. The system creates a new supplier record for each vendor record that currently does not have an associated supplier record.
4. Click **OK**.

Associating Infor EAM suppliers with iProcure vendors

Associate an Infor EAM supplier with a iProcure vendor in Infor EAM.

To associate Infor EAM suppliers with iProcure vendors:

1. Select **Materials > Setup > iProcure Vendors**.
2. Select the iProcure Vendor with which to associate an Infor EAM supplier, and then click the **Infor EAM Suppliers** tab.
3. Click **Add Supplier**.
4. Specify this information:

   Supplier
   Specify the supplier with which to associate the iProcure vendor. The system automatically populates **Supplier Description**, **Supplier Org.**, and **Payment Method**.

5. Click **Submit**. The system updates the Infor EAM Suppliers list.

Associating iProcure items with parts

Associate iProcure items with parts on the **Suppliers** page of the **Parts** form.

To associate iProcure items with parts:

1. Select **Materials > Parts**.

2 Select the part with which to associate iProcure items, and then click the **Suppliers** tab.
3 Select the supplier for which to update the parts catalog, and then click **Add iProcure Item Association**.
4 Specify the **Part #**.
5 Select the item, and then enter the number of items.
6 Click **Add to Cart** to add the item to the shopping cart.
7 Click **RETRIEVE PART**. The part information is retrieved, the iProcure item is associated with the part for the associated Infor EAM supplier, and then the supplier catalog is updated.

Updating iProcure items

Update iProcure items in the parts catalog.

To update iProcure items:

1 Select **Materials > Parts**.
2 Select the part to update, and then click the **Suppliers** tab.
3 Choose one of these options:

Option	Description
Update iProcure Items	Click to update the parts catalog for all suppliers associated with the selected part. The system updates **Gross Price**, **Lead Time**, and **iProcure Date Last Updated** in the parts catalog for all suppliers.
Update Selected iProcure Item	Click to update the parts catalog for selected suppliers associated with the selected part. The system updates **Gross Price**, **Lead Time**, and **iProcure Date Last Updated** in the parts catalog for the selected suppliers.

Adding iProcure part items to requisitions

Add iProcure part items to requisitions.

To add iProcure part items to requisitions:

1 Select **Materials > Requisitions**.
2 Select the requisition for which to add iProcure part items, and then click the **Parts** tab.

Note: The requisition must have a status of Unfinished to add iProcure part items.

3 Click **Add Parts (iProcure Items)**.
4 Specify the **Part #**.
5 Select the item to add, and then enter the number of items.
6 Click **Add to Cart** to add the item to the shopping cart.
7 Click **Add Parts (iProcure Items)**. The iProcure part item is added to the selected requisition, the supplier's catalog is updated, and **iProcure Date Last Updated** is automatically populated.

Viewing iProcure sync errors

View iProcure sync errors for part catalog records.

To view iProcure sync errors:

1. Select **Materials > Requisitions**.
2. Select the requisition for which to view iProcure sync errors, and then click the **Parts** tab.

   Note: You may also view iProcure sync errors on the **Suppliers** tab of the **Parts** page, the **Parts** tab of the **Suppliers** page, and the **Parts** tab of the **Purchase Orders** page.
3. Click **View iProcure Sync Errors**.
4. View the errors.
5. Click **Close**.

Managing warranty claims for parts

Add, modify, delete, or view warranty claims for parts.

To manage warranty claim for parts:

1. Select **Materials > Part Warranty Claims**.
2. Click the **Record View** tab.

   Note: If you are modifying a warranty claim, select the claim to modify, and then click the**Record View** tab.
3. Specify a description of the warranty claim.
4. Specify this information:

   Organization
   Specify the organization for the claim.

   Status
   Select the status of the claim.
   Note: Once the **Status** is set to Approved, the system automatically populates **Date Approved**.

   Warranty
   Specify the warranty with which the claim is associated. The system automatically populates **Warranty Org.**, **Manufacturer**, **Supplier**, and **Supplier Org.**

   Class
   Specify the class of the warranty claim. The system automatically populates **Class Org.**

   RMA Number
   Specify the return merchandise authorization (RMA) number.

   Date Filed
   Specify the date the warranty claim is filed.

   Date Resolved
   Specify the date the warranty claim is resolved.

Date Reported
Specify the date the warranty claim is reported.

5 Click **Save Record**.

Associating parts to part warranty claims

Associate a part with a warranty claim after creating a new warranty claim.

To associate parts with warranty claims:

1 Select **Materials > Part Warranty Claims**.
2 Select the warranty claim with which to associate parts, and then click the **Parts** tab.
3 Specify this information:

Part
Specify the part to associate with the warranty claim.

Note: The system automatically populates **Part Description**, **Part Org.**, and **Manufacturer**.

Quantity
Specify the total number of parts associated with the part.

Reimbursement Type
Specify the reimbursement type for the part warranty claim.

Claim Cash Amount
Specify the total cost for the parts.

Claim Replacement Qty.
Specify the number of parts to be replaced.

Settlement Cash Amount
Specify a monetary value for the settlement of the part warranty claim.

Settlement Replacement Qty.
Specify the number of parts replaced.

Settlement Receiving Store
Specify the store that receives the settlement from the part warranty claim.

Settlement Receiving Bin
Specify the bin that receives the settlement from the part warranty claim.

Settlement Receiving Lot
Specify the store that receives the lot from the part warranty claim.

Note: If the status of the part warranty claim is Unfinished, the system protects **Settlement Cash Amount**, **Settlement Replacement Qty**, **Settlement Receiving Store**, **Settlement Receiving Bin**, and **Settlement Receiving Lot**.

4 Click **Submit**.

Importing parts for part warranty claims

The import parts screen shows parts that are not associated with a warranty claim and parts already associated with the selected part warranty claim.

To import a part:

1. Select **Materials > Part Warranty Claim**.
2. Select the warranty claim for which to import parts, and then click the **Parts** tab.
3. Select **Import Parts**.
4. Select one or more of the parts to import, and then click **Submit**.

   Note: If the part you select to import is already assigned to the selected part warranty claim, the new quantity is added to the existing quantity.

Viewing imported parts

View parts that have been imported for a part warranty claim.

To view imported parts:

1. Select **Materials > Part Warranty Claim**.
2. Select the part warranty claim for which to view imported parts, and then click the **Imported Parts** tab.
3. View imported parts.

Purchasing management

Defining initial purchase information

Define initial purchase information before using the purchasing management module.

Defining purchase order terms

Define purchase order terms to use in purchase order activities. Various suppliers might have different types of purchase terms. The system has five predefined types of purchase order terms. You can also edit purchase order terms as necessary.

For example, select Freight Terms as the type for an individual purchase order term. This purchase order term appears in the Freight Terms lookup on the **Suppliers** form. Set up the individual codes for each of these types of order terms:

Term	Description
FOB (Free On Board) point (FOB)	Define where to take possession of an item such as a receiving dock.
Freight terms (FRTR)	Establish how different freight charges are paid and who pays them.
Payment terms (PAY)	Specify how a supplier is paid for a purchase such as COD.
Payment method (PYMT)	Specify what method is used to pay the supplier.
Ship via (SHIP)	Define how the supplier ships an item such as overnight, regular mail, etc.

To define purchase order terms:

1 Select **Purchasing > Setup > PO Terms**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the purchase order term belongs if you use multi-organization security.

PO Term
Specify a unique code identifying the purchase order term, and then specify a description of the purchase order term in the adjacent field.

Type
Select the type of purchase order term.

4 Click **Save Record**.

Defining purchasing clauses

Define purchasing clauses to create a list of legal agreements. Attach purchasing clauses to contract classes, purchase orders, or blanket purchase orders. Use the International Standards Organization (ISO) purchasing clauses predefined in the system, or define purchasing clauses to suit your organization's needs. You can also edit purchasing clauses after creating them as necessary.

Finally, you can create hierarchies with a general purchasing clause as a parent and more specific purchasing clauses set up as children.

To define purchasing clauses:

1 Select **Purchasing > Setup > Purchasing Clauses**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the purchasing clause belongs if you use multi-organization security.

Clause
Specify a unique code identifying the purchasing clause, and then specify a description of the purchasing clause in the adjacent field.

Class
Specify the class of the purchasing clause.

Sequence Number
Specify a number to indicate the order of the child purchasing clause in relation to the parent purchasing clause, if applicable. The sequence number determines the hierarchy of the child purchasing clauses.

Parent Clause
Specify the parent purchasing clause, if applicable.

Out of Service
Select to prevent the purchasing clause from being displayed in the lookups.

4 Click **Save Record**.

Defining children for purchasing clauses

Children can be added to purchasing clauses as additions to existing clauses.

To define children for purchasing clauses:

1 Select **Purchasing > Setup > Purchasing Clauses**.
2 Select the clause for which to define children, and then click the **Children** tab.
3 Click **Add Child Clause**.
4 Specify this information:

Sequence Number
Specify the sequence number for the clause.

Child Clause
Specify the child clause to associate with the contract class of the header clause. The system automatically populates the child clause description and **Child Clause Org**.

5 Click**Submit**.

Note: To remove a child clause from the header clause, select the child clause to remove, and then click **Remove Child Clause**.

Viewing purchasing clause hierarchies

View the existing relationship between ISO purchasing clauses as well as newly created purchasing clauses.

To view purchasing clause hierarchies:

1 Select **Purchasing > Setup > Purchasing Clauses**.
2 Select the purchasing clause for which to view the hierarchy, and then click the **Children** tab.
3 View the purchasing clause information.

Defining delivery addresses

Define and maintain delivery addresses for purchasing and materials.

To define delivery addresses:

1 Select **Purchasing > Setup > Delivery Addresses**.
2 Click **New Record**.
3 Specify this information:

Delivery Address
Specify a unique code identifying the delivery address, and then specify a description of the delivery address in the adjacent field.

Address 1
Specify the first line of the delivery address.

Address 2
Specify the second line of the delivery address.

Address 3
Specify the third line of the delivery address.

City
Specify the city for the delivery address.

State
Specify the state for the delivery address.

Telephone
Specify the telephone number at the delivery address.

Extension
Specify the telephone number extension at the delivery address.

Zip Code
Specify the zip code for the delivery address.

Country
Specify the country for the delivery address.

Fax/Telex
Specify the fax or telex number at the delivery address.

E-mail Address
Specify the e-mail address for the delivery address.

Full Address
Specify the full delivery address.

Out of Service
Select to prevent the delivery address from being displayed in lookups.

4 Click **Save Record**.

Defining credit cards

Define credit cards for use as payment on purchase orders.

To define credit cards:

1 Select **Purchasing > Setup > Credit Cards**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization of the credit card if you use multi-organizational security.

Last 4 of Credit Card
Specify the last four digits of the credit card number, and then enter a description of the credit card in the adjacent field.

Type
Specify the type of the credit card.

Expiration (Month/Year)
Specify a two-digit number for the month, and then enter a four-digit number for the year.

Class
Specify the class of the credit card.

Class Org.
Specify the organization of the class.

Expiration Date
Specify the expiration date for the credit card. The system defaults **Expiration Date** to the month entered as the **Expiration** month, the last day of the **Expiration** month, and the year of **Expiration**.

Name
Specify the name that appears on the credit card.

Out of Service
Select to set this credit card record to out of service.

4 Click **Save Record**.

Defining users for credit cards

Define users authorized to charge purchase orders to a specific credit card.

To define users for credit cards:

1 Select **Purchasing > Setup > Credit Cards**.
2 Select the credit card number for which to define users, and then click the **Users** tab.
3 Specify this information:

   User
   Specify the name of the user to associate with the credit card number. The system automatically populates the user description.

   Default
   Select to set the user as the default user for the credit card number.

4 Click**Submit**.

Creating and revising purchase orders

Create and revise purchase orders. The purchase order creation process has several steps. First, create the purchase order header and then add line items for parts and services. At this stage, you can also adjust part charges, associate clauses, create work orders and activities from service lines, and associate assets for parts tracked by asset. Next, change the status to Ready for printing to print the purchase order for approval. Finally, approve the purchase order and send it to the supplier. To change the status of a purchase order, specify a new status on the **Record View** page of the **Purchase Orders** form. See the following descriptions when changing the status:

Option	Description
Unfinished	The purchase order is at the creation stage. Create the purchase order header and add parts.
Ready for printing	The purchase order is ready for approval and printing.
Cancelled	The purchase order is cancelled.
Approved/completed	The purchase order is approved and ready to be sent to a supplier.

Note: When you approve a purchase order containing lines with repairable spare parts of **Type** External Repair, the system moves the **Requested Qty. (UOM)** of the part from the **Qty. for Repair** to the **Qty. at Supplier** on the **Stores** page of the **Parts** form. If the is part tracked by asset, the system changes the status of the asset associated with the part to In Repair. If the asset is a parent in an asset hierarchy, the system changes the status of any dependent child assets to In Repair.

If you cancel a purchase order containing lines with repairable spare parts of **Type** External Repair, the system gives you the option to cancel the requisition. If you select to also cancel the requisition, the system deletes the repair detail assignments for the part, and if the parts have been moved from **Qty. to Repair** to **Qty at Supplier**, the system moves the parts back to the **Qty. for Repair**.

Creating purchase order headers

Create purchase order headers for new purchase orders.

Note: If you are the originator of a purchase order, you might have an approval limit. This limit defines the total maximum value of all the line items on a purchase order. The approval limit may be set up at either the purchase order header level or the line item detail level. If the total exceeds your limit, you might need to have someone else (typically a manager) approve the amount.

To create purchase order headers:

1. Select **Purchasing > Purchase Orders**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the purchase order belongs if you use multi-organization security. The system automatically populates the purchase order description, **Status**, **Store**, **Buyer**, and **Due Date**.

   Purchase Order
   Specify a description of the purchase order in the adjacent field. The system assigns a purchase order number after you save the record. If the purchase order has numerous revisions, the system automatically populates **Revision Number**.

   Status
   Select the status value of the purchase order.
   Note: Your authorization level determines the values available for **Status**.

   Store
   Specify a storeroom.

   Originator
   Specify the employee requesting the purchase order.

   Due Date
   Specify the expected arrival date for the items.

   Buyer
   Specify the buyer responsible for the purchase order.

   Delivery Address
   Specify the delivery address for the purchase order.

   Class
   Specify the class of the purchase order. The system automatically populates **Class Org.**

   Package Tracking Number
   Specify the unique number by which to track the delivery of the shipment for the purchase order.

   Supplier
   Specify a supplier. The system automatically populates the supplier's default **Currency**, the current **Exchange Rate**, **Language**, and **Lead Time (Days)**.

If the items are covered under a specific contract with a supplier, the system displays **Contract** and **Discount** information after you add lines to the purchase order. **Contract** and **Discount**apply only to individual orders.

Currency
Specify the currency you use to purchase the item.

Exchange Rate
Specify the current exchange rate.
Note: You can update the Currency if there is an exchange rate defined for the currency. You can update the **Exchange Rate** when the EXRTUPDT installation parameter is set to YES.

Default Approver
Specify the employee responsible for approving the purchase order.

Ship Via
Specify the manner in which the supplier ships the specific item.

Payment Terms
Specify the manner in which the supplier is paid for the purchase.

Freight Terms
Specify the manner in which the freight charges are paid and who pays them.

FOB Point
Specify where you take possession of the item.

Payment Method
Specify the method used to pay the supplier.
Note: Click **Default Terms**. The system automatically populates **Ship Via**, **Payment Terms**, **Freight Terms**, **FOB Point**, and **Payment Method** with the values specified on the **Suppliers** form.

After the purchase order is approved, the system displays **Approved By** and **Date Approved**.

After lines are added to the purchase order, the system displays **Part Lines**, **Service Lines**, **PO Lines**, **Total Tax**, **Total Extra Charges/Discounts**, **Total Part Value**, **Total Service Value**, and **Total PO Value**.

4 Click **Save Record**.

Note: Click **Create New Revision** to create a new revision of the purchase order.

Click **Receive All Parts** to create a receipt for all outstanding parts.

Adding part details to purchase orders

Add specific line items to the purchase order. You can add both cataloged and non-cataloged parts, and you can add items from an existing requisition. You can also create new parts to add to purchase orders.

Note: You can only add part details to a purchase order if the purchase order header status is Unfinished.

You can only update part details if the part line status is Unfinished.

To add part details to purchase orders:

1. Select **Purchasing > Purchase Orders**.
2. Select the purchase order for which to add part details, and then click the **Parts** tab.
3. Click **Add Part Line**.
4. Specify this information:

   Requisition-Line
   Specify the requisition and line number from which to add the part(s) to the purchase order. If you select a **Requisition-Line**, the system populates and overwrites these fields from the requisition: **Due Date**, **Requested Qty.**, **Part**, **Description**, **Part Org.**, **Supp. Catalog Reference**, **Requested Qty. (UOM)**, **Price**, **Work Order-Activity**, **Cost Code**, **Inspection**,**Line Type**, and **Assigned Qty.**
   Note: If the selected **Requisition-Line** contains parts related to a multiple equipment work order, then the system populates **Work Order-Activity**, **Equipment**, **Equipment Org.**, and **Related Work Order** from the requisition/line.

   Part
   Specify the part to add to the purchase order. If the part is cataloged, the system automatically populates the part description, **Purchase Qty. (UOP)**, **Requested Qty. (UOM)**, **Price**, **Qty. per UOP**, **Contract Discount**, **Part Line Subtotal**, **Total Tax Amount**, **Total Extra Charges/Discounts**, and **Part Line Total**.
   Note: The **Assigned Qty.** for a core tracked part is equal to the number of parts for which repair details are assigned for the requisition line.

   The system performs a search to find an approved contract for the selected part. If an approved contract is found, the system populates **Contract** with the contract that was found.

   The system searches for an approved contract for the selected PO header supplier, store, and currency.

   Type
   Select the type of materials to order.

   Line
   Specify the line number of the purchase order.

   Purchase Qty. (UOP)
   Specify the amount and UOP in which the supplier provides the part.

   Requested Qty. (UOM)
   Specify the amount in which you receive the part to stock. The system automatically populates the UOM.

   Price
   Specify the price of a single part and the currency you use to purchase the part in the adjacent field.

   Work Order-Activity
   Specify the work order and activity if you are ordering this item for a work order activity. When you select a **Work Order–Activity**, the system automatically populates **Type** with Direct Materials and populates **Equipment** from the work order and it is protected.

Note: If the selected **Work Order–Activity** is a multiple equipment work order, the system enables **Equipment**, and it is required.

Equipment
Specify the equipment associated with the purchase order if you have not entered a **Work Order–Activity** and want to associate an equipment record with the purchase order. The system populates **Type** with Direct Materials.

Choose one of these if the work order is a multiple equipment work order:

- Specify a specific equipment to which to distribute the cost of the part.
- Specify All Equipment to evenly distribute the cost of the part to each equipment record on the work order.
- Specify WO Header Equipment to distribute the cost of the part to the equipment on the work order header only.

Note: If the selected **Part** is tracked by asset, then the system clears **Equipment**, **Equipment Org.**, and **Related Work Order** because you cannot distribute a part tracked by asset across multiple equipment.

Delivery Address
Specify the address to which to deliver the part.

Tax Code
Specify any additional taxes to apply to the part line as necessary.

Status
Select the status of the part line.
Note: The system does not move core tracked parts for which there are repair detail assignments from **Core Qty.** to **Qty. at Supplier** until the **Status** of the purchase order header is Approved, regardless of the status of the part line.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Qty. per UOP
Specify the conversion factor.
Note: For example, if the supplier's UOM for the part is a case of 12 parts but your UOM for the part is each, **Purchase Qty. (UOP)** will be 1 for one case, but **Requested Qty. (UOM)** will be 12 (1 case = 12 parts). If you enter 2 for the **Purchase Qty. (UOP)**, the system uses **Qty. per UOP** to update the **Requested Qty.** to 24.

Due Date
Specify the expected arrival date of the items.

Package Tracking Number
Specify the unique number by which to track the delivery of the shipment for the purchase order.

Track by Asset
The system displays whether or not the part is tracked as an asset.

5 Click **Submit**. The system automatically creates a new line number for each new part line added. If you wish to update a line number, use Screen Designer to display **Line** and enter a new part line manually.

Note: If you have a preset monetary limit established for purchase orders, the system will not allow you to save any amount greater than this limit. If MOS is set to YES, the limit is determined on the **Organizations** page of the **Users** form. If MOS is set to NO, the limit is determined on the **Users** form.

To delete a part, select the part to delete, and then click **Delete Part**.

Creating new parts to add to purchase orders

Create new parts to add to purchase orders. When you need to add a part that has not been previously created in the system, create the new part on the **Parts** page of the **Purchase Orders** form.

Note: You cannot create a new part for an existing part line.

To create new parts to add to purchase orders:

1 Select **Purchasing > Purchase Orders**.
2 Select the purchase order for which to create new parts, and then click the **Parts** tab.
3 Click **Create Part**. The system automatically populates **Part** with a number that starts with N. Specify a description of the part in the adjacent field.
4 Specify this information:

Type
Select the type of materials to order.

Purchase Qty. (UOP)
Specify the amount and UOP in which the supplier provides the part.

Requested Qty. (UOM)
Specify the amount in which you receive the part to stock. The system automatically populates the UOM.

Price
Specify the price of a single part and the currency you use to purchase the part.

Work Order-Activity
Specify the work order and activity if you are ordering this item for a work order activity. The system automatically populates**Type** with Direct Purchase.

Tax Code
Specify any additional taxes to apply to the part line as necessary.

Status
Select the status of the part line.

Qty. per UOP
Specify the conversion factor.
Note: For example, if the supplier's UOM for the part is a case of 12 parts but your UOM for the part is each, **Purchase Qty. (UOP)** will be 1 for one case, but **Requested Qty. (UOM)** will be 12

(1 case = 12 parts). If you specify 2 for the **Purchase Qty. (UOP)**, the system uses **Qty. per UOP** to update the **Requested Qty.** to 24.

Due Date
Specify the expected arrival date of the items.

Track by Asset
The system displays whether or not the part is tracked as an asset.

5 Click **Submit**.

Note: To add an iProcure part, click **Add Parts (iProcure Items)**. To update iProcure items in the parts catalog, click **Update iProcure Items**. To view iProcure sync errors, click **View iProcure Sync Errors**.

Adding multiple parts to purchase orders

Select and retrieve multiple parts for purchase orders.

To add multiple parts to purchase orders:

1 Select **Purchasing > Purchase Orders**.
2 Select a purchase order for which to add multiple parts, and then click the **Parts** tab.
3 Click **Select Parts**.
4 Specify this information:

Select
Select the parts to add to the purchase order.

Purchase Qty.
Specify the purchase quantity for each selected part.

5 Click **Submit**.

Note: Select **Planned Part** to add the parts to the WO-Activity as planned parts. **Planned Part** is available only when parts are defaulted as Direct Materials.

Adding iProcure part items to purchase orders

Add iProcure part items to purchase orders.

To add iProcure part items to purchase orders:

1 Select **Purchasing > Purchase Orders**.
2 Select the purchase order to which to add iProcure part items, and then click the **Parts** tab.

Note: The purchase order must have a status of Unfinished to add iProcure part items.

3 Click **Add Parts (iProcure Items)**.
4 Specify the Part #.
5 Select the item, and then enter the number of items.
6 Click **Save Record**.
7 Click **Add Parts (iProcure Items)**.The system automatically populates **iProcure Date Last Updated**.

Updating iProcure items

Update iProcure items in the parts catalog.

To update iProcure items:

1. Select **Purchasing > Quotes > Requests for Quotations**.
2. Select the purchase order, and then click the **Parts** tab.
3. Click **Update iProcure Items**. The system updates the parts catalog for PO suppliers and only parts on the selected PO record. The system automatically populates **Gross Price**, **Lead Time**, and **iProcure Date Last Updated** in the parts catalog for all suppliers.

Entering extra charges or discounts

Enter extra charges or apply special discounts to a purchase order line.

Note: You can only apply extra charges or discounts to a saved part line with a status of Unfinished.

To enter extra charges or discounts:

1. Select **Purchasing > Purchase Orders**.
2. Select the purchase order for which to enter extra charges or discounts, and then click the **Parts** tab.
3. Select the part line for which to enter extra charges or discounts.
4. Click **Extra Charges/Discounts**.
5. Click **Add Charge/Discount**. The system automatically populates **Sequence Number** based on the next incremental line number.
6. Specify this information:

   Sequence Number
   Specify the sequence number of the part line.

   Type
   Select the type of charge/discount.

   Amount
   Specify the amount of the charge/discount. Specify a positive number for an extra charge or a negative number for a discount.

   Percentage
   Specify the percentage of the charge/discount. Specify a positive number for an extra charge or a negative number for a discount.
   Note: You must specify either an amount or a percentage. You cannot specify both values.

   Cumulative
   Select to apply the charge/discount to the record after all other charges/discounts have been applied.

   Include
   Select to always include extra charges and discounts.
   Note: If the installation parameter EXTCHG is set to Y, the system always includes extra charges and discounts; therefore, **Include** is selected and protected. If EXTCHG is set to M, **Include** is updateable. If EXTCHG is set to N, **Include** is unselected and protected.

7 Click **Submit**.

Note: To delete a charge/discount, select the charge/discount to delete, and then click **Delete Charge/Discount**. The system deletes the record and updates the Extra Charges/Discounts list.

8 Click **Close**.

Creating assets for purchase order items

Order parts tracked by asset that are not yet defined in the database. Create new asset records and associate them with purchase order items. The system only requires that you create assets for purchase order items if the installation parameter ASSETASS is set to P.

Define an asset for each individual part. For example, associate three assets with the order line if the ordered quantity is three. You cannot set the order status to Ready for printing on the **Purchase Orders** form until you associate all parts tracked by asset.

To create assets for purchase order items:

1 Select **Purchasing > Assets for PO**.

2 Specify this information:

Purchase Order-Line
Specify the purchase order and line number for which to create assets. The system automatically populates **PO Org.**, **Requisition**, **Store**, **Supplier**, **Part**, **Order Qty.**, and **Price**.
Note: You must create an asset for the total quantity of the asset-parts you order. For example, if the **Order Qty.** is 2, you must create only two asset lines. You cannot create more than two assets. If you create less than two assets, the purchase order cannot be approved.

3 Click **Add Asset**.

Note: If the ASSETASS installation parameter is set to R, you can add an asset if the purchase order has a status of Unfinished, Ready for Printing, or Approved. If the ASSETASS installation parameter is set to P, you can only add an asset if the purchase order has a status of Unfinished.

4 Specify this information:

Asset ID
Specify a code identifying the asset, and then specify a description of the asset in the adjacent field. If you select an existing asset, the system automatically populates the asset ID description, **Department**, and **Asset Org.**
Note: If you do not specify an asset ID and the AUTOANUM installation parameter is set to YES, the system automatically generates an asset number after you save the record. You may also select an existing asset ID with a status of Awaiting Purchase. When you select an existing asset ID, the system automatically populates the asset ID description, **Type**, **Asset Org.**, and **Department**.

Type
Specify the type of the asset.

Asset Org.
Specify the organization of the asset.

Department
Specify the department responsible for the asset.

5 Click **Submit**.

Note: To remove an asset, select the asset to remove, and then click **Remove Asset**.

Adding service details to purchase orders

Add service details to purchase orders. Create a service line for a set quantity and certain number of hours and at a defined price and rate.

Note: You can only add service details to a purchase order if the status of the purchase order is Unfinished.

You can only modify service details if the service line status is Unfinished.

If the installation parameter POCURR is set to NO, the system copies the currency of the purchase order header to all purchase order lines and protects the **Currency**. The currency of the service lines must match the currency of the purchase order header. However, if the installation parameter POCURR is set to YES, the currency of the service lines may be different than the currency on the purchase order header.

If you have a preset monetary purchasing limit for specifying purchase orders, you cannot save any amount that exceeds your limit.

To add service details to purchase orders:

1 Select **Purchasing > Purchase Orders**.

2 Select the purchase order to which to add service details, and then click the **Services** tab. The system automatically populates **Type**, **Status**, the currency, and **Due Date**.

3 Click **Add Service Line**.

4 Specify this information:

Type
Select one of these service details options:

Option	Description
Fixed Price or Hours from Service	Select if the service line references a work order activity that is flagged for external service. If you select Fixed Price or Hours from Service, you must specify a **Work Order-Activity** or create a work order or work order activity.
Contractor Hire	Select if the service line will be completed by contract. If you select Contractor Hire, you must specify a **Trade**. You cannot specify a **Work Order-Activity** if you select Contractor Hire.

Status
Select the status of the service line.
Note: Once you change the **Status** to a value other than Unfinished and the status of the purchase order header is Accepted, Cancelled, or Rejected, you cannot change the status back to Unfinished.

If the service line is associated with a work order/activity with a project-budget, you must be an approver for the project-budget to approve the service line. However, if there are no users listed on the **Authorizations** page of the **Projects** form, every user can approve the line.

Requisition-Line
Specify a requisition and line to add services to the service line from an existing service requisition.
Note: If you manually specify a **Requisition**, the system automatically populates the line number if there is only one line that meets the lookup requirements on the requisition and if the line is valid. If there are multiple lines that meet these criteria on the requisition, the system leaves the field null.

If the selected **Requisition–Line** contains parts related to a multiple equipment work order, then the system populates **Work Order–Activity**, **Equipment**, **Equipment Org.**, and **Related Work Order** from the requisition/line.

Work Order-Activity
Specify the work order number and activity if the service line is designated for external service. If there is no work order or activity assigned to the service line, click **Create Work Order/Activity**. The system creates a new work order number and/or activity. Modify the work order on the **Work Orders** form, and then modify the activity on the **Activities** tab of the **Work Orders** form.
Note: If you manually specify a **Work Order-Activity**, the system automatically populates the line number if there is only one line that meets the lookup requirements on the work order/activity and if the line is valid. If there are multiple lines that meet these criteria on the work order/activity, the system leaves the field null.

You can only add service details to a purchase order that is associated with a work order-activity with a status of Completed.

You cannot create a multiple equipment work order on the **Services** page; however, if the selected **Work Order–Activity** is a multiple equipment work order, the system enables **Equipment** and it is required.

Job
Specify the job

Equipment
Choose one of these options if the work order is a multiple equipment work order:
- Specify a specific equipment to which to distribute the cost of the service.
- Specify All Equipment to evenly distribute the cost of the service to each equipment record on the work order.
- Specify WO Header Equipment to distribute the cost of the service to the equipment on the work order header only.

Note: When associating an order line with a multiple equipment work order, the system copies the purchase order line to the parent multiple equipment work order activity only. The system does not populate the purchase order line for the related work order activities.

Trade
Specify a trade if the service will be contracted.

Task Plan
Specify a task if the service will be contracted. The system automatically populates **Trade**, **Hours Requested**, **Price**, and the currency.

Hours Requested
Specify the number of hours required to perform the service.

Price
Specify the cost of the service, and then specify the currency in the adjacent field.
Note: If the POCURR installation parameter is set to YES, you can change the currency.

Due Date
Specify the date by which the service must be complete.

Tax Code
Specify the tax code associated with the service.

Freeze Rate
Select to freeze the exchange rate throughout the purchase order approval process.
Note: If you do not select **Freeze Rate**, the system updates the exchange rate when you approve the purchase order.

5 Click **Submit**.

Note: To delete a service line, select the service line to delete, and then click **Delete Service Line**. You can only delete service lines from a purchase order if the status of the purchase order header is Unfinished.

Click **Add/Edit Comments** to add comments to the language.

Associating clauses with purchase orders

Include contract clauses in purchase orders. For example, state that for each day the contractor finishes ahead of schedule, he or she receives a bonus. Set up contract clauses before associating them with purchase orders.

To associate clauses with purchase orders:

1 Select **Purchasing > Purchase Orders**.
2 Select the purchase order for which to associate clauses, and then click the **Clauses** tab.
3 Click **Add Clause**.

Note: You can only access the **Clauses** tab and add or delete a clause if the purchase order has a status of Unfinished.

4 Specify this information:

Order Clause
Specify a predefined ISO clause or a user-defined clause. You can associate multiple clauses with a purchase order. The system automatically populates **Description**.

5 Click **Submit**.

Note: To remove a clause, select the clause to remove, and then click **Remove Clause**.

Copying purchase orders

The copy purchase order feature copies a purchase order, including all details.

To copy purchase orders:

1 Create a purchase order.

   See Creating purchase order headers on page 679.

2 Right-click anywhere on the **Purchase Orders** form, and then select **Copy Purchase Order**.

3 Specify this information:

   New PO Description
   Specify a description for the new purchase order.

4 Select the record types to copy, and then click **Submit**. The system copies all purchase order details to the new purchase order.

   Note: Some exceptions apply to the header, service, part, and comment details copied.

   The system does not copy **Status** because all copied purchase orders are reset to **Status** Unfinished.

   Select **Use the Parts Catalog Price if no Contract Price Exists** to indicate the prices will be pulled from Parts Catalog if available.

Updating purchase orders

Update purchase order details in a batch.

To update purchase orders:

1 Select **Purchasing > Process > PO Update**.

2 Run the default dataspy. The system displays a list of purchase orders with a system status of "Unfinished" or "Awaiting Approval" in the editable grid.

3 Select the purchase orders to update and make changes to the following fields as necessary:

   - **Description**
     Specify the description of the updates.
   - **Status**
     Update the status of the purchase order.
   - **Buyer**
     Specify the buyer responsible for the purchase order.
   - **Class**
     Specify the class of the purchase order.
   - **Default Approver**
     Specify the employee responsible for approving the purchase order.

4 Click **Update POs**.

   Note: To print purchase order updates, select the purchase orders to print, and then click **Print Selected PO**.

Viewing open repairs for purchase orders

View information about assets associated with purchase orders that are listed as needing repair. This tab will only display details when the associated PO Line has not been fully received

To view open repairs for purchase orders:

1. Select **Purchasing > Purchase Orders**.
2. Select the purchase order for which to view open repairs, and then click the **Open Repairs** tab.
3. View the assets needing repair.

Viewing transactions for purchase orders

View receipt and return transactions for the selected purchase order.

To view transactions for purchase orders:

1. Select **Purchasing > Purchase Orders**.
2. Select the purchase order for which to view transactions, and then click the **Transactions** tab.
3. View the transactions information.

Viewing tracking for purchase orders

View tracking information for the selected purchase order. Tracking information is available only for purchase orders that have been transmitted to iProcure, and all information displayed on the page is from iProcure.

To view tracking for purchase orders:

1. Select **Purchasing > Purchase Orders**.
2. Select the purchase order for which to view tracking, and then click the **Tracking** tab.
3. View the tracking information.

Viewing purchase order history

View the purchase order histories of purchase orders using the **PO Revision History** form. The **PO Revision History** form enables you to select a specific purchase order and view the purchase order history for the current revision and all previous revisions of the purchase order.

The **PO Revision History** form displays the same information and includes the same tabs as the **Purchase Orders** form.

To view purchase order history:

1. Select **Purchasing > PO Revision History**.
2. Select the purchase order for which to view history, and then click the Record View, Parts, Services, or Clauses tabs to view different pages containing specific information related to the purchase order

history. The system displays the corresponding page. See the following table for details about the information displayed on each page of the **PO Revision History** form.

Tab	Description
List View	Displays a list of all purchase orders
Record View	Displays detailed header information for the selected purchase order
Parts	Displays detailed information about parts on purchase order lines **Note:** You can also view comments and extra charges or discounts associated with the part. Click **Comments** to view comments. Click **Extra Charges/Discounts** to view extra charges or discounts.
Services	Displays any services added to the purchase order **Note:** You can also view comments associated with the service. Click **Comments** to view comments.
Clauses	Displays any contract clauses included on the purchase order

Creating and using blanket orders

Use blanket orders to order a fixed number of items for a predetermined price or over a specific period of time. First, create blanket order headers, and then add line items. You can generate purchase orders from a blanket order, associate clauses with blanket orders, and set up user authorization for blanket order releases. When satisfied with the blanket order, approve the blanket order by changing the status to Approved. You must have authorization to create or update blanket orders. You must be a buyer for your organization with sufficient purchasing limit permissions to create blanket orders.

Creating blanket order headers

To create blanket order headers:

1 Select **Purchasing > Blanket Orders**.

2 Click **New Record**. The system automatically populates the blanket order description, **Status**, **Date Created**, and **Number of Lines**.

3 Specify this information:

Organization
Specify the organization to which the blanket order belongs if you use multi-organization security. The system automatically populates **Date Created**.

Blanket Order
Specify a description of the blanket order in the adjacent field. The system assigns an order number after you save the record.

Status
Select the status value of the blanker order.
Note: Your authorization level determines the values available for **Status**.

You must add line items to the blanket order before you approve it. After lines are added to the blanket order, the system populates **Remaining Value**.

Store
Specify the storeroom to which to deliver parts.

Buyer
Specify the buyer responsible for the blanket order.

Maximum Value
Specify the maximum value for the blanket order. The system displays the total monetary amount released against the blanket order to date in **Released Value**. You cannot update this field.
Note: The **Maximum Value** of the header may be less than the total of all lines, but it cannot be less than the **Maximum Value** or **Price** of an individual line.

Class
Specify the class of the blanket order. The system automatically populates**Class Org.**

Start Date, End Date
Specify the dates between which purchase orders can be generated from the blanket order. The system displays the number of purchase orders released from this blanket order in **Number Released**. You cannot update this field.

Supplier
Specify the supplier from whom to order the parts. The system automatically populates **Supplier Org.**, **Currency**, and **Exchange Rate**.

Currency
Specify the currency you use to purchase the parts.

Exchange Rate
Specify the current exchange rate.
Note: You can update **Currency** if there is an exchange rate defined for the currency and if the installation parameter POCURR is set to YES. If the installation parameter POCURR is set to NO, you can update the currency, and the system automatically populates **Exchange Rate** with `1`. You can update **Exchange Rate** if the EXRTUPDT installation parameter is set to YES.

Approve Order
Select to automatically approve a purchase order generated from the blanket order.

4 Click **Save Record**.

Note: Click **Create Complete PO** to create a purchase order from the blanket order.

You cannot delete a blanket order. If you no longer need the blanket order, change the **Status** to Cancelled. Once cancelled, you cannot change the status of a blanket order.

Creating purchase orders from a blanket order

After you approve the blanket order, create a new purchase order from the blanket order.

Note: You cannot create a purchase order if the system date is outside the range of blanket order Start Date and**End Date**; if the **Release Value** of the new purchase order will be greater than the **Remaining Value**; if the **Currency** for the blanket order is different than the currency on parts lines; if the purchase order value exceeds your purchase order limit permissions; if you are not an authorized user with specific permissions to crate purchase orders; or if the purchase order value exceeds your authorization for purchase order approval.

To create purchase orders from a blanket order:

1. Select **Purchasing > Blanket Orders**.
2. Select the blanket order from which to create a purchase order, and then click the **Record View** tab.
3. Click **Create Complete PO**. The system automatically populates and protects **Store** if you specified a store on the **Blanket Order Record View** page.
4. Specify this information:

   Originator
   Specify the employee requesting the blanket purchase order.

   Store
   Specify the storeroom to which to deliver parts.

5. Click **Submit**.

Adding part details to blanket orders

Set up items in the parts catalog before adding them to blanket orders.

Note: You can only add part details to a blanket order if the status of the blanket order is Unfinished.

You can only modify part details if the part line status is Unfinished.

Parts tracked as kit cannot be added to blanket orders.

To add part details to blanket orders:

1. Select **Purchasing > Blanket Orders**.
2. Select the blanket order to which to add part details, and then click the **Parts** tab. The system automatically populates the price currency and **Qty. per UOP**.

   Note: You can unhide **Line** and manually enter a new line number. Line sequences increase by the number entered for the installation parameter INCRLINO.

3. Click **Add Part Line**.
4. Specify this information:

Part
Specify the part with which to associate the blanket order. The system automatically populates the part description, **UOM**, and **Price**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Line
Specify the line number of the blanket order.

Purchase Qty. (UOP)
Specify the amount and UOP in which the supplier provides the part.

Price
Specify the cost of a single part and the currency you use to purchase the part in the adjacent field.

Qty. per UOP
Specify the conversion factor.
Note: For example, if the supplier's UOM for the part is a case of 12 parts but your UOM for the part is each, **Purchase Qty. (UOP)** will be 1 for one case, but the system will issue and measure12 parts (1 case = 12 parts). If you enter 2 for the**Purchase Qty. (UOP)**, the system uses **Qty. per UOP** to update the number of parts measured and issued to 24.

Exchange Rate
Specify the current exchange rate.

5 Choose one of these options:

Option	Description
If the blanket order is for a maximum number of items	Specify the number of items for **Maximum Qty.**
If the blanket order is for a total monetary amount	Specify the amount for **Maximum Value**.

Note: You cannot enter a **Maximum Value** that exceeds the **Maximum Value** on the blanket order header.

6 Specify this information:

Inspection Required
Select for inspections to be required.

Commodity
Specify the commodity associated with the blanket order.

Supp. Catalog Reference
Specify the reference number of the part, if the part is located in the supplier’s catalog.

7 Click **Submit**.

Adding service details to blanket orders

Add service details to blanket orders. Create a service line for a set quantity and certain number of hours and at a defined price and rate.

Note: You can only add service details to a blanket order if the status of the blanket order header is Unfinished.

You can only modify service details if the blanket order status is Unfinished.

If the installation parameter POCURR is set to NO, the system copies the currency of the blanket order header to all blanket order lines and protects **Currency**. The currency of the service lines must match the currency of the blanket order header. However, if the installation parameter POCURR is set to YES, the currency of the service lines may be different than the currency on the blanket order header. Contact your system administrator for more information.

To add service details to blanket orders:

1. Select **Purchasing > Blanket Orders**.
2. Select the blanket order to which to add service details, and then click the **Services** tab. The system automatically populates **Line**, **Type**, **Status**, the currency, and **Exchange Rate**.
3. Click **Add Service Line**.
4. Specify this information:

   Line
   Specify a line number.

   Type
   Select one of the service detail options:

Option	Description
Fixed Price or Hours from Service	Select if the service line references a work order activity that is flagged for external service. **Note:** **Hours Requested** for a line type of **Fixed Price** must be 1.
Contractor Hire	Select if the service line will be completed by contract. If you select **Contractor Hire**, you must specify a **Trade**.

   Trade
   Specify a trade if the service will be contracted.

   Price
   Specify the cost of the service. The system automatically populates the currency of the price.
   Note: If the POCURR installation parameter is set to YES, you can change the currency. Contact your system administrator for more information.

   Exchange Rate
   Specify the exchange rate for the currency.

   Task Qty.
   Specify the amount of units of service, and then specify the unit of measure in the adjacent field.

Task
Specify a task if the service will be contracted. The system automatically populates**Price**, the currency, and the unit of measure. If the **Task** is associated with a **Trade** on the Task record, the system automatically populates **Trade**. Also, if **Hours Requested** has not been specified, the system automatically populates **Hours Requested** from the Task record's **Estimated Hours**.

Hours Requested
Specify the number of hours required to perform the service.

Delivery Address
Specify the address to which to deliver any needed items.

Maximum Hours
Specify the maximum amount of hours allowed for the service.
Note: **Maximum Hours** must be greater than or equal to **Hours Requested**.

Maximum Value
Specify the maximum monetary value allowed for the service.
Note: You must specify either **Maximum Hours** or **Maximum Value**. You cannot specify both values.

The **Maximum Value** of the line must be less than or equal to the **Maximum Value** of the header.

5 Click **Submit**.The system automatically populates **Number Released** with the number of times the service line has been released by the blanket order, **Released Hours**with the total number of released hours for the service line released to the blanket order, **Released Value** with the total monetary value of units released by the blanket order, and **Last Order** with the number of the last purchase order that was released for the service line.

Note: To delete a service line, select the service line to delete, and then click **Delete Service Line**. You can only delete service lines from a blanket order if the status of the blanket order header is Unfinished.

Associating clauses with blanket orders

Associate existing clauses with blanket orders so that the printed purchase order includes the contract clauses.

Note: You can only associate clauses with a blanket order with a system status of Unfinished.

To associate clauses with blanket orders:

1 Select **Purchasing > Blanket Orders**.
2 Select the blanket order with which to associate clauses, and then click the **Clauses** tab.
3 Click **Add Clause**.
4 Specify this information:

Clause
Specify the contract clause to add to the blanket order. The system automatically populates the clause description and **Organization**.

5 Click **Submit**.

Note: To remove a clause, select the clause to remove, and then click **Remove Clause**. You can only remove clauses from a blanket order with a system status of Unfinished.

Associating purchase order terms with blanket orders

Associate existing purchase order terms with blanket orders to ensure correct purchase order activities.

Note: Depending on your system configuration, **Ship Via**, **Payment Terms**, **Freight Terms**, **FOB Point**, and **Payment Method**may not be displayed. Contact your system administrator for additional information.

To associate purchase order terms with blanket orders:

1 Select **Purchasing > Blanket Orders**.
2 Click **New Record**.
3 Specify the information as necessary to create a blanket order.

Note: You must enter **Supplier** before clicking **Default Terms**.

4 Click **Default Terms**. The system automatically populates **Ship Via**, **Payment Terms**, **Freight Terms**, **FOB Point**, and **Payment Method** with the values specified on the **Suppliers** form.
5 Specify this information:

Ship Via
Specify the manner in which the supplier ships the specific item.

Payment Terms
Specify the manner in which the supplier is paid for the purchase.

Freight Terms
Specify the manner in which the freight charges are paid and who pays them.

FOB Point
Specify where you take possession of the item.

Payment Method
Specify the method used to pay the supplier.

6 Click **Save Record**.

Defining blanket order user authorizations

Define which users can create purchase orders from blanket orders. Only users on the list of authorized users can create purchase orders from blanket orders. If the Users list is empty, then all users with the appropriate screen permissions (based on the user group of the user) will be able to create purchase orders from blanket orders.

To define blanket order user authorizations:

1 Select **Purchasing > Blanket Orders**.

2 Select the blanket order for which to define user authorizations, and then click the **Users** tab.
3 Click **Add User**.
4 Specify this information:

User
Specify each user who can issue releases against the blanket order. The system automatically populates the user description.

5 Click **Submit**.

Note: To remove a user, select the user to remove, and then click **Remove User**.

Creating partial order blanket orders

Create a partial order blanket order and indicate the quantities of the part or service to be added for each generated purchase order line.

Note: You can only create partial order blanket orders when the blanket order has a system status of Approved and when there are no line-level errors.

To create partial order blanket orders:

1 Select **Purchasing > Blanket Orders**.
2 Select the blanket order from which to create a partial order, and then click the **Partial Order** tab. The system automatically populates **Maximum Value**, **Released Value**, and **Remaining Value**.
3 Specify this information:

Select
Select to add the blanket order line item to the purchase order.

Purchase Qty.
Specify the quantity of parts/hours of service to be purchased.

Work Order
Specify the work order to associate with the blanket order line.

Activity
Specify the activity to associate with the blanket order line.
Note: If the line type is SF (Fixed price) or ST (Hours from service), then **Work Order** and **Activity** are required.

Equipment
Choose one of these options if the work order is a multiple equipment work order:
- Specify a specific equipment to which to distribute the cost.
- Specify All Equipment to evenly distribute the cost to each equipment record on the work order. **Note:** The system does not allow you to select All Equipment for parts on the blanket order line that are tracked by asset.
- Specify WO Header Equipment to distribute the cost to the equipment on the work order header only.

4 Click **Create Purchase Order**.

See "Creating purchase orders from a blanket order."

Note: You must select at least one blanket order line item to create a purchase order.

You cannot create a purchase order that exceeds your preset monetary limits for creating and approving purchase orders. You cannot create a purchase order from a blanket order with service lines without a work order.

Recording invoice vouchers

Record invoice vouchers received from suppliers to verify invoices against purchase order-lines and received quantities. Create credit and debit notes to apply credits to invoices and inventory. Create non-purchase order invoice vouchers to record invoices for items or services received without associated purchase orders.

Creating regular invoice vouchers

Regular invoice vouchers are used to create a record of a supplier's bill. Creating invoice vouchers creates a business process by which suppliers are paid for parts and services.

Regular invoice vouchers verify that the cost of the invoice lines matches the cost of the associated order lines within a specified range of tolerance. The range of tolerance can be based on an absolute dollar amount or on a percentage, as defined on the **Organizations** form. Specify Match Tolerance Absolute, Match Tolerance %, and Match Quantity Tolerance % to establish the amount or percentage allowed as the difference between the purchase order-line cost and the invoice voucher line cost when matching line costs. Upon approval of the invoice voucher, the system captures the price, freezes the exchange rate if foreign currencies are used, and updates prices.

Occasionally suppliers' prices for items vary, causing discrepancies between an invoice voucher and projected costs for that invoice.

Note: Set the MATCHAPP installation parameter to YES to enable the system to automatically assign the Approved status to vouchers matched by the invoice process. Contact your system administrator for more information.

Creating invoice voucher headers

Create invoice voucher headers for purchased materials.

Note: You cannot delete an invoice voucher unless the status is Unfinished or if it is an invoice voucher with lines associated.

To create invoice voucher headers:

1. Select **Purchasing > Invoice Vouchers**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the invoice voucher belongs if you use multi-organization security.

Invoice Voucher
Specify a description of the invoice voucher in the adjacent field. The system automatically generates a voucher number when you save the record.

Registration Date
Specify the date of the registration of the invoice voucher.
Note: **Registration Date** cannot be before **Invoice Date**.

Status
Select the status of the invoice voucher.
Note: If lines have not been added to the invoice voucher, then the status of the invoice voucher can only be Unfinished or Cancelled. However, this does not apply to Non-PO invoice vouchers.

Invoice vouchers with the type Invoice can only be approved after matching.

Debit Note or Credit Note invoice vouchers can only be approved if the **Original Invoice Voucher** is approved and if the invoice voucher does not exceed your approval limits.

If you update the status of the invoice voucher to Unfinished, every associated line will reset to Not Matched.

Type
Select the invoice voucher type. Choose one of these options:

Option	Description
Credit note	Select to indicate a credit has been added to the invoice voucher.
Debit note	Select to indicate a debit has been added to the invoice voucher.
Invoice	Select to indicate the invoice voucher is for an invoice.
Non-PO	Select to indicate the invoice voucher is a bill from a supplier that should not have lines associated such as a utility bill.

Supplier Invoice
Specify the supplier's invoice number.

Invoice Date
Specify the supplier's invoice date.

Supplier
Specify the supplier from whom the invoice has been received. The system automatically populates **Supplier Org.**, **Currency**, and **Exchange Rate**.
Note: In order to specify a value in**Supplier** and **Purchase Order**, the supplier on the **Purchase Order** must be the same as the value specified in **Supplier**.

Currency
Specify the currency used for the invoice voucher.

Exchange Rate
Specify the exchange rate for the currency.

Class
Specify the class of the voucher. The system automatically populates **Class Org.**

Return
Select to indicate a return.

Original Invoice Voucher
Specify the original voucher. The system automatically populates **Original Supplier Invoice**
Note: Invoice vouchers with the types Credit Note or Debit Note must specify an **Original Invoice Voucher**.

Purchase Order
Specify the purchase order from which to create voucher lines.
Note: You can choose to not specify a value in **Supplier** and instead only specify a **Purchase Order**. This restricts the lines of the invoice voucher to only the lines for the purchase order on the invoice voucher header. Therefore, **Supplier**, **Supplier Org.**, **Currency**, and **Exchange Rate** will populate from the supplier of the purchase order.

You cannot specify a **Purchase Order** for Non-PO invoice vouchers.

Payment Due Date
Specify the date by which the invoice voucher is to be paid.
Note: **Payment Due Date** cannot be before **Registration Date**.

Pay To
Specify the supplier to whom to pay the invoice voucher.
Note: **Pay To** must be the same supplier or an associated child or parent of the supplier that was specified in **Supplier**.

Paid Date
Specify the date on which the invoice was actually paid.

4 Click **Save Record**.

Note: After the invoice voucher is approved, the system displays **Approved By**, and the purchase order line for each invoice voucher line is updated with the invoice voucher line's invoice quantity and invoice value.

After costs have been added to the invoice voucher, the system displays **Voucher Total**.

Adding line items to invoice vouchers

Note: You cannot add line items to the invoice voucher unless the invoice voucher **Type** is Invoice, Debit Note, or Credit Note. **Supplier** is specified on the invoice voucher header, and **Purchase Order** is not specified on the invoice voucher header.

The **Assign GL Codes**, **Extra Charges/Discounts**, and **Match** hyperlinks are protected unless the invoice voucher type is Invoice.

To add line items to invoice vouchers:

1 Select **Purchasing > Invoice Vouchers**.

2 Select the invoice voucher to which to add line items, and then click the **Lines** tab.

3 Click **Add Invoice Voucher Line**. The system automatically populates**Invoice Voucher Line** and **Status**.

4 Specify this information:

Invoice Voucher Line
Specify a line number.

Purchase Order-Line
Specify the purchase order and line number to invoice. The system automatically populates **Qty. Invoiced**, **Qty. Returned**, **Price**, **Currency**, **Tax Code 1**, **Tax Code 2**, **Exchange Rate**, **Type**, **Work Order-Activity**, **Cost Code**, **Part/Trade**, **Ordered**, **Received**, and **Invoiced**.

If the work order associated with the selected Purchase Order-Line is a multiple equipment work order, then the system populates the **Equipment**, **Equipment Org.**, and **Related Work Order** from the information on the purchase order line. The system distributes any invoice differences as defined by the purchase order line.

Qty. Invoiced
Specify the amount to be invoiced.

Qty. Returned
Specify the amount to be returned.

Price
Specify the unit price for parts or the hourly rate for services. The system automatically populates the currency of the price.

Tax Code 1, Tax Code 2
Specify any additional taxes to apply to the line. The system adds the tax charges to the total for the invoice voucher line and displays the updated totals in **Tax Amount**and **Line Total**.
Note: Tax codes do not affect the purchase order-line record.

Exchange Rate
Specify the exchange rate for the currency

5 Click **Match** to simulate the voucher match process without actually changing the status of the header. This action verifies the following information:

- Absolute tolerance and percentage have not been exceeded.
- The voucher quantity does not exceed a specified percentage above the amount ordered.
- The quantity invoiced does not exceed the quantity received.

6 Click **Submit**. The system automatically populates **Subtotal**, **Extra Charges/Discounts**, **Adjusted Costs**, **Tax Amount**, and **Line Total**.

Note: You cannot delete an invoice voucher line unless the status of the invoice voucher header is Unfinished.

Creating costs for invoice vouchers

Create and edit costs for the invoice voucher header. The **Extra Charges/Discounts** button on the **Lines** page of the **Invoice Voucher** form applies costs to specific invoice voucher lines. The **Costs** page applies costs to the invoice voucher header.

Note: You cannot apply costs to the invoice voucher unless the status of the header is Unfinished.

To create costs for invoice vouchers:

1. Select **Purchasing > Invoice Vouchers**.
2. Select the invoice voucher for which to apply costs, and then click the **Costs** tab.
3. Click **Add Cost**.
4. Specify this information:

   Type
   Specify the type of additional charge or discount to apply to the invoice voucher. The system automatically populates the type description. If you specify Pre-tax extra charge/discount (PRT), the system enables **Tax Code 1**.

   Amount
   Specify the amount of the extra charge or the discount to apply to the invoice voucher.
   Note: You must specify a negative value to indicate it is a discount.

   Accounting Flexfield Desc.
   Specify the accounting flexfield description. The system automatically populates **GL Code**.

   Tax Code 1
   Specify the tax rate to be applied to the cost amount. If you specify **Tax Code 1**, the system enables **Tax Code 2**.
   Note: The system calculates **Tax Amount** and **Line Total** based on the selected tax code.

   Tax Code 2
   Specify the second tax rate to be applied to the cost amount.
   Note: If you specify **Tax Code 2**, the system applies each tax and then adds the amounts to calculate Tax Amount and Line Total.

5. Click **Submit**.

Defining utility bills for invoice vouchers

Create and edit utility bill information for the invoice voucher header. The **Utility Bills** page applies costs to the invoice voucher header and allows you to calculate a daily rate for utility/energy consumption.

To define utility bills for invoice vouchers:

1. Select **Purchasing > Invoice Vouchers**.
2. Select a non-PO invoice voucher for which to apply utility bills, and then click the **Utility Bills** tab.
3. Click **Add Utility Bill**. The system automatically populates **Line**.
4. Specify this information:

Utility Bill Source
Specify the utility bill source object. **Utility Bill Source** is the level at which the utility bill is recorded (usually building level). The system automatically populates **Utility Bill Source Org.** and **UOM**.

Meter
Specify the meter that is attached to the Utility Bill Level Object. The system automatically populates **Meter Org.**

Commodity
Specify the commodity that represents the type of energy being consumed such as electricity or gas.

UOM
Specify the unit of measure of the usage of the utility bill.

Cycle
Specify the cycle for the utility bill.

Rate Code
Specify the code of the rate to charge for the utility bill.

Correction Factor
Specify the number for the correction factor. **Correction Factor** is a value the utility company sets to ensure proper usage calculation. This value will be used as a multiplier when calculating utility bill rates.

From Date
Specify the begin date of the billing period. The system automatically populates **To Date** with the same date.

End Date
Specify the end date of the billing period.

Start Reading
Specify the reading at the start of the utility bill period.
Note: If you clear Start Reading, the system automatically clears **End Reading** and vice versa. It will not adjust **Usage** based on edits to either field.

End Reading
Specify the reading at the end of the utility bill period.
Note: If you specify **End Reading** when **Usage** is null and **Start Reading** is not null, the system automatically populates `Usage = End Reading – Start Reading`.

Usage
Specify the usage for the utility bill period. If **Start Reading** is not null when you specify **Usage**, the system automatically populates `End Reading = Start Reading + Usage`.

Total Bill Amount
Specify the cost amount for the utility bill period. The system automatically populates **Currency**.

Multiplier
Specify a multiplier to calculate usage from the meter reading. This value will be used as a multiplier when calculating utility bill rates.

Meter Type
Select the type of meter for the utility bill period.

Option	Description
Energy and Demand	Measures KWh and kW
Reactive Energy	Measures kVARh to bill power factor less than 95%
Energy, Demand, and Power Factor	Measures all KWh, kW, and kVARh

Peak Demand
Specify the peak demand for the utility bill period. The system automatically populates the peak demand UOM.

Billed Demand
Specify the demand rate billed for the utility bill period.

Power Factor (%)
Specify the power factor percentage of the commodity for the utility bill period.

Service Charge
Specify the monthly service charge for the utility bill period. The system automatically populates **Currency**.

Unit Charge
Specify the unit charge or rate being charged for the rate code for the utility bill period. The system automatically populates **Currency**.

Load Factor
Specify the load factor for the utility bill period.

5 Click **Submit**.

Viewing invoice voucher line item information

To view invoice voucher line item information:

1 Select **Purchasing > Overview > Invoice Lines per Buyer**.
2 Run the default Dataspy or create a personalized Dataspy to filter results by user.

Note: Unlike other forms within the system, you must first run a Dataspy to view invoice voucher line item information.

3 View the invoice voucher line item information.

Viewing utility invoice audit messages

View a list of audit messages that were encountered during the utility invoice audit process.

To view utility invoice audit messages:

1. Select **Purchasing > Invoice Vouchers**.
2. Select the invoice voucher for which to view audit messages, and then click the **Utility Audit** tab.
3. View the utility invoice audit messages.

Booking invoice allocations

Book invoice allocations to assign costs to work orders invoice vouchers and invoice voucher lines.

To book invoice allocations:

1. Select **Purchasing > Invoice Allocations**.
2. Select the invoice number for which to book an allocation. The system populates the Invoice Allocation Details.

   The system automatically populates **Total Unallocated Amount** and **Qty. to Allocate**. The system calculates the Total Unallocated Amount based on the following formula:

   ```
   Total Unallocated Amount = Unallocated Qty. x Unallocated Unit Cost
   ```

3. Specify this information:

   Qty. to Allocate
   Update the quantity to allocate if necessary.
   Note: If the **Qty. to Allocate** specified is greater than 0 but less than or equal to the **Unallocated Qty.**, then the system will recalculate the **Unallocated Qty.** as the difference between the existing **Unallocated Qty.** and the **Qty. to Allocate**.

   If you specify a negative number for the **Qty. to Allocate**, then the system will create a correction transaction of type INVA and adds the absolute value of the negative value to **Unallocated Qty.** for the correction. For example, if you specify -2 as the **Qty. to Allocate**, then the system will add 2 to the **Unallocated Qty.**

   The INVADAYS installation parameter determines the number of days that invoice allocations can be booked for a completed work order. The system does not display work orders for which the completion date exceeds the number of days specified by the setting of the INVADAYS installation parameter.

   Work Order-Activity
   Specify the work order and activity for which to book the invoice allocation.
   Note: If you select a work order with a system work order type of IS, or Direct issue, then the system clears and protects **Activity**. No **Activity**is required for the work order type IS.

   If you manually specify a **Work Order** of a type other than IS, the system will automatically populate the **Activity** from the work order if there is only one activity on the work order.

   The system enables you to search for all transactions associated with a multiple equipment work order by defining a Quick Filter on the Work Order lookup using **Parent Work Order** as part of the filter criteria.

4 Click **Submit**. The system creates an invoice allocation transaction against the work order.

Note: Upon saving the invoice allocation, the system deactivates the invoice allocation if the **Unallocated Qty.** is zero as a result of the allocation.

To activate an inactive invoice line, select the invoice line to activate, and then click **Activate Line**. The system activates the line and selects Active.

To inactivate an invoice line, select the invoice line to inactivate, and then click **Inactivate Line**. The system inactivates the line and unselects **Active**. The system also clears and protects the **Qty. to Allocate**,**Work Order**, and **Activity** for the selected invoice line.

Defining requests for quotations

Requests for quotations (RFQs) are records of parts and services that are presented to suppliers to solicit bids on pricing. Define request for quotation information before submitting requests to suppliers.

To define requests for quotations:

1 Select **Purchasing > Quotes > Requests for Quotations**.

2 Click **New Record**. The system automatically populates **Currency**,**Requested Response Date**, **Created By**, and **Requested Date**.

3 Specify this information:

Organization
Specify the organization to which the request for quotation belongs if you use multi-organization security.

RFQ description
Specify a description of the request for quotation.

Specify the RFQ Details.

Status
Choose one of these options:

- Unfinished
- Ready to Send
- Sent to Supplier
  Note: When **Status** is set to Sent to Supplier, the system creates quotation records for each supplier on the **Suppliers** page and copies the parts and services to the **Parts and Services** pages, respectively, for the quotation record.
- Receiving Quotations
  Note: System automatically assigns this **Status** when the first quotation is updated with pricing and its **Status** is changed to Received.
- All Quotations Received
- Awarded
  Note: If **Status** is set to Awarded, the system automatically populates **Awarded By** and **Awarded Date** and then calculates cost values.
- Cancelled

Currency
Specify the currency for the quotation.

Store
Specify the store to which the request for quotation applies.

Requested By
Specify the employee requesting quotations.

Response Date
Specify the date by which quotations should be received.

Project
Specify the project to which the request for quotation applies.

Project-Budget
Specify the project-budget to which the request for quotation applies.
Note: Specify either **Project** or **Project-Budget**. Both fields cannot be populated simultaneously.

Work Order
Specify the work order associated with the request for quotation. The system automatically populates **Equipment**.

Work Order-Activity
Specify the work order-activity associated with the request for quotation.
Note: Specify either **Work Order** or **Work Order-Activity**. Both fields cannot be populated simultaneously.

Equipment
Specify the equipment for which you are requesting a quotation if MEC work order is specified. The system automatically populates **Equipment Org.** and **Related Work Order**.

Buyer
Specify the buyer for the request for quotation.

Delivery Address
Specify the delivery address for the request for quotation.

Class
Specify the class for the request for quotation. The system automatically populates **Class Org.**

Specify the RFQ Print Options:

Individual Lines
Select to have the system create a line for each line listed.

Sum Quantities with Earliest Due Date
Select to have the system create quotation lines for each part and each trade-task combination assigning the earliest **Due Date** for the grouping.

Sum Quantities by Due Date
Select to have the system create quotation lines for each part and trade-task combination grouping by **Due Date**.

Auto-print RFQ
Select to print the record automatically when **Status** is Sent to Supplier.

Specify the RFQ Terms.

Ship Via
Specify the ship via code for the request for quotations.

Payment Terms
Specify the payment terms for the request for quotations.

Freight Terms
Specify the freight terms for the request for quotations.

FOB Point
Specify the freight on board point for the request for quotations.

Payment Method
Specify the method of payment for the request for quotations.

Specify the e-mail Information.

Email Subject Line
Specify the e-mail subject line.

Email Body Text
Specify the e-mail body text.

4 Click **Save Record**.

Calculating costs for RFQs

To calculate cost values for RFQs that have Awarded lines:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to calculate costs, and then click the **Record View** tab.
3 Click **Calculate Costs**.

The system automatically populates these fields:

Field	Description
Part Lines	Count of part lines awarded on the Selections page
Service Lines	Count of service lines awarded on the Selections page
RFQ Lines	Count of awarded lines on the Selections page
Total Tax	Total tax on the awarded RFQ Lines (Parts and Services) on the Selections page

Field	Description
Total Part Value	Total price of all awarded part lines with positive part line totals
Total Service Value	Total price of all awarded service lines on the Selections page
Total RFQ Value	Total value based on this equation: `Total Part Value + Total Service Value`
Date Last Refreshed	Date and time calculations were refreshed

Defining clauses for RFQs

To define clauses for RFQs:

1. Select **Purchasing > Quotes > Requests for Quotations**.
2. Select the record for which to define clauses, and then click the **Clauses** tab.
3. Click **Add Clause**.
4. Specify this information:

   RFQ Clause
   Specify the purchasing clause to be associated with the RFQ. The system automatically populates the RFQ description.

5. Click **Submit**.

Associating parts with RFQs

To associate parts with RFQs:

1. Select **Purchasing > Quotes > Requests for Quotations**.
2. Select the record for which to define parts, and then click the **Parts** tab.
3. Click **Add Part Line**.
4. Specify this information:

   Manufacturer
   Specify the manufacturer of the part.

   Manufacturer Part Number
   Specify the manufacturer part number.

   Part
   Specify the part. The system automatically populates **Part Org.**, **Part Description**, **UOM**,**Inspection**, **Tracked by Asset**, **Preferred Supplier**, **Preferred Supplier Org.**, **Preferred Supplier description**, and **Requested Qty.**

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Type
Choose one of these options:
- PD (Direct Materials)
- PS (Stock Items)
- RE (External Repair)

Line
Specify the line number for the part.

Requested Qty.
Specify the number of units requested for the part.

Due Date
Specify the date the parts are due.

Delivery Address
Specify the address to which the parts should be delivered.

Inspection
Select to request a part inspection.

Track by Asset
Select to track parts.

Work Order-Activity
Specify the work order and activity for which the part is needed.

Comments
Specify any additional comments regarding the service.

5 Click **Submit**.

Creating parts for RFQs

To create parts for RFQs:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to define parts, and then click the **Parts** tab.
3 Click **Add Part Line**. The system automatically populates **Line**, **Type**, **Due Date**, and **Delivery Address**.
4 Click **Create Part**.
5 Specify this information:

Part Org.
Specify the organization for which to create a part.

UOM
Specify the unit of measure for the part.

Requested Qty.
Specify the number of units requested for the part.

6 Click **OK**.

Selecting multiple parts

Select and retrieve multiple parts to be associated with an RFQ.

To select multiple parts for an RFQ:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to add multiple parts, and then click the **Parts** tab.
3 Click **Select Parts**.
4 Select the parts to add to the RFQ, and then click **Submit**.
Note: Requested Quantity and **Due Date** can be entered on the popup or on the **Parts** page.

Retrieving WO parts

To retrieve work order parts:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to retrieve parts, and then click the **Parts** tab.
3 Click **Add Part Line**. The system automatically populates **Line**, **Type**, **Due Date**, and **Delivery Address**.
4 Click **Retrieve WO Parts**.
5 Select the parts to retrieve, and then click **OK**.

Selecting substitute parts

To select substitute parts for RFQs:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to select substitute parts, and then click the **Parts** tab.
3 Click **Add Part Line**. The system automatically populates **Line**, **Type**, **Due Date**, and **Delivery Address**.
4 Click **Select Substitute Part**.
5 Select the part to substitute for the RFQ part, and then click **OK**.

Selecting items on RFQs

Select items on a request for quotation. You may award selected items on an RFQ, update the supplier part catalog with items on quotations, create or update a requisition, or create or update a purchase order.

To select items on RFQs:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to select items, and then click the Selection tab.
   Note: The lines displayed are the received Quotation lines associated with the RFQ.
3 Select either **Parts** or **Services**. The system displays the parts or services.
4 Select items for the RFQ, and then choose one of these options:

Option	Description
Award Items	The system awards selected items to the quotation and others in the item group to **Not Awarded**. **Note: System Status** must be Undecided. Multiple items with the same Line may not be Awarded.
Cancel Awarded Items	The system cancels the **Award** status for selected items and changes the items' **System Status** to Undecided. **Note: System Status** must be Awarded.

5 Specify this information:

   Update Supplier Catalog
   The system updates the supplier parts catalog with data from selected items.

   Generate Requisition
   The system generates a requisition for selected items.

   Generate POs
   The system generates purchase orders for selected items.

   View Totals for All Suppliers
   The system displays totals by supplier in view-only mode.

Updating a supplier catalog

To update a supplier catalog:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to update a supplier catalog, and then click the **Selection** tab.
3 Select **Parts**.
4 Select items for which to update the supplier catalog, and then click **Update Supplier Catalog**.
5 Select the part with which to update the supplier catalog, and then click **Update**.
   Note: If the item type is parts, the system inserts a Parts Catalog Record for the selected supplier.

Generating requisitions for RFQs

To generate requisitions for RFQs:

1 Select **Purchasing > Quotes > Requests for Quotations**.

2 Select the record for which to generate a requisition, and then click the **Selection** tab.
3 Select either **Parts** or **Services**.
4 Select the items for which to generate a requisition, and then click **Generate Requisition**.
5 Specify this information:

Create Requisition
Select to create a new requisition.

Requisition Description
Specify a description for the requisition.

Store
Specify the store to which the requisition should be issued.

Requested By
Specify the name of the employee requesting the requisition.

Default Approver
Specify the name of the employee who should approve the requisition.

Add to Existing Requisition
Select to add items to an existing requisition.

Buyer
Specify the name of the employee purchasing the items.

Planned Part
Select to add the item to the selected WO-Activity if the item is not already a **Planned Part**.

Print Requisition
Select to print the requisition to which the quotation lines have been associated when the system generates or updates the requisition.

6 Click **Generate**.

Generating POs for RFQs

To generate purchase orders for RFQs:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to generate a purchase order, and then click the **Selection** tab.
3 Select either **Parts** or **Services**.
4 Select the items for which to generate a purchase order, and then click **Generate POs**.
5 Specify this information:

Create PO
Select to create a new purchase order.

PO Description
Specify a description for the purchase order. You must enter a **PO Description** if **Use Quotation Description** is unselected.

Store
Specify the store to which the purchase order should be issued.

Originator
Specify the name of the employee generating the PO.

Delivery Address
Specify the address to which the items should be delivered.

Use Quotation Description
Select to use the quotation description as the PO description.

Buyer
Specify the name of the employee purchasing the items.

Add to Existing PO
Select to add items to an existing purchase order.

Planned Part
Select to add the item to the selected WO-Activity if the item is not already a Planned Part.

Print PO
Select to print the purchase order(s) to which the quotation lines have been associated when the system generates or updates the purchase order(s).

6 Click **Generate**.

Note: The system generates a separate purchase order for each supplier.

Viewing totals by supplier

To view totals by supplier:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to view totals, and then click the **Selection** tab.
3 Click **View Totals for All Suppliers**.
4 View the totals by supplier information.

Defining suppliers for RFQs

To define suppliers for RFQs:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to define suppliers, and then click the **Suppliers** tab.
3 Click **Add Supplier**.
4 Specify this information:

Supplier
Specify the supplier. The system automatically populates the supplier description.

5 Click**Save Record**.

Defining services for RFQs

Define services for RFQs. The system copies values to each new part line.

To define services for RFQs:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to define services, and then click the **Services** tab.
3 Click **Add Service Line**. The system automatically populates **Line**, **Type**, and **Delivery Address**.
4 Specify this information:

Work Order-Activity
Specify the work order and activity for the service.

Equipment
Specify the equipment to be used for the service if work order is MEC. The system automatically populates **Equipment Org.**, **Project-Budget**, **Related Work Order**, and **Department**.

Line
Specify the line number for the service.

Type
Choose one of these options:

Option	Description
ST (Hours From Service)	The system protects **Task Plan** and **Job Plan**, and makes **Work Order-Activity** required.
SF (Fixed Price Service)	The system protects **Trade** and **Task**, sets **Hours Requested** to 1 and protects the field.
SH (Contractor Hire)	The system clears and protects **Work Order**, **Activity**, **Equipment**, **Equipment Org.**, **Related Work Order**, **Department**, **Project**, and**Budget**, makes **Trade** required, and makes **Task** optional.

Trade
Specify the trade associated with the service.

Task
Specify the task for the service. The system automatically populates **Trade**, **UOM**, **Hours Requested**, and **Task Qty.**

Task Qty.
Specify the number of units required for the service.

Hours Requested
Specify the number of hours necessary to perform the service.

Due Date
Specify the date by which the service should be complete.

Delivery Address
Specify the location for the service.

Comments
Specify any additional comments regarding the service.

5 Click **Submit**.

Retrieving WO services for RFQ service

When retrieving WO services for RFQ service, the system copies values to each new part line.

To retrieve work order services for RFQ service:

1 Select **Purchasing > Quotes > Requests for Quotations**.
2 Select the record for which to define services, and then click the **Services** tab.
3 Click **Add Service Line**. The system automatically populates **Line**, **Type**, and **Delivery Address**.
4 Click **Retrieve WO Services**.
5 Select the services to add to the RFQ, and then click **OK**.

Copying RFQs

The copy RFQ feature copies an RFQ, including all details.

To copy RFQs:

1 Create an RFQ.
See "Generating RFQs from requisitions."
2 Select **Purchasing > Quotes > Requests for Quotations**
3 Right-click anywhere on the **Requests for Quotations** form, and then select **Copy RFQ**.
4 Specify this information:

New RFQ Description
Specify the description for the new RFQ.

Due Date
Specify the due date for the new RFQ.

5 Select the record types to copy, and then click **Submit**. The system copies all RFQ details to the new RFQ.
Note: Some exceptions apply to the header, service, part, and comment details copied.

Editing quotations

The system automatically creates a quotation record when a quotation is received via an RFQ and the RFQ header status is changed to Sent to Supplier. Update the record details as long as the quotation is in the status of Unfinished.

To edit quotations:

1 Select**Purchasing > Quotes > Quotations**.
2 Select the quotation to edit, and then click the **Record View** tab.
3 Specify this information:

   Quotation Description
   Specify a description for the quotation.

   Status
   Choose one of these options:
   - Unfinished
   - Received
   - Cancelled

   Currency
   Specify the currency accepted by the supplier for this quotation.

   Specify the Supplier Contact Info details.

   Contact Name
   Specify the name of the individual to contact for the supplier.

   Telephone
   Specify the telephone number for the supplier.

   Fax Number
   Specify the fax number for the supplier.

   E-mail Address
   Specify the e-mail address for the supplier.
   Note: If you change any contact information on this form, the system updates the contact information for the associated supplier on the **Suppliers** page of the **RFQ** form.

4 Click **Save Record**.

Defining services price information for quotations

Edit services information on a quotation.

To define services price information for quotations:

1 Select **Purchasing > Quotes > Quotations**.
2 Select the quotation for which to define services, and then click the **Services** tab. The system automatically populates **Type**, **WO-Activity**, **Task**, **Trade**, **Hours Requested**, and **Due Date**.

3 Specify this information:

Not Offered
Select if the service is not offered by the supplier.

Price
Specify the price of the service, and then update the currency of the price in the adjacent field.

Exchange Rate
Specify the exchange rate for the currency.

Freeze Rate
Select to set the **Exchange Rate** as permanent.

Delivery Date
Specify the requested delivery date for the service.

Tax Code
Specify the tax code that applies to the service.

Tax Code 2
Specify a secondary tax code that applies to the service.
Note: If there are two tax codes, the system calculates the total tax based on the two tax codes specified by adding the amount to be taxed for each code to the price of the service.

4 Click **Submit**.

Defining parts price information for quotations

Edit parts information on a quotation.

To define parts price information for quotations:

1 Select **Purchasing > Quotes > Quotations**.
2 Select the quotation for which to define parts, and then click the **Parts** tab. The system automatically populates **Response Date**, **Part**, **Part Description**, **Part Org.**, **Line**, **Type**, **Inspection**, **Track by Asset**, Work Order Details information, **Purchase Quantity**, **Part Quantity**, **Due Date**, **Delivery Address**, **Contract**, **Total Tax Amount**, and**Part Line Total**.

Note: If there is an active, approved contract for the selected supplier and store defined on the RFQ header, the system displays the contract for the selected part. The part exists on the **Parts** page of the **Contracts** form.

3 Specify this information:

Supp. Catalog Reference
Specify the associated supplier catalog information for the part.

Lead Time (Days)
Specify the necessary lead time for the part.

Not Offered
Select if the part is not offered by the supplier.

Purchase Qty. (UOP)
Specify the unit of purchase for the part.

Price
Specify the price of the part, and then update the currency of the price in the adjacent field.

Exchange Rate
Specify the exchange rate for the currency.

Freeze Rate
Select to set the **Exchange Rate** as permanent.

Qty. per UOP
Specify the number of parts per unit of measure.

Delivery Date
Specify the requested delivery date for the part.

Tax Code
Specify the tax code that applies to the part.

Tax Code 2
Specify a secondary tax code that applies to the part.
Note: If there are two tax codes, the system calculates the total tax based on the two tax codes specified by adding the amount to be taxed for each code to the price of the part.

4 Click **Submit**.

Work management

Defining initial work information

Define initial work information before using the work management module.

Defining supervisors

Define codes to represent employee supervisors.

To define supervisors:

1 Select **Work > Setup > Supervisors**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the supervisor belongs if you use multi-organization security.

Supervisor
Specify a unique code identifying the supervisor, and then enter a description of the supervisor in the adjacent field.

Class
Specify the class of the supervisor.

4 Click **Save Record**.

Optionally, click **Revoke** to remove the supervisor's record and all references to the record for GDPR compliance.

Note: This process is not reversible.

Defining permits

Define permits to link safety and permitting information to equipment, locations, categories, PM schedules, standard work orders and work orders. For example, you may define a "hot" work permit regarding welding in a restricted area; a "confined space entry" permit when workers must complete the work in an enclosed production space such as a tank or vessel; or a "lockout-tagout" permit when the equipment involved must be cut off from operational power supplies.

Note: Define equipment, locations, categories, PM schedules, standard work orders and work orders before associating permits with these. Describe any necessary permit information and instructions on the **Permit Body** tab.

To define permits:

1 Select **Work > Permit to Work > Permits**.
2 Click**New Record**.
3 Specify this information:

Organization
Specify the organization to which the permit belongs if you use multi-organization security.

Permit
Specify a unique code identifying the permit, and then enter a description in the adjacent field. Leave it blank and the system assigns an identifying code.

Status
Select the status of the permit to work, e.g. select **Unfinished** if the permit to work is not yet finished.

Class
Specify the class of the permit. The classes shown belong to the PERM entity. The system automatically populates **Class Org.**

Auto Create PTW
Select to automatically create the permit to work.

PTW Type
Select the type of work to be performed on the permit, e.g., **Confined space entry** if the work to be performed must be completed in an enclosed space.

Type of Work
Select the type of work to be performed on the permit to work.

Priority
Select the priority of the work to be performed on the permit to work.

Risk
Select the risk the permit to work poses to your organization.

LOTO Required
Select to require a lockout/tagout permit.

Isolation Type
Select the isolation type or method for isolating or disconnecting equipment (e.g., water valve) from its energy source in order that work can be performed without risk or injury.

Date Review Required
Specify the date a review is required for the permit.

Out of Service
If selected the permit will not display in the **Permits** lookups.

4 Click **Save Record**.

The system automatically populates **Created By** and **Date Created**.

Note: The system automatically populates **Created By** and **Date Created**. To create a new revision of the permit, select a permit record for which to create a new revision, and then click **Create New Revision**.

Adding permit body comments

Add specific permit body comments, and then specify whether the comments should print with the specified record.

To add permit body comments:

1 Select **Work > Permit to Work > Permits**.
2 Select the permit for which to enter permit body comments, and then click the **Permit Body** tab.
3 Click **Add Comment**.
4 Specify this information:

Language
Select the language of the comment.

5 Enter comments as necessary.
6 Optionally, select the **Print with Document** check box to print the comments on the associated report.
7 Click **Save**.

Deleting permit body comments

Delete permit body comments as necessary.

To delete permit body comments:

1 Select **Work > Permit to Work > Permits**.
2 Select the permit for which to delete permit body comments, and then click the **Permit Body** tab.
3 Click the header of the permit body comment to delete.
4 Click **Delete**.

Modifying permit body comments

Modify permit body comments as necessary.

To modify permit body comments:

1 Select **Work > Permit to Work > Permits**.
2 Select the permit for which to modify permit body comments, and then click the **Permit Body** tab.
3 Click the header of the permit body comment to modify.
4 Modify the existing comments as necessary.
5 Click**Save**.

   The system displays the modified comment on the **Permit Body** page.

   Note: The system does not display a link for the original Created comment after the comment is modified. To preserve all comments, do not delete any previous comment text when modifying comments.

Defining qualifications

Define qualifications to establish a set of occupational standards and/or required job-related training for personnel, tasks, trades, and/or work order activities. After defining a qualification, associate the qualification with personnel, tasks, trades, and/or work order activities to establish your criteria for qualification enforcement of work activities. Qualification enforcement is determined by the WOQUAL installation parameter.

If you are using qualification enforcement, you can only assign/schedule an employee who has the necessary qualification(s) to perform the work for which a qualification is required. If a qualification is associated with a trade, task, or work order activity, the employee must have that qualification on their personnel record. Employee qualifications are active if the employee has completed the necessary training course/requirements for the qualification and the qualification duration has not expired.

You can also define qualifications as training records to create a historical record of job-related training employees receive that does not need to be tracked for qualification enforcement.

To define qualifications:

1 Select **Work > Setup > Qualifications**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the qualification belongs if you use multi-organization security.

Qualification
Specify a unique code identifying the qualification, and then enter a description of the qualification in the adjacent field.

Class
Specify the class of the qualification. The classes shown belong to the QUAL entity.

Active
Select to indicate whether the qualification is active.
Note: If you unselect **Active** for a qualification, then you can no longer associate the qualification with any subsequent personnel, tasks, trades, and/or work order activities. However, if the deactivated qualification is already associated with any personnel, tasks, trades, and/or work order activities, the qualification will still be required for any existing personnel, tasks, trades, and/or work order activities.

You can also select and unselect **Active** to temporarily activate and deactivate a qualification as necessary.

Training Record
Select to indicate whether the qualification is associated with a training record. By defining a qualification as a training record, the system does not track the qualification for qualification enforcement, and the qualification cannot be associated with tasks, trades, and/or work order activities.

4 Click **Save Record**.

Defining trades

Define codes for the types of employees performing maintenance work. The cost of the trade, based on an hourly rate, is charged back to the appropriate work order, asset, or project, ensuring correct cost accounting. A single trade may have multiple rates based on the type of work performed or the department associated with the trade for a specific work order.

Define standard trade rates for suppliers on the **Supplier Rates** tab of the **Trades** form. On the **Qualifications** tab, you may associate qualifications with trades to establish the minimum qualifications for an employee belonging to a trade to perform work for which the trade is selected.

When scheduling work, you can select to assign the work to an employee and/or a trade. When booking hours for the work, the labor cost of the hours to book is calculated based on the trade rate defined for either the employee or the trade rate defined for the trade.

To define trades:

1 Select **Work > Setup > Trades**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the trade belongs if you use multi-organization security.

Trade
Specify a unique code identifying the trade, and then enter a description of the trade in the adjacent field.

Class
Specify the class to further subdivide the trade as necessary. For example, specify apprentice, journeyman, or master.

4 Click **Save Record**.

Defining trade rates

Define rates for trades. When booking hours, the **Hourly Rate** defined for the employee, is used. If so, the hours are booked at that rate. However, if you have not defined trade rates for the employee, the Hourly Rate defined for the trade on the trade **Rates** tab, is assigned.

To define trade rates:

1 Select **Work > Setup > Trades**.
2 Select the trade for which to define rates, and then click the **Rates** tab.
3 Click **Add Rate**.
4 Specify this information:

Organization
Specify the organization to which the rate belongs if you use multi-organization security.

Type of Hours
Specify hour occupation type for this work, e.g., select **N** for normal hours or **O** for overtime hours.

Department
Specify the department associated with this rate. If the rate applies to all departments, enter*.

Hourly Rate
Specify the hourly rate for this trade.

Start Date
End Date
Specify the beginning and ending dates to which the rate applies.
Note: Dates for the same trade type/department combination cannot overlap. For example, the MAINT department of ORG1 cannot have an overtime hourly rate of 20 to start 01-01-2004 and end 12-31-2004 and another overtime hourly rate of 30 to start 05-01-2004.

Currency
The currency of the organization is displayed.

5 Click **Submit**.

Defining supplier trade rates

First define trades and trade rates. Then, define standard trade rates for suppliers. You can also define rates on the **Rates** tab of the **Suppliers** page.

To define supplier trade rates:

1. Select **Work > Setup > Trades**.
2. Select the trade for which to define supplier rates, and then click the **Supplier Rates** tab.
3. Click **Add Supplier Rate**.
4. Specify this information:

   Supplier
   Specify the code identifying the supplier. The system automatically populates the description of the supplier, the **Organization**, the **Supplier Org.**, and the currency.

   Hourly Rate
   Specify the hourly rate for the supplier trade.

   Organization
   Specify the organization for the supplier rate if the organization of the selected trade is common. The system displays only those organizations to which you have access. Otherwise, **Organization** defaults to the organization of the trade.

   Start Date
   End Date
   Specify the beginning and ending dates to which the rate applies.

5. Click **Submit**.

Associating qualifications with trades

Associate qualifications with trades to establish the minimum qualifications for an employee belonging to a trade to perform work for which the trade is selected. Qualifications are defined on the **Qualifications** form.

After defining a qualification, you can associate it with a trade. If an employee is associated with a trade for which there is a qualification, the employee must have an active record of that qualification on their personnel record. Employee qualifications are active if the employee has completed the necessary training course/requirements and the training has not expired as indicated by the **Start Date** and **Expiration Date** for the qualification on the employee's personnel record. Employees can also be **Temporarily Disqualified** for qualifications as necessary on their personnel record.

If you have associated a qualification with a trade, and you associate a trade with a work order activity, you can only schedule employees associated with the selected trade who have the active qualifications required for that trade to be assigned/scheduled to perform the work.

Note: If you delete a qualification previously associated with a trade, then the deleted trade qualification will no longer be required for any subsequent work order activities to which the trade is assigned.

Likewise, if you add a new qualification to a trade or update an existing qualification associated with a trade, the new/updated trade will not affect any existing work order activities to which the trade is assigned. However, the added/updated qualification will be required for any subsequent work order

activities to which the trade is assigned, and the system displays a message indicating the number of open work orders for the trade.

To associate qualifications with trades:

1 Select **Work > Setup > Trades**.
2 Select the trade with which to associate qualifications, and then click the **Qualifications** tab.
3 Click **Add Qualification**.
4 Specify this information:

   Qualification
   Specify the qualification to associate with the trade.

5 Click **Submit**.

Defining employee information

Define employee information to track full-time, part-time, and seasonal employees, and then define wage rates for employees to establish a specific hourly pay rate for an employee. Also, you may record labor availability exceptions for individual employees and for groups. You may associate qualifications with employee codes to establish qualifications for personnel. Finally, associate specific employee positions with certain functions on the **Types** page.

Defining employee codes

Define codes to represent individual employees, and then use the employee codes to track full-time, part-time, and seasonal personnel.

To define employee codes:

1 Select **Work > Setup > Employees**.
2 Click **New Record**.
3 Specify this information:

   Organization
   Specify the organization to which the employee belongs if you use multi-organization security.

   Employee
   Specify a unique code identifying the employee, and then enter a description of the employee code in the adjacent field.

   Department
   Specify the employee's department.

   Select the **Out of Service** check box to prevent the employee code from being displayed in lookups. **Out of Service** is automatically populated if the employee has been transferred to another organization.

   Transferred To Employee and **Transferred To Employee Org.** are automatically populated when an employee is transferred between company organizations.

   See Transferring Employees Between Organizations on page 734.

Class
Specify the class of the employee.

Trade
Specify the employee’s trade or craft.

Job Title
Specify the employee's job title.

Supervisor
Specify the employee's supervisor.

Associated User
Specify the Infor EAM Mobile user to associate with this employee.

Tradeperson
Select this check box to indicate this employee belongs to a trade profession.

Workspace Occupant
Select this check box to indicate this employee occupies a physical workspace.

Hire Date
Specify the date the employee was hired.

Date of Birth
Specify the employee's date of birth.

Terminated Date
Specify the date the employee is terminated.

Payroll No.
Specify a payroll number to which to associate the employee.

Security Badge No.
Specify the employee's security badge number.

License No.
Specify the employee’s driver’s license number.

Alias
Specify an alias to associate to the employee.

Notification Preference
Select the employee's preference for receiving notifications.

Specify the employee's **Address**, **City**, **State**, **Zip Code**, and **Country**.

Specify the employee's **Emergency Contact** and the **Emergency Contact Phone No.**

Specify the employee's **Work Phone No.**, **Mobile Phone No.**, and **Home Phone No.**

E-mail Address
Specify the employee’s e-mail address as necessary.

Fleet Customer
Specify the fleet customer with which to associate the employee.

URL
Specify the employee's URL address.

Cost Code
Specify the fleet cost code with which to associate the employee.

Customer
Specify the contract rental customer with which to associate the employee.

4 Click **Save Record**.

Scheduling Session and **Scheduling Session Type** are automatically populated.

Optionally, click **Revoke** to remove the employee's record and all references to the record for GDPR compliance.

Note: This process is not reversible.

Defining wage rates for employees

Define wage rates for employees to establish a specific hourly pay rate for an employee. Rates for employees can be defined based on the employee's level of experience, training, etc. Therefore, employees belonging to a designated trade can have different pay rates than other employees belonging to the same trade.

Note: You must designate a **Trade** for an employee when you define the employee code.

See Defining Employee Codes on page 728.

When scheduling work, you can select to assign the work to an employee and/or a trade. When booking hours for the work, the system calculates the labor cost of the appropriate work order, asset, or project based on the hourly pay rate defined for the employee or the trade. Therefore, when booking hours, the labor cost for performing work can be based on the rate defined for either the employee or the trade.

To define wage rates for employees:

1 Select **Work > Setup > Employees**.
2 Select the employee for whom to define wage rates, and then click the **Rates** tab.
3 Click **Add Rate**.
4 Specify this information:

Organization
Specify the organization to which the rate belongs if you use multi-organization security.

Type of Hours
Specify the occupation type for this work, e.g., enter **N**for normal hours or **O** for overtime hours. The values listed belong to the OCTP entity.

Department
Specify the department associated with this rate. If the rate applies to all departments, enter `*`.

Hourly Rate
Specify the hourly rate for this employee.

Start Date
Specify the beginning date to which the rate applies.
Note: Dates for the same type of hours/department/organization combination cannot overlap. For example, the MAINT department of ORG1 cannot have an **Hourly Rate** of 20 for overtime **Type of Hours** to start 01-01-2004 and end 12-31-2004 and another **Hourly Rate** of 30 for the overtime **Type of Hours** to start 05-01-2003.

End Date
Specify the ending date to which the rate applies.
Note: **End Date** must be later than or equal to **Start Date**.

5 Click **Submit**.

Recording labor availability exceptions for individual employees

Labor availability records are used to calculate the available hours for employees.

To record labor availability exceptions for individual employees:

1 Select **Work > Setup > Employees**.
2 Click the **Availability Exceptions** tab.
3 Click **Add Exception**.
4 Specify this information:

Date
Specify the date the employee will be absent. If the employee will be absent for multiple days, create multiple, separate date records.

Hours
Specify the number of hours for each day the employee will be present. If the employee is available for two hours, enter `2`. You cannot enter more than 24 hours per day.

Start Time
Select the time work begins for the employee, even for days on which no work occurs, for each day in the shift. Specify the time in HH:MM format, e.g., 08:00 for 8:00 AM.

Comments
Specify any additional comments.

5 Click **Submit**.

Recording labor availability exceptions for groups

Create labor availability exceptions for a group of employees. For example, create an exception for all employees on Christmas day.

Note: Create exceptions for individual employees using the **Availability Exceptions** page of the **Employees** form.

When recording a labor availability exception for a group, the selected employee record is not affected.

To record labor availability exceptions for groups:

1 Select **Work > Setup > Employees**.
2 Click the **Record View** tab.
3 Click **Create Group Exception**.
4 Specify this information:

Organization
Specify the organization for which to record labor availability exceptions.

Shift
Trade
Department
Specify the shift, trade, and/or department for which to record an exception.

Start Date
End Date
Specify the starting date and ending date of the period for which to record an exception.

Hours
Specify the number of hours for each day the employees will be present. If the employees are available for two hours, enter `2`. You cannot enter more than 24 hours per day.

Employee
Specify the employee for which to create multiple availability exceptions.

Comments
Specify a comment about the exception.
Note: End Datemust be later than or equal to **Start Date**.

5 Click **Process**.
6 Click **Close**.

Associating qualifications with employee codes

Associate qualifications with employee codes to establish qualifications for personnel. By associating qualifications with an employee, you can establish the criteria to determine whether an employee is qualified to perform work. Qualifications are defined on the **Qualifications** form.

See Defining Qualifications on page 724.

After defining a qualification, you can associate the qualification with an employee record to add detailed information about the qualification, including whether the employee has completed the necessary training courses for a qualification, continuing education units (CEU), course cost, the duration of an employee's certification/qualification period, and the dates by which the system validates whether an employee's qualification is current or expired.

If you are using qualification enforcement for work, which is determined by the WOQUAL installation parameter, and an employee has not completed the necessary training courses required for a

qualification, their certification/qualification is expired, or if you have disqualified them for any reason, you cannot schedule the employee to perform the work for which the qualification is required.

Note: You can also define qualifications as training records to create a record of any job-related training employees receive that does not need to be tracked for qualification enforcement.

Associating qualifications with employee codes also enables you to create qualification history that allows you to maintain current qualification records, old or expired qualification records, and any subsequent re-qualifications for a qualification record. If you are re-qualifying a specific qualification record, simply enter new qualification dates for the existing code, or enter a new record with the same code as the existing qualification; however, you must enter new qualification dates for the re-qualification.

To associate qualifications with employee codes:

1. Select **Work > Setup > Employees**.
2. Select the employee with which to associate qualifications, and then click the **Qualifications** tab.
3. Click **Add Qualification**.
4. Specify this information:

   Qualification
   Specify the qualification to associate with the employee.

   Start Date
   Specify the date on which the duration of the qualification begins.

   Duration
   Specify the duration of the qualification, and then select the unit of measure for the duration of the qualification in the adjacent field. The expiration date of the qualification for the employee is calculated based on the values entered for **Start Date** and **Duration**. and then **Expiration Date** is populated with the appropriate date. If no value is entered for **Duration**, you must specify the **Expiration Date** for the qualification manually.
   Note: The system immediately validates whether the qualification is current based on the **Start Date** and **Expiration Date** for the qualification. If the qualification is current, the system selects **Qualified**. If the duration of the qualification has expired or is not current, the system automatically unselects **Qualified**.

   The system unselects **Qualified** if you select **Temporarily Disqualified**. You can select to disqualify an employee's qualification as necessary by selecting **Temporarily Disqualified**. Selecting **Temporarily Disqualified** overrides the qualification **Expiration Date**, and the qualification is no longer valid even if the qualification has not expired.

   Comments
   Specify comments about the qualification.

   Course Start
   Specify the start date of the course.

   Course Finish
   Specify the finish date of the course.

   Course Cost
   Specify the cost of the course, and then select the currency for the course cost in the adjacent field.

Completed
Select to indicate whether the employee has completed the course.

Certification Type
Select the type of certification. Certification types are linked to the certification type entity, for which you must define certification type codes as user codes on the **System Codes** form.

Certification Number
Specify the certification number for the qualification.

Hours
Specify the number of hours for the course.

CEU
Specify the number of continuing education units for the course.

Purpose
Specify the purpose of the course.

5 Click **Submit**.

Associating employee types

Associate employee types with employees. An employee can have multiple employee types.

Note: Define employee types on the **System Codes** form. See "Defining system codes" in the *Infor EAM System Administrator Guide*.

To associate employee types:

1 Select **Work > Setup > Employees**.
2 Select the employee with whom to associate the employee type, and then click the **Types** tab.
3 Click **Add Type**.
4 Specify this information:

Type
Specify the type of the employee.

5 Click **Submit**.

Transferring employees between organizations

Transfer employees from one organization to another organization within your company if you use multi-organization security.

When you transfer an employee between organizations, the system:

- Creates a new record with the employee's new organization, and a historical record with the employee's old organization.
- Automatically populates fields in the new employee record based on the historical record.
- Validates information in the new employee record against the employee's new organization.

If a conflict exists with the employee's **Class**, **Fleet Customer**, and **Cost Code**, the system clears these fields when you submit the transfer.

Additionally, when you transfer an employee into an organization of which he or she was previously a member, the system automatically updates fields in the new employee record based on the historical record for the original organization. The system copies child records and updates associated records.

To transfer employees between organizations:

1. Select **Work > Setup > Employees**.
2. Select the employee to transfer, and then click the **Transfers** tab.
3. Click **Add Transfer**.
4. Specify this information:

   New Organization
   Specify the organization to which the employee is being transferred. The system automatically populates **New Department** and **New Trade** if the employee's current department and trade are valid for the new organization.

   Historic Employee Code
   Specify a unique employee code to assign to the employee's historical record.

   New Department
   Specify the employee's new department.

   New Trade
   Specify the employee's new trade.

5. Click **Submit**.

   The system automatically populates **Transferred By** and **Date Transferred**.

Viewing outstanding issues for employees

View the list of parts issued to an employee that remain outstanding and have not been returned to stock.

To view outstanding issues for employees:

1. Select **Work > Setup > Employees**.
2. Select the employee for which to view outstanding part issues, and then click the **Outstanding Issues** tab.
3. View the outstanding issues for employees.

Defining shifts

Define the shifts used within the organization.

To define shifts:

1. Select **Work > Setup > Shifts**.
2. Click **New Record**.

3 Specify this information:

Organization
Specify the organization to which the shift belongs if you use multi-organization security.

Shift
Specify a unique code identifying the shift, and then enter a description of the shift in the adjacent field.

Days in Rotation
Specify the number of days in the shift.
Note: Days in Rotation must be an integer between 1 and 999.

If you edit the number of days in a rotation to a value less than the original value, one or more of the days may be deleted. For example, if you previously defined 5 as the number of **Days in Rotation** and then change the number to 4, one of the days will be deleted.

Shift Start Date
Specify the date the shift goes into effect. For example, if the workweek begins on Monday, ensure that this date is a Monday.

Class
Specify the class of the shift.

4 Click **Save Record**.

Defining days for shifts

Define the days for established shifts.

To define days for shifts:

1 Select **Work > Setup > Shifts**.
2 Select the shift for which to define days, and then click the **Days** tab.
3 Click **Add Day**.
4 Specify this information:

Day Number
Enter a new record for each day in the shift, numbered 1, 2, 3, etc.

Number of Hours
Enter the number of hours worked in the shift for each day. For days on which no work occurs, enter 0.

Start Time
Select the time work begins, even for days on which no work occurs, for each day in the shift. Enter the time in HH:MM format, e.g., 08:00 for 8:00 AM.

5 Click **Submit**.

Defining shift personnel

Assign employees to a specific shift.

Note: Define employees on the **Employees** form.

See Defining Employee Codes on page 728.

To define shift personnel:

1 Select **Work > Setup > Shifts**.
2 Select the shift with which to associate the employee, and then click the **Employees** tab.
3 Click **Add Employee**.
4 Specify this information:

   Employee
   Specify the employee working on the shift. The system automatically populates the description of the employee code.

   Start Date
   End Date
   Specify the first and last dates the employee works on the shift.
   Note: You can assign an employee to multiple shifts, but the dates of the shifts cannot overlap.

5 Click **Submit**.

Defining crews

Define and edit crew records.

To define crews:

1 Select **Work > Setup > Crews**.
2 Click **New Record**.
3 Specify this information:

   Crew
   Enter a unique code identifying the crew, and then enter a description in the adjacent field.

   Organization
   Enter the organization to which the crew belongs.

   Class
   Enter the class to which the crew belongs. The system automatically populates **Crew Org.**

   Supervisor
   Enter the supervisor of the crew.

4 Optionally, select the **Out of Service** check box to choose to not display the crew.
5 Click **Save Record**.

Adding employees to crews

Add employees or update employee information for crews.

To add employees to crews:

1 Select **Work > Setup > Crews**.
2 Select the crew to which to add employees, and then click the **Employees** tab.
3 Click **Add Employee**.
4 Specify this information:

   Employee
   Specify the employee code. The system automatically populates **Name**.

   Start Date
   Specify the shift start date for the employee.

   End Date
   Specify the shift end date for the employee.

5 Click **Submit**.

Defining task plan information

A task plan is a predefined set of work order activity details that may be referenced on an activity of a work order, PM schedule, or standard work order to minimize data entry and ensure consistent planning for jobs.

Define the cost of the task plans for each supplier on the **Suppliers** tab, and then define prices for common task plans on the **Prices** tab if you are using multi-organization security. Finally, associate qualifications with task plans to establish the minimum qualifications for an employee to perform task plans associated with work on the **Qualifications** tab.

To define task plan information:

1 Select **Work > WO Planning > Task Plans**.
2 Click **New Record**.
3 Specify this information:

   Organization
   Specify the organization to which the task plan belongs if you use multi-organization security.

   Task Plan
   Specify a unique code identifying the task plan, and then enter a description of the task plan in the adjacent field.

   Class
   Specify the class of the task plan. The classes shown belong to the TASK entity.

   Trade
   Specify the trade with which to associate the task plan.

   Estimated Hours
   Specify the number of hours estimated to complete the task plan.

   People Required
   Specify the number of people required to complete the task plan.

UOM
Specify the unit of measure for the task plan.

Specify this information only if you use the Equipment Maintenance Reporting System (EMRS):

Note: Depending on your system configuration, the **EMRS-related** fields may not be displayed. Contact your system administrator for more information.

EMRS-related information you enter on this form is copied to all standard work order activities, PM activities, and work order activities with the selected task plan.

Reason For Repair
Specify the reason for the repair.

Work Accomplished
Specify the work performed.

Technician Part Failure
Specify the reason the technician or supplier thinks the equipment failed.

Manufacturer
Specify the Manufacturer/Supplier Code to associate with the equipment.

System Level
Specify the EMRS code identifying the system needing repair.

Assembly Level
Specify the EMRS code identifying the subsystem needing repair. The values available are based on the system-level code.

Component Level
Specify the EMRS code identifying the specific component or part needing repair. The values available are based on a combination of the system-level code and the assembly-level code. The system automatically populates **EMRS Description** based on the combination of the system, assembly, and component descriptions.

Isolation Method
Select if the task plan is used as part of a lockout/tagout procedure (LOTO).

Out of Service
Select to indicate the task plan should not display in lookups on the **Standard WO** page.

Workspace Moves
Select to indicate the task plan is used as part of a workspace move procedure.

Preferred Supplier
Specify the preferred supplier for the task plan.

Total Price
Specify the total cost of the task plan per unit of measure. The system automatically populates **Hourly Rate** as the **Total Price** divided by the number of **Estimated Hours**, and the **Currency**.

Commodity
Specify the commodity to associate with the task plan.

Buyer
Specify the buyer (user) responsible for the task plan.

Active Checklist
Select if the task plan contains active checklist items.

Performed By Required
Select to indicate the identification of person performing the checklist on the task plan is required.

Reviewed By Required
Select to indicate the identification of the person reviewing the checklist results on the task plan is required.

Revision Status
Specify the revision status for the route. The system automatically populates **Revision**.
Note: You can enter a **Revision Status** only if the PMRVCTRL installation parameter is set to **Yes**. Contact your system administrator for more information.

WO Description
Specify the description of the follow-up work order the system will create when checklist items are selected for follow-up.

WO Type
Select the work order type of the task plan checklist.

WO Class
Specify the work order class of the task plan checklist.

WO Status
Select the work order status of the follow-up work order.

WO Priority
Select the work order priority of the follow-up work order.

4 Specify this Permit to Work Tags information to define your unique tags:

Tag Header
Specify a unique name for the tag.

Tag Line 1
Specify a unique tag for line 1.

Tag Line 2
Specify a unique tag for line 2.

Tag Line 3
Specify a unique tag for line 3.

Tag Line 4
Specify a unique tag for line 4.

5 Click **Translate WO Description** to translate the follow-up work order description.

6 Click **Save Record**.

Adding and modifying task plan instructions

Add specific task plan instructions, and then specify whether the instructions should print with the specified record.

Modify task plan instructions as necessary.

Add and view task plan job instructions on the **Jobs** tab of the **Task Plans** form. You cannot edit those instructions on this form, you can only view the instructions.

To add or modify task plan instructions:

1 Select **Work > WO Planning > Task Plans**.
2 Select the task plan for which to enter instructions, and then click the **Instructions** tab.

   Note: If you are modifying task plan instructions, click the header of the instruction to modify, and then specify the information below.

3 Click **Add Instructions**.
4 Specify this information:

   Language
   Select the language of the instruction.

   Print with Document
   Select to print the instructions on the associated report.

5 Specify instructions or modify existing instructions as necessary.

   Note: Format comments using the HTML Editor Toolbar.

6 Click **Save**.

Planning parts for task plans

Plan the parts required to complete a task plan, or to complete specific jobs on a task plan. You may associate the parts to the task plan by populating an existing material list on the **Record View** page of the **Task Plan** form, or by directly entering the parts required on this tab.

Note: The **SHOWJOB** installation parameter must be set to **YES** and **Planning Level** for the task plan must be set to **Job Plan** to plan at the job level.

The **Enabled for Enhanced Planning** check box must be selected for the task plan to use this tab.

It is impossible to create planning records for the task plan and to create planning records for a job on that same task plan. Planning can be done at one level or the other, but not both.

To plan parts for task plans:

1 Select **Work > WO Planning > Task Plans**.
2 Select the task plan for which to plan parts, and then click the **Plan Parts** tab.
3 Click **Add Part Line**.
4 Specify this information:

Part
Specify the part to add to the task plan. The part description, **Part Org.**, **Long Description**, **UOM**, **Primary Manufacturer**, and **Primary Manufacturer Part Number** are automatically populated.

Condition
Specify the condition if the part is a condition tracked parent part.

Quantity
Specify the quantity of the part required to complete the job or task plan.

Planned Source
Select the planned source for supplying the part, e.g., enter **Stock** if the part will be supplied from the stock inventory.

Line Number
Specify the line number for the part on the task plan.

Equipment
Specify the equipment required to complete the job or task plan. **Equipment Org.**, **Equipment Type**, **Primary Manufacturer**, and **Primary Manufacturer Part Number** are automatically populated.

5 Optionally, select the **Reserve** check box to reserve this part for the material list of the task plan when this material list is requested on a new task plan.
6 Optionally, select the **Critical** check box to indicate the part is critical to all task plan jobs requiring the material list.
7 Click **Save Record**.

Planning labor for task plans

Plan and view the labor necessary to complete the task plan or specific jobs on a task plan.

Note: SHOWJOB installation parameter must be set to **YES** and **Planning Level** must be set to **Task Plan** to plan at the job level.

To plan and edit labor on this page **Enable Enhanced Planning** must be selected for the task plan regardless of planning level settings.

It is not possible to create planned labor records for the task plan and create planned labor records for a job on the same task plan. Planned labor records can be performed at one level or the other, but not both.

To plan labor for task plans:

1 Select **Work > WO Planning > Task Plans**.
2 Select the task plan for which to plan labor, and then click the **Plan Labor** tab.
3 Optionally, select the specific job for which to plan labor for the task plan, or select **Show All Records** to display all of the records for the task plan, including pre-planned jobs or a job created specifically for the task plan.

   Note: If the task plan **Planning Level** is set to **Job Plan**, select the job for which to create a planned labor record.

Alternately, if the task plan **Planning Level** is set to **Task Plan** and **Job** is set to **Show All Records** all of the records for the selected task plan are displayed.

If a pre-planned job plan is selected all associated records are displayed, however changes cannot be made on this page. All changes must be made on the **Job Plans** form.

4 Click **Add Labor Line**.

5 Specify this information:

Trade
Specify the trade that will perform the labor for the task plan.

Estimated Hours
Specify the number of hours estimated to complete the job.

People Required
Specify the number of people required to perform the job.

Hired Labor
Select to indicate that the job will be completed by an external source.

6 Click **Submit**. **Total Estimated Hours** and **Total People Required** are calculated for the selected task plan.

Planning tools for task plans

Plan the tools necessary to complete a task plan by adding, deleting, or modifying the lists of tools associated to task plans. Alternately you may view the tools associated to task plans.

To plan tools for tasks plans:

1 Select **Work > WO Planning > Task Plans**.

2 Select the task plan for which to plan tools, and then click the **Plan Tools** tab.

3 Click **Add Tool**.

4 Specify this information:

Tool
Specify the tool to add to the task plan. The tool description is automatically populated.

Hours Requested
Specify the number of hours estimated to use the tool to complete the task plan.

Qty. Required
Specify the tool quantity estimated complete the task plan. **Total Hours Required** is automatically populated.

5 Click **Submit**.

Viewing estimated costs for task plans

View the estimated costs for a task plan, including the estimated costs of all jobs or a single job on the task plan.

The following cost categories are estimated based on the information provided: internal labor, external labor, stock items, direct purchases, and tools. The total cost is then calculated.

To view estimated costs for task plans:

1. Select **Work > WO Planning > Task Plans**.
2. Select the task plan for which to view estimated costs, and then click the **Estimated Costs** tab.
3. Optionally, select the specific job for which to view the estimated costs for the task plan.

   Note: If **Job** is set to **Show All Records** the cost for the task plan is displayed including all associated jobs.
4. Specify this information:

   Organization
   Specify the organization of the task plan. The organization of the selected task plan is defaulted if it is a specific organization.

   Department
   Specify the department of the task plan.

   Store
   Specify the store of the task plan to calculate estimated costs per store.
   Note: This field is hidden unless `PRICELEV` is set to `S` for store level. If `PRICELEV` is set to `P`, prices are retrieved from the Prices tab for the part of the selected organization.

   Supplier
   Specify the supplier of the task plan to calculate estimated costs per supplier. The preferred supplier of the selected task plan is defaulted.
5. View the estimated costs.

Adding checklists to task plans

Add a checklist to a task plan to track the completion of one step of the task plan instruction, or to collect qualitative and quantitative data for the task plan.

To add checklists to task plans:

1. Select **Work > WO Planning > Task Plans**.
2. Select the task plan for which to add a checklist, and then click the **Checklist** tab.
3. Click **Add Checklist Item**. **Checklist Item** is automatically populated.
4. Enter a description of the checklist item.
5. Specify this information:

   Sequence
   Specify the sequence in which the checklist item should be answered for the task plan.

   Type
   Select the type for the checklist item, e.g., enter **Quantitative**, **Inspection**, or **Meter Reading**.

   Required Entry
   Select if completion of the checklist item is required to close the associated work order.

Equipment Level
Select the equipment level. A checklist item can be attached to the work order header equipment, equipment, or the route or linear referenced equipment.

Equipment Class
Specify the equipment class with which the checklist item is associated. The system automatically populates **Equipment Class Org.**

Equipment Category
Specify the equipment category with which the checklist item is associated.

UOM
Specify the unit of measure for the measurement. **UOM** is required for inspections, meter readings, and quantitative checklist items.

Aspect
Specify the inspection aspect measured during an inspection. **Aspect** is required for inspection checklist items.

Point Type
Specify the inspection point type. **Point Type** is required for inspection checklist items.

Repeating Occurrences
Select to indicate the measurement recorded with this checklist item is recorded more than one time during the execution of the task.

Follow-up Task Plan
Specify the task plan the system will assign to the follow-up work order activity.

Follow-up Job Plan
Specify the job plan the system will assign to the follow-up job plan.

Material List
Specify the material list the system will assign to the follow-up work order activity.

System Level
Specify the EMRS code identifying the system requiring the check.

Assembly Level
Specify the EMRS code identifying the subsystem needing repair. The values available are based on the system-level code.

Component Level
Specify the EMRS code identifying the specific component or part needing repair. The values available are based on a combination of the system-level code and the assembly-level code. The system automatically populates **EMRS Description**.

Component Location
Specify the location the check will be performed on the equipment.

Condition
Specify the condition of the equipment required to perform the check.

Findings
Specify the possible findings the user can select when entering results. This is necessary for qualitative and inspection checklist items.

6 **Click Submit**. **Updated By** and **Date Updated** are automatically populated.

Importing checklists from task plans

To import checklists from task plans:

1 Select **Work > WO Planning > Task Plans**.
2 Select the task plan for which to copy a checklist, and then click the **Checklist** tab.
3 Click **Import Checklist**.
4 Specify this information:

Task Plan
Specify the task plan from which to copy the checklist. The task plan description and **Task Revision** are automatically populated.

5 Click **Submit**.

Planning jobs for task plans

Create and plan the jobs necessary to complete a task plan by associating pre-planned jobs to task plans. Alternately, create a specific job for a task plan on this form.

To plan jobs for tasks plans:

1 Select **Work > WO Planning > Task Plans**.
2 Select the task plan for which to plan jobs, and then click the **Jobs** tab.
3 Click **Add Job**.
4 Specify this information:

Sequence
Specify the sequential order in which the job should be performed during the task plan.

Job Plan
Specify the job plan to add to the task plan. The job plan description is automatically populated.

Description
Specify a description of the job to complete for the task plan.

Type
Select the type of job plan to be performed.

Class
Specify the class of the job plan. **Class Org.** is automatically populated.

Equipment Type
Specify the equipment type.

Equipment Class
Specify the class of the equipment. **Equipment Class Org.** is automatically populated.

Material List
Specify the material list the system will assign to the job plan.

Trade
Specify the trade to associate to the job plan. **Multiple Trades** is automatically populated.

UOM
Specify the unit of measure for the job plan.

Estimated Hours
Specify the number of hours estimated to complete the job.

People Required
Specify the number of people required to complete the job.

Reason For Repair
Specify the reason a repair is required for the job plan.

System Level
Specify the VMRS code identifying the system needing repair.

Assembly Level
Specify the VMRS code identifying the subsystem needing repair. The values available are based on the system-level code.

Component Level
Specify the VMRS code identifying the specific component or part needing repair. The values available are based on a combination of the system-level code and the assembly-level code. **VMRS Description** is automatically populated based on the combination of the system, assembly, and component descriptions.

Component Location
Specify the location the check will be performed on the equipment.

Preferred Supplier
Specify the preferred supplier for the job plan.

Total Price
Specify the total cost of the job per unit of measure.

Commodity
Specify the commodity to associate to the job plan.

Buyer
Specify the buyer responsible for the job.

Active Checklist
Select if the tasks contains active checklist items.

Performed By Required
Select to indicate that the identification of the person performing the checklist on the task is required.

Reviewed By Required
Select to indicate that the identification of the person reviewing the checklist results on the task is required.

WO Description
Specify the description of the follow-up work order the system will create when checklist items are selected for follow-up.

WO Type
Select the work order type of the task checklist.

WO Class
Specify the work order class of the task checklist. **WO Class Org.** is automatically populated.

WO Status
Select the work order status of the follow-up work order.

WO Priority
Select the work order priority of the follow-up work order.

5 Click **Submit**.

Defining prices for common task plans

With multi-organization security, you can centrally maintain prices of tasks and jobs created specifically for task plans used across all of your organizations. Enter multiple prices per organization for the same task or job plan when companies have multiple organizations with different currencies in each organization

Note: Define common task plan prices for organizations only if the MULTIORG installation parameter is set to YES. Contact your system administrator for more information.

You can view but you cannot modify price records associated to a pre-planned job on this screen.

To define prices for common task plans:

1 Select **Work > WO Planning > Task Plans**.
2 Select the task plan for which to define prices, and then click the **Prices** tab.
3 Select the specific job on the task plan for which to define prices.
4 Click **Add Price**.
5 Specify this information:

Organization
Specify the organization for the task price.

Note: If the organization of the selected task plan is common, the system displays only those organizations to which you have access. If the organization of the selected task plan is specific, the system displays only the organization of the task.

Price
Specify the price for the task per unit of measure.

6 Click **Submit**.

Associating qualifications with task plans

Associate qualifications with task plans and task jobs to establish the minimum qualifications for an employee to perform tasks associated with work. Qualifications are defined on the **Qualifications** form.

See Defining Qualifications on page 724.

After defining a qualification, you can associate it with task plans.

When you select a task plan to which you have associated qualifications for a work order activity, you can only assign/schedule an employee that has an active record of the required qualification(s) for that task plan on their personnel record to perform the work order activity. Employee qualifications are active if the employee has completed the necessary training course/requirements and the training has not expired as indicated by the **Start Date** and **Expiration Date** for the qualification on the employee's personnel record. Employees can also be **Temporarily Disqualified** for qualifications as necessary on their personnel record.

Note: If you delete a qualification previously associated with a task plan, then the deleted task plan qualification will no longer be required for any subsequent work order activities for which the task plan is selected. However, the deleted task plan qualification will still be required for any existing work order activities for which the task plan is selected.

Likewise, if you add a new qualification to a task plan or update an existing qualification associated with a task plan, the new/updated task plan will not affect any existing work order activities for which the task plan is selected. However, the added/updated qualification will be required for subsequent work order activities for which the task plan is selected, and a message is displayed indicating the number of open work orders for the task plan.

To associate qualifications with task plans:

1 Select **Work > WO Planning > Task Plans**.
2 Select the task plan with which to associate qualifications, and then click the **Qualifications** tab.
3 Click **Add Qualification**.
4 Specify this information:

Job
Specify the job to associate with the qualification on the task plan. **Job Plan** is automatically populated.

Qualification
Specify the qualification to associate with the task plan. The description of the qualification and the **Organization** are automatically populated.

5 Click **Submit**.

Defining sales prices for task plans

Define sales prices for task plan. Use the sales prices defined here for sales transactions on the task plan. Sales prices can be defined for specific task plans to create invoice lines using a fixed sales price rather than use the actual work order costs tracked by the system, like part issues, time sheets, tool costs, etc.

To define sales prices for task plans:

1. Select **Work > WO Planning > Task Plans**.
2. Select the task plan for which to define sales prices, and then click the **Sales Prices** tab.
3. Click **Add Record**.
4. Specify this information:

   Job
   Specify the job associated with the task plan for which to define sales prices. **Job Plan** is automatically populated.

   Organization
   Specify the organization of the task plan.

   Sales Price
   Specify the sales price to specify for the selected task plan.

   Date Effective
   Specify the date this sales prices will become effective.

5. Click **Submit**.

Defining supplier task plan prices

First define task plans. Then, define the cost of the task plans for each supplier.

To define supplier task plan prices:

1. Select **Work > WO Planning > Task Plans**.
2. Select the task plan for which to define supplier prices, and then click the **Suppliers** tab.
3. Select the specific job of the task plan if you choose to define the supplier catalog for the supplier. **Job Plan** is automatically populated.
4. Click **Add Supplier**.
5. Specify this information:

   Supplier
   Specify the supplier for which to define task plan prices. The system automatically populates the description of the supplier, **Supplier Org.**, and the currency.

   Catalog Reference
   Specify the supplier's catalog reference number.

   Price
   Specify the supplier's cost and base currency for the task plan.

Tax Code
Specify the tax code for the task plan.

Purchase UOM
Specify the supplier's unit of measure for the task plan.

Qty. per UOP
Specify the quantity per unit of purchase for the task plan if the purchase unit of measure is different from the inventory unit of measure.

Lead Time (Days)
Specify the average number of days that the supplier needs to provide the task plan.

Expiration Date
Specify the date the price expires.

Preferred
Select if the supplier is the preferred supplier for the task plan.
Note: Only one supplier may be the preferred supplier for a specific task plan. If you have already selected **Preferred** for another supplier and then add an additional supplier and mark it as **Preferred**, the system clears this designation from the previous supplier and marks the new supplier as **Preferred**.

6 Click **Submit**. The system also automatically populates **Exchange Rate** as defined in the exchange rates table to convert the specified **Currency** to the **Local Currency**. **Local Price** is populated by calculating **Price** divided by **Exchange Rate** divided by **Qty. per UOP**. **Date Last Updated** is populated with the current system date.

Defining job plans

Define tasks on a detailed level to create a job plan. Predefine labor, parts, tools, and qualifications for jobs to minimize data entry and to standardize work. A job plan can exist anywhere a task plan exists, for example a job plan can be referenced on a task plan, PM schedule, standard work order, work order, purchase requisitions, or purchase order.

Alternately a task plan can be developed by associating one or more job plans.

To define job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization for the job plan.

Job Plan
Specify a unique code identifying the job plan, and then enter a description in the adjacent field.

Type
Select the type of job plan you are defining.

Class
Specify the class. The system automatically populates **Class Org.**

Equipment Type
Select the type of equipment.

Equipment Class
Specify the class of the equipment. The system automatically populates **Equipment Class Org.**

Material List
Specify the material list the system will assign to the job plan.

Trade
Specify the trade. The system automatically populates **Multiple Trades**.

UOM
Specify the unit of measure for the task.

Estimated Hours
Specify the number of hours estimated to complete the job.

People Required
Specify the number of people required to complete the job.

Reason For Repair
Specify the reason a repair is required for the job plan.

System Level
Specify the VMRS code identifying the system needing repair.

Assembly Level
Specify the VMRS code identifying the subsystem needing repair. The values available are based on the system-level code.

Component Level
Specify the VMRS code identifying the specific component or part needing repair. The values available are based on a combination of the system-level code and the assembly-level code. The system automatically populates **VMRS Description** based on the combination of the system, assembly, and component descriptions.

Component Location
Specify the location the check will be performed on the equipment.

Active Checklist
Select if the tasks contains active checklist items.

Performed By Required
Select to indicate that the identification of the person performing the checklist on the task is required.

Reviewed By Required
Select to indicate that the identification of the person reviewing the checklist results on the task is required.

WO Description
Specify the description of the follow-up work order the system will create when checklist items are selected for follow-up.

WO Type
Select the work order type of the task checklist.

WO Class
Specify the work order class of the task checklist. The system automatically populates **WO Class Org.**

WO Status
Select the work order status of the follow-up work order.

WO Priority
Select the work order priority of the follow-up work order.

WO Status
Select the work order status of the follow-up work order.

Revision Status
Specify the revision status for the job plan. The system automatically populates **Revision**.

Approval List
Specify the approval list for the job plan.

Revision Reason
Specify an explanation of any revisions to the job plan.

Hours Requested
Specify the number of hours estimated to complete the job.

Preferred Supplier
Specify the preferred supplier for the job plan.

Total Price
Specify the total cost of the job per unit of measure.

Commodity
Specify the commodity to associate to the job plan.

Buyer
Specify the buyer responsible for the job.

4 Optionally, select the **Out of Service** check box to indicate the job plan does not display in job plan lookups.
5 Click **Submit**.

Planning labor for job plans

Plan the labor necessary to complete a job plan.

To plan labor for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to plan labor, and then click the **Plan Labor** tab.
3 Click **Add Labor Line**.
4 Specify this information:

Trade
Specify the trade for the labor.

Estimated Hours
Specify the hours estimated to complete the labor.

People Required
Specify the number of people required to complete the labor.

Hired Labor
Select to indicate that the labor for the job plan will be completed by an external source.

5 Click **Submit**.

Planning parts for job plans

Plan the parts required to complete a job plan. Associate the parts for the plan by populating on an existing material list on the **Record View** page of the **Job Plan** form or by directly entering the parts required on this tab.

To plan parts for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to plan parts, and then click the **Plan Parts** tab.
3 Click **Add Part Line**.
4 Specify this information:

Part
Specify the part to add to the job plan.

Condition
Specify the condition if the part is a condition tracked parent part.

Quantity
Specify the quantity of the part needed to complete the job plan.

Planned Source
Select the source for the part, e.g., **Direct Purchase** for a part ordered from an external source, or **Stock** for a part ordered from internal stock.

Reserve
Select to indicate the part is a part reserved for a work order.

Critical
Select if the part is critical or integral to complete the job plan.

Line Number
Modify the line number as necessary.

Equipment
Specify the equipment associated with the part.

5 Click **Save Record**.

Managing tools for job plans

Plan the tools necessary to complete a job plan. Add, delete, modify, or view lists of tools associated to job plans.

To manage tools for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to manage tools, and then click the **Plan Tools** tab.
3 Click **Add Tool**.
4 Specify this information:

Tool
Specify the tool to add to the job plan. The system automatically populates the tool description.

Hours Requested
Specify the number of hours estimated to use the tool to complete the job plan.

Qty. Required
Specify the tool quantity estimated complete the job plan. The system automatically populates **Total Hours Required**.

5 Click **Submit**.

Adding checklists to job plans

Add a checklist to a job plan to track the completion of one step of the job instruction, or to collect qualitative and quantitative data for the job plan.

To add checklists to job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to add checklists, and then click the **Checklist** tab.
3 Click **Add Checklist Item**. Checklist Item is automatically populated.
4 Enter a description of the checklist item.
5 Specify this information:

Sequence
Specify the sequence in which the checklist item should be answered for the job plan.

Type
Select the type for the checklist item, e.g., Quantitative, Inspection, or Meter Reading.

Required Entry
Select if the completion of the checklist item is required to close the associated work order.

Equipment Level
Select the equipment level. A checklist item can be attached to the work order header equipment, equipment, or the route or linear referenced equipment.

Equipment Class
Specify the equipment class with which the checklist item is associated. **Equipment Class Org.** is automatically populated.

Equipment Category
Specify the equipment category with which the checklist item is associated.

Out of Service
Select

UOM
Specify the unit of measure for the measurement. **UOM** is required for inspections, meter readings, and quantitative checklist items.

Aspect
Specify the inspection aspect measured during an inspection. **Aspect** is required for inspection checklist items.

Point Type
Specify the inspection point type. **Point Type** is required for inspection checklist items.

Follow-up Task Plan
Specify the task plan to be assigned to the follow-up work order activity.

Follow-up Job Plan
Specify the job plan to be assigned to the follow-up job plan.

Repeating Occurrences
Select to indicate the measurement recorded with this checklist item is recorded more than one time during the execution of the job.

6 Click **Submit**.

Managing and adding qualifications for job plans

Add, view, or delete the list of qualifications for a job plan.

To manage and add qualifications for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to manage qualifications, and then click the **Qualifications** tab.
3 Click **Add Qualification**.
4 Specify this information:

Qualification
Specify the qualification to manage. The system automatically populates the qualification description and **Organization**.

5 Click **Save**.

Viewing estimated costs for job plans

View the estimated costs for a job plan, including the estimated costs of all jobs or a single job on the job plan.

The following cost categories are estimated based on the information provided: internal labor, external labor, stock items, direct purchases, and tools. The total cost is then calculated.

To view estimated costs for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to view estimated costs, and then click the **Estimated Costs** tab.
3 Optionally, select the specific job for which to view the estimated costs for the job plan.

Note: If **Job** is set to **Show All Records** the cost for the job plan is displayed including all associated jobs.

4 Specify this information:

Organization
Specify the organization of the job plan. The organization of the selected job plan is defaulted if it is a specific organization.

Department
Specify the department of the job plan.

Store
Specify the store of the job plan to calculate estimated costs per store.
Note: This field is hidden unless `PRICELEV` is set to `S` for store level. If `PRICELEV` is set to `P`, prices are retrieved from the Prices tab for the part of the selected organization.

Supplier
Specify the supplier of the job plan to calculate estimated costs per supplier. The preferred supplier of the selected job plan is defaulted.

5 View the estimated costs.

Defining prices for job plans

With multi-organization security, you can centrally maintain prices for job plans used across all of your organizations with different currencies. Enter and maintain multiple prices per organization for the same job plan.

Note: Define common prices for organizations only if the MULTIORG installation parameter is set to YES and PMRVCTRL is set to NO and the **Revision Status** of the job plan is **Unfinished**. Contact your system administrator.

To define prices for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to define a price, and then click the **Prices** tab.
3 Click **Add Price**.
4 Specify this information:

   Organization
   Specify the organization of the job plan for which to define a price.

   Price
   Specify the price for the job plan per unit of measure.

5 Click **Submit**.

Defining supplier prices for job plans

First define job plans specifying the labor, parts, tools, and qualifications required to complete the job plan. Then, define the cost of the job plans for each supplier based on the supplier's service catalog of parts.

To define supplier prices for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to define supplier prices, and then click the **Suppliers** tab.
3 Click **Add Supplier**.
4 Specify this information:

   Supplier
   Specify the supplier for which to define job plan prices.

   Catalog Reference
   Specify the supplier's part number for the part necessary to complete the job plan.

   Price
   Specify the supplier’s cost and base currency for the job plan.

   Tax Code
   Specify the tax code for the job plan.

   Purchase UOM
   Specify the supplier’s unit of measure of the part for the job plan.

   Qty. per UOP
   Specify the quantity per unit of purchase for the job plan if the purchase unit of measure is different from the inventory unit of measure.

   Lead Time (Days)
   Specify the average number of days that the supplier needs to provide the job plan.

   Expiration Date
   Specify the date the price expires.

Preferred
Select if the supplier is the preferred supplier for the job plan.
Note: Only one supplier may be the preferred supplier for a specific job plan. If you have already selected **Preferred** for another supplier and then add an additional supplier and mark it as **Preferred**, the system clears this designation from the previous supplier and marks the new supplier as **Preferred**.

5 Click **Submit**.

Defining sales prices for job plans

Define sales prices for a job plan. Use the sales prices defined here for sales transactions on the job plan. Sales prices can be defined for specific job plans to create invoice lines using a fixed sales price rather than use the actual work order costs tracked by the system, like part issues, time sheets, tool costs, etc.

To define sales prices for job plans:

1 Select **Work > WO Planning > Job Plans**.
2 Select the job plan for which to define sales prices, and then click the **Sales Prices** tab.
3 Click **Add Record**.
4 Specify this information:

Task Plan
Specify the task plan associated to the job for which to define sales prices.

Organization
Specify the organization of the job plan.

Sales Price
Specify the sales price to specify for the selected job plan.

Date Effective
Specify the date this sales prices will become effective.

5 Click **Submit**.

Defining tools

Define tools for departments. Tools are pieces of equipment that a department uses to carry out maintenance work, e.g., scaffolding or excavators. The department is usually the "owner" of a tool, so the department's store keeps the tools.

Note: Tool refers to a type of tool, rather than an individual item. For example, if the organization has several drills, create a general Tool code called DRILL. Then create individual parts for each drill and track them as assets using the drills' serial numbers.

See the following table to determine the best method for defining tools in the organization:

Type of Tool	Importance to the Organization	Define Tool as a…
Hammer	**Low** Tool can be replaced easily and inexpensively	Simple tool
Ratchet	**Medium** Tool should be ordered and kept in stock	Tool and a part
Calibration Gauge	**High** Tool can be ordered and kept in stock and is also valuable	Tool, part, and asset

Defining simple tools

To define simple tools:

1. Select **Work > Setup > Tools**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the tool belongs if you use multi-organization security.

   Tool
   Specify a unique code identifying the tool, and then enter a description of the tool in the adjacent field.

   Class
   Specify the class of the tool. The system automatically populates **Class Org.**

4. Click **Save Record**.

Viewing transactions for tools

View all issue and return transactions for tools. Only those tools associated to a part will display in the transaction records.

Once the transaction records are displayed, click the work order hyperlink. The system opens the **Work Orders** form and queries for the selected work order.

Note: If a common tool is associated with a common part, the transaction price will reflect the actual currency, e.g., the currency of the organization fo the transaction.

To view transactions for tools:

1. Select **Work > Setup > Tools**.
2. Select the tool for which to view transactions, and then click the **Transactions** tab.
3. View the information.

Defining material lists

Certain work orders always require the same materials. A material list is a predefined list of parts that may be referenced on an activity of a work order, PM schedule, or standard work order to minimize data entry and ensure consistent material planning for jobs. First, define the material list header information, and then add part line items to the material list. Material lists must contain at least one part line item.

To define material lists:

1. Select **Work > WO Planning > Material Lists**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the material list belongs if you use multi-organization security.

   Material List
   Specify a unique code identifying the material list, and then enter a description of the material list in the adjacent field.
   Note: Do not use the prefix "V-" in the **Material List** code. Material list codes with this prefix are reserved for system use only.

   Class
   Specify the class of the material list. The classes shown belong to the MATL entity.

   Revision Status
   Specify the revision status for the route. **Revision** is automatically populated.
   Note: You can enter a **Revision Status** and **Approval List** only if the `PMRVCTRL` installation parameter is set to Yes. Contact your system administrator for more information.

   Approval List
   Specify the list of approvers authorized for revisions to the material list.

4. Click **Save Record**.
5. Click the **Parts** tab.
6. Click **Add Part Line**. **Line Number** is automatically populated with the next consecutive number according to the `INCRLINO` installation parameter.
7. Specify this information:

   Part
   Specify the part to add to the material list.

   Condition
   Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, **Condition** is automatically populated.

   Quantity
   Specify the quantity needed. The unit of measure is displayed in the adjacent field.

Reserve
Select to reserve the part when this material list is requested on a new work order. If you mark the part line as **Reserve**, this setting will carry over to any work order activity on which the material list is selected, and the part for the work order activity is automatically reserved by creating a part reservation record in the indicated store for all material list parts flagged for reserve.

Critical
Select if the part is critical to all work activities requiring the material list.

Line Number
Modify the line number as necessary.

Equipment
Specify the equipment associated with the part. The part for issue is displayed only when you associate the material with a work order that has the specified equipment.

8 Click **Submit**.

Adding multiple parts to materials lists

Select and retrieve multiple parts for material lists.

Use this form to maintain the list of parts for a material list:

To add multiple parts to material lists:

1 Select **Work > WO Planning > Material Lists**.
2 Select the material list for which to add multiple parts, and then click the **Parts** tab.
3 Click **Select Parts**.
4 Select the parts to add to the material list.
5 Specify this information:

Quantity
Specify the requested quantity for each selected part.

6 Click **Submit**.

Copying material lists

The copy material list feature copies an existing material list, including all details. If the material list does not exist, you must first create the list.

See Defining Material Lists on page 761.

To copy material lists:

1 Right-click the material list to copy, and then select **Copy Material List**.
2 Specify this information:

New Material List
Specify the name of the new material list. **New Material List** description is automatically populated.

3 Select the record types to copy, and then click **Submit**.

Defining VMRS codes

The American Trucking Association's Vehicle Maintenance Reporting System (VMRS) is a set of codes used to track equipment and maintenance within the fleet/transportation industry. VMRS provides a "universal language" so that the various industry segments, such as maintenance employees, management, suppliers, and manufacturers, can communicate more easily and accurately. Values for all Code Keys are installed in the database.

When defining VMRS codes, you must first define a system-level code before you can define assembly-level or component-level codes.

To define VMRS codes:

1 Select **Work > Setup > VMRS Codes**.
2 Click **New Record**.
3 Specify this information:

Description
Specify the description of the VMRS code.

System Level
Specify the VMRS code identifying the system, e.g., brakes, frame, or suspension, associated with the vehicle (Code Key 31).

Assembly Level
Specify the VMRS code identifying the associated subsystem (Code Key 32). The values available are based on the system-level code.

Component Level
Specify the VMRS code identifying the specific component or part (Code Key 33). The values available are based on a combination of the system-level code and the assembly-level code.

Icon
Select the color of the icon to indicate the importance of the user code.

Icon Path
Specify the URL path to the image you would like to use for the icon. Accepted icon paths begin with **http://**, **//**, or ****, or **https://**.

Material Type
Specify the VMRS code identifying the associated material type.

Importance
Specify the VMRS code identifying the associated importance.

4 Click **Submit**.

Creating incident requests

Create and update hospitality-based incident request records.

To create incident requests:

1 Select **Work > Verticals > Hospitality > Incident Requests**.
2 Click **New Record**.
3 Specify this information:

Find Guest By
Choose one of the following options to search for a guest:

Room
Select to locate guests by their room assignment.

Employee
Select to locate the hospitality employees by their employee codes.

Employee Name
Select to locate the hospitality employees by their names.

Last Name
Select to locate guests by their last names.

First Name
Select to locate guests by their first names.

Phone
Select to locate guests by their phone numbers.

4 Enter data in **that contains**, e.g., if you chose to search by **Phone**, enter the phone number, and then click **Search** to begin the search process.

Note: If exactly one match is found by the room, the system populates **Room**, the room description, and **Room Property**.

If exactly one match is found by the guest's last name, first name, or phone number, the system populates the information in the Guest Information section.

5 Enter the guest's first, middle, and last name.
6 Specify this information:

VIP Status
Select the guest's VIP status.

Employee
Specify the employee responsible for the incident request. The system automatically populates the employee description.

Enter the guest's **E-mail Address** and **Phone Number**.

Room
Specify the room where the incident occurred. The system automatically populates **Room**, the room description, and **Room Property**.

Problem Code
Specify the code identifying the incident problem. The system automatically populates the service problem code description and **Problem Code Property**.

Incident Details
Specify details of the incident as necessary.

Copy to WO Comments
Select to copy the work order comments to the incident request.

Property
Specify the property of the request.

Status
Select the status for the request.

Source
Select the request source.

Type
Select the request type.

Assigned To
Specify the person responsible for the property, this is typically the property manager, housekeeping, or building maintenance personnel. The system automatically populates **Request Date** and **Request Taken By**.

Work Order
Specify the work order for the incident request. The system automatically populates **Standard WO** and **Duplicate**.

WO Priority
Select the work order priority.

WO Property
Specify the property at which to perform the incident work.

7 Click **Save Record**.

The system automatically populates **Incident Request**.

Note: To create a work order based on the incident request, enter the room and problem code for the incident, and then click **Create WO**.

To email the guest, click **Email Guest**.

To create another guest request based on the guest information and another incident, click **Create Another Guest Request**.

Approving and rejecting work requests

View a list of work requests awaiting approval, and then either accept or reject the work requests.

Note: You must have sufficient status change authorizations to approve and reject work requests, and you cannot approve work requests that exceed your work requests approval limit.

Approving work requests

To approve work requests:

1. Select **Work > Review Work Requests**.
2. Select one or more work requests to approve, and then click **Approve**.

   Note: Double-click a work request to view its details.

Rejecting work requests

To reject work requests:

1. Select **Work > Review Work Requests**.
2. Select one or more work requests to reject, and then click **Reject**.

   Note: Double-click a work request to view its details.
3. Enter the reason for rejection.
4. Specify this information:

   Use Reason for All
   Select if you are rejecting multiple work requests and the reason for rejection applies to all of the work requests.
5. Click **OK**.

   The system removes the rejected work requests from the list, and then sets the system status of the work requests to **Rejected**.

Creating standard work orders

A standard work order is a predefined set of details and activities that may be referenced on a work order to facilitate entry of repair jobs that are performed repeatedly over time, but not according to a definable schedule as is the case with periodic preventive maintenance. A basic standard work order defines a simple repair job consisting of one or more activities.

A basic standard work order consists of a header and one or more activity lines. **Standard WO**, **Description**, and **Organization** frame the header of any standard work order, while two additional required fields, **WO Type** and **Duration**, and two optional fields, **WO Class** and **Priority**, house data that transfers to any work order on which the standard work order is selected. Any activities that are

defined for the standard work order are copied to the work order as a result of selecting a standard work order.

To restrict the list of standard work orders available on a given work order to only those defined as applicable for the equipment and/or problem indicated on the work order at the time the standard work order selection is made, enter **Equipment Class**, and/or **Category**.

Create standard work orders, and then apply the information from standard work orders to regular work orders.

Note: You can only insert, update, or delete work orders if you are authorized to do so.

Defining standard work order headers

Create headers for standard work orders. Headers include basic information about the work orders.

To define standard work order headers:

1. Select **Work > WO Planning > Standard WOs**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the standard work order belongs if you use multi-organization security.

   Standard WO
   Specify a unique code identifying the standard work order, and then enter a description of the work in the adjacent field.

   Problem Code
   Specify the code identifying the problem.

   Equipment Class
   Specify the class of the equipment on which to perform the work. The classes shown belong to the OBJ entity.

   Category
   Specify the equipment category to which the standard work order applies.

   Class
   Specify the class of the work. The classes shown belong to the STWO entity.

   Template
   Select to create a standard work order template with which to associate children.
   Note: If you are creating a template work order, you must specify a **Duration** greater than the total duration of all child work orders.

   WO Type
   Select the work order type of the standard work order.

Duration
Specify the duration of the standard work order, in days.

WO Class
Specify the work order class of the standard work order.

Priority
Select the priority of the standard work order.

4 Click **Save Record**.

Defining standard work order activities

Set up activities for standard work orders. Associate specific task plan lists and material lists to standard work orders.

To define standard work order activities:

1 Select **Work > WO Planning > Standard WOs**.
2 Select the standard work order for which to define an activity, and then click the **Activities** tab.
3 Click **Add Activity**.
4 Specify this information:

Activity
Specify an activity number for the first activity. If you do not provide this number, the system automatically enters a number based on the INCRLINO installation parameter. For example, if INCRLINO = 1, then the system enters the number "1" for **Activity** and increases by 1 for each new record. However, if INCRLINO = 5, then the system enters the number "5" for **Activity** and increases by 5 for each new record.

Trade
Specify the trade of the activity.

Task Plan
Specify the task plan list of the activity.

Task Plan Qty.
Specify the required number of units of the task plan to associate with the activity, and then select the unit of measure for the **Task Plan Qty.** in the adjacent field. For example, a work order activity to pave 100 miles of highway today will indicate a **Task Plan Qty.** of "100" and a unit of measure of "Miles", whereas the same task plan on another day will indicate only 80 miles due to the steep inclines of the stretch of highway being paved on that day.

Material List
Specify the material list to include for the activity.

Estimated Hours
Specify the number of hours estimated to complete the activity.

People Required
Specify the number of people needed to complete the activity.

Start
Specify a 1 if the activity is to start on the same day that the standard work order starts. Enter a 2 if the activity should start on day 2 of the standard work order, etc.

Duration
Specify the duration of the activity in days.

Hired Labor
Select to indicate that the activity will be completed by an external source.

Specify this information only if you use the American Trucking Association's Vehicle Maintenance Reporting System (VMRS).

Note: Depending on your system configuration, the VMRS-related fields may not be displayed. Contact your system administrator for more information.

Reason For Repair
Specify the reason the vehicle needs repair (Code Key 14).

Work Accomplished
Specify the work performed on the vehicle (Code Key 15).

Technician Part Failure
Specify the reason the technician or supplier thinks the vehicle failed (Code Key 18).

Manufacturer
Specify the Manufacturer/Supplier Code (Code Key 34) to associate with the vehicle.

System Level
Specify the VMRS code identifying the system, e.g., brakes, frame, suspension, needing repair (Code Key 31).

Assembly Level
Specify the VMRS code identifying the subsystem needing repair (Code Key 32). The values available are based on the system-level code.

Component Level
Specify the VMRS code identifying the specific component or part needing repair (Code Key 33). The values available are based on a combination of the system-level code and the assembly-level code.

Activity Comments
Enter comments or instructions for the activity.

5 Click **Submit**.

Copying standard work orders

Copy standard work orders to create new standard work orders.

To copy standard work orders:

1 Select **Work > WO Planning > Standard WOs**.
2 Select the standard work order to copy, and then click the **Record View** tab.
3 Right-click on the form, and then choose **Copy Record**.
4 Specify this information:

   New Standard WO
   Specify a unique code identifying the new standard work order, and then enter a description of the work order in the adjacent field.

5 Select the related details to copy to the new standard work order:
   - **Custom Field Values**
   - **Comments**
   - **Documents**
   - **Translations**
   - **WO Custom Field Values**
   - **Activities**
   - **Activity Comments**
   - **Children**
6 Click **Submit**.

Assigning child work orders to standard work orders

First define standard work order headers, and then define child standard work orders. You can only define child work orders if you selected **Template** on the standard work order header. If you define child work orders using a standard work order template, the system automatically creates a work order for each child assigned to the template.

You can also set up child work orders to change the status of a work order depending on another work order, and you can calculate the requested start and end dates for each work order when the new work order is created from the template.

To assign child work orders to standard work orders:

1 Select **Work > WO Planning > Standard WOs**.
2 Select the standard work order for which to define children, and then click the **Children** tab.
3 Click **Add Child Standard WO**.
4 Specify this information:

   Child Standard WO
   Specify the child standard work order to assign to the standard work order template.

   Sequence
   Specify the sequence number in which to perform the child work order.

   Step
   Specify the step number (in the sequence of steps) in which to perform the child standard work order.

Trigger Sequence - Step
Specify the sequence/step number combination of the child standard work order that triggers the selected child work order.

Old Status
Specify the existing status of the child standard work order to be changed.

New Status
Specify the new status to assign to the child standard work order upon completion of the triggering event.

5 Click **Submit**.

Managing tools for standard work orders

Add, delete, modify, or view lists of tools associated to standard work order activities and jobs. Using the tool records, create planned tools for work orders, scheduled tools for work orders, or both.

Manually add tools to standard work order activities that do not have an associated task plan, or to standard work order activities for which the task plan is not enabled for enhanced planning.

View tools associated to the standard work order task plan if the task plan is enabled for enhanced planning.

To manage tools for standard WO:

1 Select **Work > WO Planning > Standard WOs**.
2 Select the standard work order for which to manage tools, and then click the **Plan Tools** tab.
3 Select the **Activity** for which to manage tools.

Note: If **Job** is set to **Show All Records**, **Job** is automatically populated, protected, and set to **Show All Records**.

4 Select the **Job** of the activity for which to manage tools.
5 Click **Add Tool**.
6 Specify this information:

Activity
Select the activity for which to manage tools. **Job** is automatically populated.

Tool
Specify the tool to add to the standard work order.

Hours Requested
Specify the number of hours estimated to use the tool to complete the activity.

Qty. Required
Specify the tool quantity estimated to complete the activity. **Total Hours Required** and **Activity Duration** are automatically populated.

7 Click **Submit**.

Associating permits with standard work orders

Associate permits with standard work orders. The permits will be copied to the work order when work orders are created that reference the standard work order.

To associate permits with standard work orders:

1. Select **Work > WO Planning > Standard WO's**.
2. Select the standard work order with which to associate a permit, and then click the **Permits** tab.
3. Click **Add Permit**.
4. Specify this information:

   Permit
   Select the permit with which to associate the standard work order. The system automatically populates the description and **Permit Org.**

   Auto Create PTW
   Select the check box to automatically create a permit to work when the a new work order is created and the permit is copied to the work order.

   PTW Type
   Select the type of permit to work to create when the work order is created.

   Type of Work
   Select the type of work to attach to the created permit to work.

   Priority
   Select the priority to attach to the created permit to work.

   Risk
   Select to indicate the risk to attach to the created permit to work.

   Activity
   Specify the activity of the work order.

   Mandatory
   Select the check box to indicate that the permit is mandatory to complete the work.

   LOTO Required
   Select the check box to require a lockout/tagout procedure of equipment associated to the permit to work.

   Isolation Type
   Select the type of isolation required on the lockout/tagout procedure of equipment associated to the permit to work.

5. Click **Submit**.

Adding safety hazards and precautions to standard work orders

Add hazards and precautions to standard work orders that inform your employees on how to use equipment safely when working in hazards that can cause bodily harm and alert them in advance of the precautions to take to protect themselves from the hazard. For example, you can add a precaution to turn equipment off and remove the power cord from the power outlet before performing repairs on electrical equipment.

To add safety hazards and precautions to standard work orders:

1. Select **Work > WO Planning > Standard WOs**.
2. Select the standard work order for which to add safety precautions and hazards, and then click the **Safety** tab.
3. Click **Add Safety Record**.
4. Specify this information:

   Hazard
   Specify the hazard to add to the standard work order. The system automatically populates a description of the hazard, **Hazard Org.**, and **Hazard Type**.

   Precaution
   Specify the safety measure to protect your employees from the hazard. The system automatically populates a description of the precaution, **Precaution Org.**. **Timing**, and **Sequence**.

   Timing
   Select the timing which is used to identify when the precaution should be taken. For example, if your employee is working with fire, you can enter the timing of pre-work to alert the employee that they should wear fire-resistant clothing before beginning the task.

   Sequence
   Specify the sequence number which is used to identify the order in which your employee should be made aware of the precaution. All precautions are important regardless of the sequence number entered.

5. Select the **Delete Pending** check box to delete the pending safety record during the next review.
6. Click **Submit**. The system automatically populates **Created By** and **Date Created**.

Defining sales prices for standard work orders

Sales prices can be defined for specific standard work orders to create invoice lines using a fixed sales price rather than use the actual work order costs tracked by the system, like part issues, time sheets, tool costs, etc.

To define sales prices for standard work orders:

1. Select **Work > WO Planning > Standard WOs**.
2. Select the standard work order for which to define sales prices, and then click the **Sales Prices** tab.
3. Click **Add Record**.
4. Specify this information:

Organization
Specify the organization of the standard work order.

Sales Price
Specify the sales price for the selected standard work order.

Date Effective
Specify the date this sales price will become effective for the standard work order.

5 Click **Submit**.

Viewing estimated costs for standard work orders

View the estimated costs for a standard work order, a specific activity, or a specific job for an activity.

The system estimates the following cost categories based on the information provided: internal labor, external labor, stock items, direct purchases, tools, and total costs.

To view the estimated costs for standard work orders:

1 Select **Work > WO Planning > Standard WOs**.
2 Select the standard work order for which to view estimated costs, and then click the **Estimated Costs** tab.
3 Optionally, select the **Activity** for which to view the estimated costs for the standard work order.

Note: If **Activity** is set to **Show All Records** the cost for the work order is displayed including all associated activities.

4 Optionally, select the **Job** for which to view the estimated costs for the standard work order.

Note: If **Job** is set to **Show All Records** the cost for the work order is displayed including all associated jobs.

5 Specify this information:

Organization
Specify the organization of the standard work order.

Department
Specify the department of the standard work order.

Store
Specify the store of the standard work order to calculate estimated costs per store.

Supplier
Specify the supplier of the standard work order to calculate estimated costs per supplier.

6 View the estimated costs.

Creating regular work orders

Create regular work orders to repair broken equipment, modify equipment to meet safety and environmental standards, perform work orders during a normal workday, and record information concerning equipment problems. Work orders can either be independent or part of a much larger project. First, enter header information on the **Record View** tab of the **Work Orders** page. Then add activities to the work order, schedule labor, associate qualifications with work order activities, book labor and vendor hours, associate parts, enter meter readings, create child work orders, add permits, and request tools as necessary. Add additional equipment to work orders for which similar work will be done to distribute costs across the equipment on the work order. You may also view the status of work orders and view work order information such as work order cost and service request details. Finally, close the work order after the work is complete.

Note: View and attach GIS maps to work orders scheduled for GIS-integrated equipment. To attach a GIS map to a work order, associate the GIS map to the work order via the **Work Orders** page.

You may also configure the system to link a specific equipment record's GIS map to work orders as they are released via the **Assets**, **Positions**, or **Systems** pages.

Defining regular work order headers

Enter work order header information on the **Record View** tab of the **Work Orders** page.

Note: To create an editable copy of the record that contains the same base data, right-click on the **Record View** tab, and then choose **Copy Record**.

You may also associate inspection routes to work orders from the **Work Orders** page.

Note: The form contains collapsible sections.

To define regular work order headers:

1. Select **Work > Work Orders**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the work order belongs if you use multi-organization security.

   Work Order
   Specify a description of the work needed in the adjacent field. A work order number is assigned after you save the record.

   Equipment
   Specify the equipment on which to perform the work.
   Note: Safety is selected if it is selected on the **Location** record.

   Multiple Equipment is selected if you add additional equipment to the work order and it is protected.

   Type
   Choose one of the following options:

Type	Description
Breakdown	Select to create a work order in response to an equipment breakdown or failure.
Calibration	Select to create a calibration work order.
PM	Select to create a preventive maintenance work order.
Repairable Spare	Select to create a work order for repairable spare parts. If you are creating a work order for repairable spare parts, you must also add the parts to repair on the **Repair Parts** tab.
Standard WO	Select to create a standard work order.

Note: The previously listed work order types are standard types in the system. You can also create user-defined work order types.

Department
Specify the department.

Print
Select to print the work order when work orders are batch printed.
Note: Once the work order is printed, the system automatically selects **Printed** and unselects **Print**.

Status
Select one of the following options:

Released
Select to create a work order.

Work request
Select to create a work request.
Note: If you select a **Status** of **Work request**, the work request must be approved and assigned a status of **Released** before defining activities, scheduling labor, booking labor, etc.

Safety
Select if this work requires special safety precautions.

Warranty
Select if the equipment is under manufacturer warranty.

Dependent
Select to keep the work order open until all child work orders are completed.

4 Specify this Linear Reference Details information:

From Point
Specify the point on the linear equipment record from which to perform the work order. The system automatically populates **Ref. Description** and **Geographical Ref.** if available.

Ref. Description
Specify a description of the **From Point**.

Geographical Ref.
Specify a geographical reference for the **From Point**.

To Point
Specify the point on the linear equipment record to which to perform the work order.

Ref. Description
Specify a description of the **To Point**.

Geographical Ref.
Specify a geographical reference for the **To Point**.

Inspection Direction
Specify the direction in which to begin the inspection on the linear equipment.

Flow
Specify the direction in which the travel flows along the linear equipment, e.g., cars traveling on the linear equipment record for Highway 185 are traveling in the North-South flow direction.

5 Specify this Production Details information:

Production Priority
Specify the priority of production for the work order.

6 Specify this Work Order Details information:

Location
Specify the location of the work to be completed.

Class
Specify the class of the work order.

Problem Code
Specify the code to identify the type of problem.
Note: If the selected **Equipment** is linked with a **Criticality** code, the system populates **Problem Code** based on the **Criticality** code.

Parent Work Order
Specify the code identifying the parent work order for the work order. The system automatically populates the following fields:

Criticality identifies the equipment in the work request. The system only populates **Criticality** if you selected an **Equipment** for which a criticality code is linked, and it is protected.

PM Code identifies the PM work order from which the work order was generated. The system only populates **PM Code** if the work order was generated from a PM work order.

CN Number indicates the change notice number of the equipment on the work order.

Scheduling Session indicates the MS Project planning session associated with the equipment on the work order.

Customer indicates the asset management customer associated with the equipment on the work order.

Property indicates the asset management property associated with the equipment on the work order.

Caller Name indicates the name of the person who called in to report the problem.

Reject Reason indicates the reason that the work order was rejected.

The system automatically selects **Reopened** if the work order is closed and then reopened.

Standard WO
Specify the standard work order if it has been stored in the system library. The system automatically populates the work order description, **Type**, **Class**, **Scheduling Session**, **Scheduling Session Type**, **Maintenance Pattern-Sequence**, **Problem Code**,**Priority**, **Scheduled End Date**, **Campaign-Campaign Event** and **Campaign Status** if available. The system also copies the standard work order activities to the current work order. If the standard work order is a template, the system creates child work orders as defined on the standard work order.

Priority
Specify the priority of the work order.

Cost Code
Specify the cost code of the work order.

Target Value
Specify the estimated maximum cost for the work order.

Failure Code
Specify the cause of failure for the equipment.

Action Code
Specify the action taken to resolve the problem.

Cause Code
Specify the cause code identifying the cause of the problem. The system automatically populates the following fields:

Route identifies the inspection route of which the equipment is a part.

Inspection Status indicates the current status of the inspection route of which the equipment is a part.

Downtime Cost
Specify the cost that resulted from the equipment being out of operation due to failure.

Downtime Hours
Specify the number of hours that the equipment was out of operation due to failure. The system automatically populates the following fields:

The system populates **Last Meter Reading** with the value of the last meter reading and the unit of measure of the reading in the adjacent field.

Trigger Event indicates the MS Project planning session associated with the equipment on the work order.

The system automatically populates **Customer Contract** if there is a contract associated with the work order or if customer charges have been calculated using the asset management services module.

The system automatically populates **Original PM Due Date** if the work order originated from a PM.

Note: If applicable, the system also populates **Customer Contract** from a project, equipment, and location associated with the work order. The system first determines whether the work order is associated with a customer contract; then checks for customer contracts associated with a project that is associated with the work order (including child projects); then for the equipment of the work order (and child equipment); and finally for the location of the work order (and child locations)

7 Specify this Call Center Details information:

Equipment Usability
Specify the code identifying the equipment's usability factor.

Temporary Fix Promise Date
Specify the date the work will be fixed temporarily, if a date was promised to the customer.

Provider
Specify the provider.

Service Category
Specify the service category.

Permanent Fix Promise Date
Specify the date the work will be fixed permanently, if a date was promised to the customer.

Temporary Fix Date Completed
Specify the date the temporary fix was completed.

Service Problem Code
Specify the service problem code.

Work Address
Specify the address or intersection where work is requested.

8 Specify this Activity information:

Activity
Specify a value if you want to create a new activity to associate with the work order.

Trade
Specify the trade required to perform the activity.
Note: If you enter a **Trade**,**Estimated Hours**, or **People Required** in the Activity section of the page, an activity will automatically be created for this work order.

An activity record can be deleted when you remove the **Trade** value.

Task Plan
Specify the task plan code for the activity.

Material List
Specify the material list code for the material list containing the parts needed for the work order.

Estimated Hours
Specify the estimated number of hours required to complete the activity. The system automatically populates **Hours Remaining** with the estimated number of hours remaining for the activity. You may update this field at any time during the life cycle of the work order.

Activity Start Date
Activity End Date
Enter the starting and ending dates for the activity associated with the work order.

People Required
Specify the number of people required to perform the activity.

9 Specify this Scheduling information:

Reported By
Specify the employee requesting the work.

Date Reported
Specify the date and time that the problem was reported.
Note: If the BOOKDATE installation parameter is set to ON, the system does not allow you to book hours for labor for a date that is earlier than the **Date Reported**. If BOOKDATE is set to OFF, then you can book hours without any date restrictions related to the **Date Reported**.

See the following for a list of constraints related to booking hours:

- The system verifies that **Date Worked** is not less than **Date Reported** for the work order
- The system verifies that **Date Worked** is less than or equal to **Date Completed**(if populated) for the work order
- The system verifies that **Date Worked** is not greater than the current system date and time
- The system also verifies whether **Date Worked** is within the date range defined by **Scheduled Start Date** and **Scheduled End Date** on the work order activity

Assigned By
Specify the supervisor who assigned the work order.

Assigned To
Specify the person responsible for the work order.

Sched. Start Date
Sched. End Date
Specify the starting and ending dates for the work order.

Req. Start Date
Req. End Date
Specify the requested starting and ending dates for the work order.

Start Date
Specify the actual date on which the work order is started.

Date Completed
Specify the actual date on which the work order is completed.

Shift
Specify the shift during which the work is requested to be performed.

Project-Budget
Specify the project and the project budget to associate with the work order.
Note: You cannot select a frozen project/budget.

Service Request
If populated, the value displayed for **Service Request** is a hyperlink to the service request associated with the work order. Click the number to view the associated service request.

10 Click **Save Record**.

Note: To view a GIS map and associate it with the work order, right-click on the form, and then choose **View GIS Map**.

If the work order is for a linear equipment record integrated with GIS, right-click, and then choose **View GIS Map** to adjust **From Point** or **To Point** via the work order's map.

To create a customer invoice for the work order (for a asset management services customer contract), right-click, and then select **Create Customer Invoice**. The system then calculates all customer charges for the work order that are associated with the customer contract and generates a customer invoice record.

To create a standard work order from any general work order for easy duplication, right-click on any existing work order, and then click **Create Standard WO**. The system displays the Create Standard WO popup. Enter **New Standard WO**, and then enter a description for the new standard work order. Enter **Organization**, and then click **Submit**.

To view the progress of a work order, right-click on the form, and then choose **Event Log**.

To create a warranty claim for the work order, right-click, and then select **Create Warranty Claim**.

To create a production request with an Unfinished **Status**, enter **Work Order** and **Production Priority**, and right-click on the form, and then choose **Create Production Request**. The system creates a production request with an Unfinished **Status**.

To create a production request with an Approved **Status**, enter **Work Order** and **Production Priority**, and right-click on the form, and then choose **Create Production Order**. The system creates a production request with an Approved **Status**. ERP retrieves the production request.

Defining regular work order activities

After creating work order headers, define the specific work order activities to perform.

Define the trades necessary to perform the work, the specific steps involved, the materials required, and the work duration. Create a labor requisition as necessary. After task completion, indicate that an activity is completed.

If you previously specified a standard work order, the system automatically displays the activities of the standard work order. Modify the information as necessary.

To define regular work order activities:

1 Select **Work > Work Orders**.
2 Select the work order for which to define activities, and then click the **Activities** tab.

3 Click **Add Activity**.

The system automatically populates **Activity** with the next available activity number, populates **Start Date** and **End Date** with the scheduled start date of the work order, and populates **People Required** with a default value of "1."

4 Specify this information:

Activity
Modify the activity number as necessary.

Trade
Specify the trade required to perform the activity.

Estimated Hours
Specify the estimated number of hours required to complete the activity. The system automatically populates **Hours Remaining** with the estimated number of hours remaining for the activity. You may update this field at any time during the life cycle of the work order.

Optionally, specify this information:

Reason For Repair
Specify the reason the equipment needs repair.

Work Accomplished
Specify the work performed on the equipment.

Technician Part Failure
Specify the reason the technician or supplier thinks the equipment failed.

Manufacturer
Specify the Manufacturer/Supplier Code to associate with the equipment.

System Level
Specify the EMRS code identifying the system, e.g., brakes, frame, suspension, needing repair.

Assembly Level
Specify the EMRS code identifying the subsystem needing repair. The values available are based on the selected system-level code.

Component Level
Specify the EMRS code identifying the specific component or part needing repair. The values available are based on the system-level code and assembly-level code.

Warranty
Select if the equipment is under manufacturer warranty. The system automatically selects **Warranty** if there is a warranty associated with the work order header or if there is an active warranty for the code key combination for the work order equipment.

Completed
Select if the activity is completed.

Start Date
End Date
Modify the starting date and ending date for the activity as necessary.

Task Plan
Specify the task plan code for the activity. The system updates the value for **People Required** to correspond with the **Task Plan** as necessary.

Material List
Specify the code identifying the material list that contains the parts needed for the activity.

Percent Complete
Specify the percentage of work that has been completed for the activity.

People Required
Modify the number of people required to perform the activity as necessary.

Task Plan Qty.
Specify the required number of units of the task plan to associate with the activity, and then select the unit of measure for the **Task Plan Qty.** in the adjacent field. For example, a work order activity to pave 100 miles of highway today will indicate a **Task Plan Qty.** of "100" and a unit of measure of "Miles", whereas the same task plan on another day will indicate only 80 miles due to the steep inclines of the stretch of highway being paved on that day.

Hired Labor
Select to indicate that the activity will be completed by an external source.
Note: If the work order is a multiple equipment work order and you select **Hired Labor**, the system enables **Equipment** and it is required.

Labor Type
Select the type of labor needed if you selected **Hired Labor**.
Note: Activity lines only appear on the Create Labor Requisition popup if you have established one or more activities to be hired from an external source by selecting **Hired Labor** and by selecting a valid **Labor Type** on the **Activities** tab.

Supplier
Specify the supplier for the activity.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:
- Enter a specific equipment to which to distribute the hired labor.
- Enter All Equipment to evenly distribute the hired labor to each equipment record on the work order.
- Enter WO Header Equipment to distribute the hired labor to the equipment on the work order header equipment.

Activity Comments
Enter comments or instructions for the activity.

5 Click **Submit**. **Total People Required**, **Total Estimated Hours**, and **Total Hours Remaining** are automatically populated.

Note: If the work order is a multiple equipment work order, the system creates the activity for each **Related Work Order**.

Note: Choose any of the following **Actions**.

- To add and edit comments, click **Add/Edit Comments**.
- To view comments entered for an activity, select the activity for which to view comments, and then click **View PM Activity Comments**.
- To create a labor requisition, click **Create Labor Requisitions**.
- To add deferred activities for equipment, the work order must have equipment with deferred maintenance activities. Click **Add Deferred Activities**.
- To reallocate direct materials, select the activity for which to reallocate direct materials, and then click **Reallocate Direct Materials**.
- To create a warranty claim for the work order activity, select the activity for which to create the warranty claim, and then click **Create Warranty Claim**.
- To view task plan instructions, select the activity for which to view task plan instructions, and then click **View Task Plan Instructions**.
- To add a part line or multiple part lines to a work order by accessing technical documents and drawings stored in Documoto, click **Add Documoto Details**.

  See Adding Documoto details to work order activities and jobs on page 810.

Defining additional costs for work orders

Define additional costs for work orders. Additional costs are charges related to the work order but not to a specific part of service, i.e., non-inventory parts. These records do not affect purchasing.

To define additional costs for work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to define additional costs, and then click the **Additional Costs** tab.
3. Choose one of the following options for **Activity**:
   - Select to display the work order activity or activities in the grid.

   Show All Records
   Select this option if you want to define additional costs for multiple activities on the work order.

4. Choose one of the following options for **Job**:
   - Select to display the job or jobs in the grid.

   Show All Records
   Select this option if you want to define additional costs for multiple jobs on the work order.

5. Click **Add Additional Cost**.
6. Specify this information:

   Cost Description
   Specify a cost description.

Activity
Select an activity. The system automatically populates **Activity** if the work order has only one associated activity and it is not deferred.

Job
Select a job. The system automatically populates **Job** if the work order has only one associated job.

Cost Type
Select one of the following options:
- **Part**
- **Own Labor**
- **Hired Labor**

Date
Specify the date of the additional cost if you use multiple equipment.

Equipment
Specify the equipment for the additional cost if this is a multiple equipment work order. The system automatically populates **Equipment Org.** and **Related Work Order**.

7 Click **Submit**.

Note: Records cannot be deleted on the **Additional Costs** page. Therefore, enter negative costs to make corrections. The negative costs are not validated against the positive posts, i.e., there may be a part cost of 10 and another part cost of -15.

Managing repairs for work orders

Add, modify, or delete repairs for work order activities and jobs. Specify the reason for the repair, the work performed, and the components repaired.

To manage repairs for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to manage repairs, and then click the **Repairs** tab.
3 Click **Add Repair**.
4 Specify this information:

Activity
Select the activity for which to add repairs.

Job
Select the job of the activity for which to add repairs if applicable.

Reason for Repair
Specify the reason the repair is necessary.

Work Accomplished
Specify the work performed towards the repair.

Include on Warranty Claim
Select if the repair is covered under warranty.

Completed
Select if the repair has been completed.

Percent Complete
Specify the percentage of completion for the repair.

System Level
Specify the system on which the repair is to be completed.

Assembly Level
Specify the assembly on which the repair is to be completed.

Component Level
Specify the component on which the repair is to be completed.

Component Location
Specify the component location on which the repair is to be completed.

Repair Comments
Enter any comments on the repair as necessary.

5 Click **Submit**.

Creating a labor requisition

Create a labor requisition from a work order activity to hire labor for an activity from an external source. To create a labor requisition for a work order activity, select **Hired Labor**for the **Activity** and specify a **Labor Type**. The system then displays each hired labor activity on the Create Labor Requisition popup enabling you to select the activities for which to create a labor requisition.

To create a labor requisition:

1 Select **Work > Work Orders**.
2 Select the work order for which to create a labor requisition, and then click the **Activities** tab.
3 Click **Create Labor Requisition**.
4 Specify this information:

Requisition Description
Enter a description of the requisition.

Store
Enter the **Store** requesting the labor.

Requested By
Enter the employee requesting the labor.

5 Select the activity for which to create a labor requisition. You may select multiple activities as necessary.

6 Click **Create Requisition**. **Equipment** is populated with All Equipment (on the requisition header), **Activity**, **Labor Type**, **Task Plan**, **Supplier** and **Supplier Org.**

Note: If you are creating a labor requisition for a multiple equipment work order, the system creates a requisition line for each selected activity and copies the **Equipment** value selected for the hired labor activity to the requisition line.

The requisition/line information is applied only to the activity lines on the multiple equipment header and not to the **Related Work Order** activities.

7 Click **Cancel**.

Scheduling labor for work orders

Schedule labor hours for each work order activity by trade, by shift, and/or by employee.

Note: Hours can only be scheduled for work orders with activities.

To schedule labor for work orders:

1 Select **Work > Work Orders**.

2 Select the work order for which to schedule labor, and then click the **Schedule Labor** tab.

3 Click **Add Schedule**.

The system automatically populates **Activity-Trade** with the activity-trade performing the work for the selected work order. The system populates **Scheduled Date** with the scheduled start date of the work order activity; **Scheduled By** with the name of the current user; **Completed** with the current setting of the **Completed** checkbox for the selected **Activity-Trade**; **Act. Est. Hours** with the number of hours planned for the work order activity; **Act. Sched. Hours** with the number of hours scheduled for the work order activity; and **Act. Actual Hours** with the total hours booked to date for the work order activity. When the work order activity is defined as requiring tools, the system automatically selects **Tools** for new and existing labor schedules.

Note: If the work order has multiple activities, you must select the **Activity-Trade** to schedule from the drop-down list.

If the project on the work order header is flagged as **Frozen**, you may not add or delete labor schedules, and the system displays all fields as read-only.

4 Enter one of the following:

Employee
Specify the personnel to schedule to perform the work. The system automatically populates the employee description and **Department**.

Crew
Specify the crew to schedule to perform the work.

Scheduled Date
Specify the date on which to schedule the work. You cannot schedule work for any date earlier than today's date.

Scheduled Hours
Specify the estimated number of hours to complete the work. The number of hours must be between 0 and 24.

Start Time/End Time
Specify the scheduled start time and end time of the work order activity.

Shift
Specify the shift to perform the activity on the scheduled date.

5 Specify this information:

Maintenance Equipment
Enter the auxiliary equipment needed for the task, i.e., the equipment is not used in production. The system automatically populates **Equipment Org.**

6 Enter additional comments about the schedule.

7 Click **Submit**.

Note: You may delete an existing labor schedule that is scheduled for the current date or later if you have made an error entering the data and if you have access rights for deleting the labor schedule. Also, you may only delete labor schedules that have not been frozen or completed.

Copying an existing labor schedule

You may copy an existing labor schedule and update it as necessary.

To copy an existing labor schedule:

1 Select **Work > Work Orders**.

2 Select the work order for which to copy a labor schedule, and then click the **Schedule Labor** tab.

3 Select the labor schedule to copy, and then click **Copy Schedule**.

Note: The system automatically populates **Employee** and **Activity-Trade** with the employee and activity-trade performing the work for the selected work order. The system also populates **Act. Est. Hours** with the number of hours planned for the work order activity; **Act. Sched. Hours** with the number of hours scheduled for the work order activity; and **Act. Actual Hours** with the total hours booked to date for the work order activity.

4 Specify this information:

Employee
Specify the personnel to schedule to perform the work. The system automatically populates the employee description to correspond with the selected employee.

Scheduled Date
Specify the date on which to schedule the work. You cannot schedule work for any date earlier than today's date.

Scheduled Hours
Specify the estimated number of hours to complete the work. The number of hours must be between 0 and 24.

5 Click **Submit**.

Adding equipment to work orders to split work order costs

Add equipment to work orders to split costs across equipment on the work order. When creating a work order, you must specify an equipment on the work order header. However, you can add additional equipment to the work order (including the equipment on the header) to which to distribute work order costs.

When applying work order costs to multiple equipment work orders (for booked labor, issue parts, etc.), specify a value for **Equipment** on forms within the system where work order costs are accrued to indicate whether the costs should be distributed evenly across all work order equipment, a specific equipment, or only the work order header equipment.

There are two types of work orders related to the addition of multiple equipment records to work orders for distributing work order costs: a "multiple equipment work order" and a "multiple equipment child (MEC)" work order. There are many references to these two types of work orders in the user documentation. See the following descriptions for clarification of the two types:

- **Multiple equipment work orders**
  Multiple equipment work orders are work orders to which at least one equipment has been added on the **Equipment** page of the **Work Orders** form to distribute the work order costs across the equipment records. When the first equipment record is added to the **Equipment** page of the **Work Orders** form, **Multiple Equipment** is automatically selected on the work order header.

- **Multiple equipment child (MEC) work orders**
  An MEC work order is the work order type that is assigned to a **Related Work Order** that is automatically created for each equipment record added to the **Equipment** page of the **Work Orders** form. Upon saving the equipment to the work order, the **Related Work Order** (of type Multiple Equipment Child) is generated for the equipment. The **Related Work Order**, which can be viewed on many forms within the system, then enables you to track work order costs at both the work order and equipment level.

For example, if you add EQUIP-001 and EQUIP-002 to the **Equipment** page of the **Work Orders** form, a **Related Work Order** of type MEC is generated for both EQUIP-001and EQUIP-002 when you save the work order, e.g., work order numbers 50001 for EQUIP-001 and 50002 for EQUIP-002.

Note: In the user documentation, all references to "MEC work order" or "related work order" are to the type of work order that is automatically created for equipment records added to the **Equipment** page of the **Work Orders** form.

By default MEC work orders are not displayed on the **List View** page of the **Work Orders** form. You must use the Dataspy to access MEC work orders.

To add equipment to work orders to split work order costs:

1 Select **Work > Work Orders**.

2 Select the work order for which to add equipment, and then click the **Equipment** tab.

Note: If you selected a work order that already has child work orders on the **Children** page of the **Work Orders** form and are not MEC work orders, all of the information on the **Equipment** page is protected.

If the PMRVCTRL installation parameter is set to YES and the work order on the header is a PM work order, then all of the fields on the **Equipment** page are protected. You cannot add or remove a PM work order equipment from the work order if PM Revision Control is in use.

If the ROUTEEOB installation parameter is set to Y, and the parent work order is associated with an equipment route, then all of the route equipment and corresponding work orders are displayed in the grid, and they are protected.

3 Click **Add Equipment**.

4 Specify this information:

Equipment
Specify the equipment to add to the work order.
Note: You can retrieve multiple equipment to the work order using the **Equipment** lookup.

Click **Add WO Header Equipment** to add the equipment on the work order header to the Equipment list to distribute costs to the header equipment. The work order costs are not automatically distributed to the equipment on the work order header. You must add the header equipment to the Equipment list to include the header equipment in the work order cost distribution.

Click **Import Route Equipment** to select an existing equipment route from which to populate equipment.

Warranty is automatically selected on each MEC work order and each activity if the **Equipment** on the MEC work order is under warranty.

Duplicate equipment records are only allowed to be added to the Equipment list if the parent work order is route-based and the ROUTEEOB installation parameter is set to Y.

Department
Specify the department of the equipment.

Location
Specify the location of the work to be performed.

Cost Code
Specify the cost code of the work order.

From Point
Specify the point on the linear equipment record from which to begin the reference.

Ref. Description
Specify the description for the **From Point** reference.

Geographical Ref.
Specify the geographical reference for the **From Point** reference.

To Point
Specify the point on the linear equipment record from which to end the reference

Ref. Description
Specify the description for the **To Point** reference.

Geographical Ref.
Specify the geographical reference to the **To Point** reference.

Inspection Direction
Specify the direction in which to begin the inspection on the linear equipment.

Flow
Specify the direction in which the travel flows along the linear equipment, e.g., cars traveling on the linear equipment record for Highway 185 are traveling in the North-South flow direction.

5 Optionally, select the **Safety** check box if this work requires special safety precautions.
6 Optionally, select the **Warranty** check box to indicate the equipment is covered under manufacturer warranty.
7 Click **Submit**.
   - The following fields are populated on the MEC work order(s) from the parent work order: **Organization**, **Description**, **Type**, **Status**, **Duration**, **Priority**, **Problem Code** , **Entered By** , **Sched. Start Date**, **Date Reported**, **Class**, and **Class Org.**
   - The following fields are populated on each MEC work order from the **Equipment** on the MEC work order: **Equipment**, **Type**, **System Status**, **Equipment Type**, **Equipment System Type**, **Equipment**, **Equip. Organization**, **Location**, **Location Organization**, **Department**, **Cost Code** , **Criticality**, and **Safety**.
   - **Parent Work Order** and **Route Parent** (in the database only) are automatically populated with the work order number (on the header).
   - The following fields are populated from the activities on the parent work order to each MEC work order: **Activity**, **Start Date**, **Trade**, **Task**, **Hired Labor** , **People Required**, **Duration**, **Task Qty. (UOM)**, **Reason for Repair**, **Work Accomplished**, **Technician**, **Part Failure**, **Manufacturer**, **System Level**, **Assembly Level**, **Component Level**, **Supplier**, and **Supplier Org.**

   Note: Work order planning information is not copied to related work orders. Therefore, **Estimated Hours**, **Hours Remaining**, and **Task Qty.** are set to 0 for all the activities on any created related work order(s).

   Add additional equipment to the work order as necessary.

   If the AUTODMEC installation parameter is set to YES, then the MEC work order is deleted from the system altogether.

Importing equipment from an existing equipment route to work orders

Import route equipment to quickly add equipment to a work order.

To import equipment from an existing equipment route to work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to import route equipment, and then click the **Equipment** tab.
3 Click **Import Route Equipment**.
4 Select the route from which to import the route equipment, and then click **OK**.

Note: If the equipment on the selected equipment route already exists in the list of equipment added to the work order, the system does not retrieve the duplicated equipment record to the work order.

See Adding Equipment to Work Orders to Split Work Order Costs on page 789.

If the equipment on the selected equipment route is duplicated within the route itself, the system only retrieves one record for the duplicated equipment to the equipment list for the work order.

If no equipment are associated with the selected equipment route, the system will not add any equipment records to the list of equipment on the work order.

Tracing linear route equipment to add to work orders

Create multiple equipment child work orders for selected linear equipment and any related equipment by adding them to existing work orders. Use the relationships previously defined for linear equipment including segments, right of ways, branch points and routes to trace from route to route, start a new trace, or select related equipment to include in the MEC work orders to be generated. Equipment is considered related when its record is associated (linear reference) with the specified route.

To trace route equipment for work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to trace route equipment, right-click on the work order record, and then select **Trace Route**.
3. Specify the **Route** for which to trace the linear equipment.
4. Specify this information to establish the physical length or distance on the route where the work will be performed:

   From Reference Point
   Specify the origin or starting point on the route where the work will begin.

   To Reference Point
   Specify the ending point on the route where the work will conclude.

5. Optionally, in the Reference Point Details section, specify this information to further pinpoint the reference points on the route where the work will be performed:

   From Offset
   Specify the offset of the point of origin, i.e, the amount in distance it is offset from the starting point of the work to the reference point.

   From Offset %
   Alternatively, specify the offset indirectly by entering a percentage of the distance between two reference points.

   From Offset Direction
   Specify the direction of the offset relative to the origin point, e.g., North or South.

   To Offset
   Specify the ending point of the offset of the segment, i.e, the amount of distance it is offset from the ending point of the linear equipment record.

To Offset %
Specify the percentage the ending (to) point is offset.

To Offset Direction
Specify the direction the ending point is offset from the linear equipment record, e.g., East to West.

6 Optionally, in the Additional Reference Details section, specify this information to map the coordinates where the work will begin:

From X Coordinate
Specify the X coordinate on the map for the starting (from) point of the work, e.g, the origin of the work.

From Y Coordinate
Specify the Y coordinate on the map for the starting (from) point of the work, e.g., the origin of the work.

From Latitude
Specify the latitude on the map for the starting (from) point of the work.

From Longitude
Specify the longitude on the map for the starting (from) point of the work.

From Relationship Type
Specify the relationship type of the starting (from) point of the work, e.g., parallel, perpendicular, crossing, overpass.

From Horizontal Offset
Specify the horizontal distance to the work, e.g., the fire hydrant could be 40 feet away from the edge of the road with the starting point being the fire hydrant.

From Horizontal Offset Type
Specify the type of horizontal offset, e.g., North, South, Right, Left, etc.

From Vertical Offset
Specify the vertical distance to the work, e.g., the traffic light could be hanging 20 feet above the road with the starting point being the traffic light.

From Vertical Offset Type
Specify the type of vertical offset, e.g., Above, Below, Underground, etc.

7 Optionally, in the Additional Reference Details section, specify this information to map the coordinates where the work will end:

To X Coordinate
Specify the X coordinate on the map for the ending (to) point of the work.

To Y Coordinate
Specify the Y coordinate on the map for the ending (to) point of the work.

To Latitude
Specify the latitude on the map for the ending (to) point of the work.

To Longitude
Specify the longitude on the map for the ending (to) point of the work.

To Relationship Type
Specify the relationship type of the ending (to) point of the work, e.g., parallel, perpendicular, crossing, overpass.

To Horizontal Offset
Specify the horizontal distance to the work, e.g., the fire hydrant could be 40 feet away from the edge of the road with the ending point being the edge of the road.

To Horizontal Offset Type
Specify the type of horizontal offset, e.g., North, South, Right, Left, etc. of the ending point or to point of the offset.

To Vertical Offset
Specify the vertical distance to the work, e.g., the traffic light could be hanging 20 feet above the road with the ending point being the road.

To Vertical Offset Type
Specify the type of vertical offset, e.g., Above, Below, Underground, etc. of the ending point or to point of the offset.

8 Click **Submit**. An MEC work order is created for each record in the grid.

9 Optionally, click **Actions**, and then select one of the options below to modify the trace:

Option	Description
New Trace	Start a new trace along another linear equipment record
Continue Trace	Continue the trace of the selected record in the grid and branch onto another related linear equipment (route)
Add All Routes of Right of Way	Add all of the equipment records marked as **`Route`** that are attached to the **`Right of Way`**, providing the WO header equipment is a right of way
Add Related Equipment	Add related equipment records for the selected route to the list of MEC work orders to be created

Associating qualifications with work order activities

Associate qualifications of trades and tasks with work order activities to establish the qualifications required for employees performing work. Qualification enforcement is determined by the WOQUAL installation parameter.

When you select a trade and/or a task code for a work order activity, any qualifications associated with the selected trade and/or task to the work order activity are automatically retrieved. You can also associate qualifications directly with the work order activity to enforce additional qualification requirements for the work order activity that are not inherited from the trade or task.

To associate qualification with work order activities:

1 Select **Work > Work Orders**.
2 Select the work order with which to associate qualifications, and then click the **Qualifications** tab.
3 Click **Add Qualification**.

   Activity-Trade, **Task**, and **Source** are automatically populated.

   Note: The activity-trade is only populated if one activity-trade exists. When two or more exist, **Activity-Trade** is empty.

4 Specify this information:

   Activity-Trade
   Select the appropriate activity-trade for the work order.

   Qualification
   Specify the qualification to associate with the work order activity. The description of the qualification and the qualification **Organization** are automatically populated.
   Note: Removed is selected for any qualifications that are retrieved to the work order activity from a task/trade to indicate that the qualification is no longer associated with its original **Source** (the trade record on the **Trades** form or the task record on the **Tasks** form). You can only delete work order activity qualifications inherited from a trade/task for which **Removed** is selected or that are activity specific (not inherited from a trade/task).

5 Click **Submit**.

Associating ERP resources to work orders

Associate ERP resources to selected work orders to communicate equipment downtime for any resources impacted when the selected equipment is taken down for maintenance work.

A resource is a line of products, equipment, or materials used to complete a job.

Note: Resource must be selected on the **Record View** page of the selected equipment to associate resources. If the selected equipment **Status** is **Withdrawn** the system will not add or modify resources.

To associate ERP resources to work orders:

1 Select **Work > Work Orders**.
2 Select the work order with which to associate ERP resources, and then click the **Resources** tab.
3 Click **Add Resource**.
4 Specify this information:

   Resource
   Specify the resource to associate to the selected work order.

   Operation Sequence
   Specify the order in which this resource will be impacted when work is performed on the equipment.

   Cool-down Time (Hours)
   Specify the time it takes in hours for the resource line to cool down before performing work orders.

Warm-up Time (Hours)
Specify the time it takes in hours for the resource line to warm up before normal use.

Downtime (Hours)
Specify the expected downtime in hours for the selected work order.

Offset
Select to designate this resource line is impacted by down equipment which will overlap with the previous resource.

Offset Value (Hours)
Specify the amount of time in hours in which the resource impacted by down equipment overlaps the previous resource.

5 Click **Submit**.

Note: To select resources from the complete list of Active resources, click **All Resources**. Select the resource, and then click **Submit**.

To refresh resources associated with the work order, click **Refresh Resources**.

Importing unlinked qualifications

Import additional trade and task qualifications that are not already linked to the work order activity.

To import unlinked qualifications:

1 Select **Work > Work Orders**.
2 Select the work order for which to import unlinked qualifications, and then click the **Qualifications** tab.

Note: You must enter an activity for the work order before you associate a qualification.

3 Click the **Actions** button, and then select **Import Unlinked Qualifications**.
4 Specify this information:

Activity
Select the activity defined for the selected work order.

Job
Select the job defined for the activity.

5 Choose one of the following options:

Import From Trade
Click to import trade qualifications. Any qualifications for the trade that are not already linked to this work order activity are retrieved and **Source** is populated with Trade for each retrieved qualification. **Unlinked Trade Qualifications** is automatically populated with the number of qualifications associated with the trade selected for the work order activity that are not already linked to the work order activity.

Import From Task Plan
Click to import task qualifications. Any qualifications are retrieved for the task that were not previously linked to this work order activity and **Source** is populated with Task Plan for each retrieved qualification. **Unlinked Task Qualifications** is populated with the number of qualifications associated with the task selected for the work order activity that are not already linked to the work order activity.

Booking labor for work orders

Record the number of hours that employees worked for each work order activity. You may book labor hours before closing work orders or until a specified number of days after closing work orders.

Note: Hours can only be booked against work orders with activities.

To book labor for work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to book labor, and then click the **Book Labor** tab.
3. Click **Add Labor**.
4. Specify this information:

   Activity-Trade
   Select the activity-trade performing the work for which to book labor hours.
   Note: You can also select the task for which the work is performed to differentiate between multiple activities on the work order that may be assigned to the same trade.

   Specify one of the following:

   Employee
   Specify the personnel performing the work for which to book hours.

   Crew
   Specify the crew performing the work for which to book hours.

   Department
   Specify the department where the activity was performed.

   Trade
   Specify the trade that performed the activity.

   Date Worked
   Specify the date on which the work was performed.

   Type of Hours
   Select the type of hours worked (e.g., normal rate, overtime rate, etc.).

   Rate
   Specify or modify the hourly pay rate for the employee, trade, or crew performing the work. If you defined a trade rate for the selected employee or trade, **Rate** is automatically populated with the

appropriate hourly rate. If you selected a **Crew**, **Rate** is not populated; when you submit the booked labor, the trade rate for each employee on the crew is reviewed.

If you defined a trade rate for the selected **Employee**, **Rate** is populated with the employee trade rate. However, if you did not define trade rates for the selected **Employee**, **Rate** is populated with the trade rate defined for the selected **Trade**. If you enter a **Rate** for the selected **Crew**, the system overrides the trade rate defined for each employee on the crew if the calculated rate is zero.

Hours Worked
Specify the number of hours spent performing the work.

Start Time/End Time
Specify the scheduled start time and end time of the work order activity. If the end time will span beyond midnight, two booked labor records will be created.
Note: The **`WOBKMIDN`** organization option must be set to Yes to book labor across midnight. Contact your system administrator for more information.

Equipment
Specify one of the following options if the work order is a multiple equipment work order:

- Specify a specific **Equipment** record to apply the booked labor to the selected **Equipment** and its corresponding related work order.
  Note: If you are making corrections to booked labor for a multiple equipment work order and you select All Equipment or a specific equipment record for **Equipment**, the booked hours are split and the correction is applied to all the equipment on the work order or the selected equipment.
- Specify **`All Equipment`** to evenly split the booked labor to each equipment record on the work order for the selected work order and activity. Upon saving the transaction, labor booking records are created and applied to each related work order and selected activity. The number entered for **Hours Worked** is divided by the number of equipment records added on the **Equipment** tab of the **Work Orders** page to determine the booked labor to apply to each equipment. The **Rate** applicable to the multiple equipment work order is also applied to all of the MEC work orders.
  Note: Any remainder of the **Hours Worked** are applied to the last equipment record on the **Equipment** tab of the **Work Orders** page.

  If you select **`All Equipment`** for **Equipment** and at least one of the related work orders has a Completed status (or equivalent user status), a message is displayed enabling you to select whether to split the labor hours against only equipment with open related work orders or against all equipment, regardless of whether the related work orders are Open or Completed (or their user-status equivalents).

  Also, the setting of the `COMDAYS` installation parameter is disregarded when posting labor booking transactions related work orders if you select **`All Equipment`**.
- Specify **`WO Header Equipment`** to apply the booked labor to the work order header only.

5 Click **Submit**.

Note: After submitting the transaction, the original booked labor transaction entered when the **Hours Worked** are split across multiple equipment records is not displayed. Instead, the booked labor transactions for each equipment to which the labor was split are displayed.

Booking vendor hours for work orders

Record the number of hours that vendors worked for each work order activity. You may book vendor hours before closing work orders or until a specified number of days after closing work orders.

Note: Hours can only be booked against work orders with activities.

Hours cannot be booked against work orders with a system status of Q (Work Request) or work orders that are part of a scheduling session.

The setting of the COMDAYS installation parameter indicates the number of days you can book hours after a work order is completed. If the number of days between the completion date of the work order and the current system date is greater than the value specified for COMDAYS, you are not allowed to book hours for a work order.

To book vendor hours for work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to book vendor hours, and then click the **Book Vendor Hours** tab.
3. Click **Add Vendor Time**.
4. Specify this information:

   PO-Line
   Specify the PO-line for which to book vendor hours. The system automatically populates the purchase order description, **Type**, **Ordered**, and **Received To Date** to correspond with the selected purchase order line item.

   Depending on the **Type** of the purchase order line, the system also automatically populates or protects the following additional fields.

   If **Type** is ST (Hours from service), the system automatically populates **Activity-Trade**, **Act. Estimated Hours**, and **Act. Hours Remaining**. The system automatically protects **% Received** and **Received**. The system automatically populates **Rate** based on the selected **PO-Line**. You may modify **Date Worked** and **Hours Worked** as necessary.

   If **Type** is ST (Hours from service) and the work order is a multiple equipment work order, the system protects and populates **Equipment**, **Equipment Org.**, and **Related Work Order** from the selected **PO-Line**.

   If **Type** is SF (Fixed price), the system automatically populates **Activity-Trade**, **Act. Estimated Hours**, and **Act. Hours Remaining**. The system automatically clears and protects **Hours Worked** and **Rate**. The system automatically populates **Received** based on the selected **PO-Line**. You may modify **Date Worked**, **% Received**, and **Received** as necessary.

   If **Type** is SF (Fixed price) and the work order is a multiple equipment work order, the system protects and populates **Equipment**, **Equipment Org.**, and **Related Work Order** from the selected **PO-Line**.

   If **Type** is SH (Contractor hire), the system automatically clears and protects **% Received**, **Received**, and **Rate**. The system automatically populates **Received** based on the selected **PO-Line**. You may modify **Date Worked**, **Hours Worked**, and **Activity-Trade** as necessary.

   If **Type** is SH (Contractor hire) and the work order is a multiple equipment work order, the system enables **Equipment** and it is required. The system automatically selects **All Equipment** for **Equipment**, and protects **Equipment Org.** and **Related Work Order**. If you select **WO Header Equipment** for **Equipment**, the system populates **Related Work Order** with the selected work order. If you select a specific **Equipment**, then the system populates **Equipment Org.** and **Related Work Order** from the selected **Equipment**.

Employee
Specify the personnel performing the work for which to book vendor hours. The system automatically populates the employee description in the adjacent field.
Note: The setting of the BOOPLAN installation parameter determines the manner in which the system populates information from employee records and activity-trade records for booked hours.

Date Worked
Specify the date the hours were worked.

Type of Hours
Specify the type of hours worked (e.g., normal rate, overtime rate, etc.).

Hours Worked
Specify the number of hours spent performing the work.

If you enter a positive value for **Hours Worked**, the system populates **Start Time** and **End Time**. If you enter a negative value or delete the **Hours Worked**, then the system clears **Start Time** and **End Time**.

Note: You can only book vendor labor hours against an MEC work order from the parent multiple equipment work order.

Rate
Specify the hourly pay rate for the vendor performing the work.

Units
Specify the quantity of the task being ordered. For example, if you entered 3 hours as the **Estimated Hours** for the **Task**, then the 3 hours represents one unit.

If no value is entered for **Hours Worked**, then the system calculates the **Hours Worked** based on the **Units** entered as follows:

If **Type** is SH and you enter a value for **Units**, the system populates **Hours Worked** based on the following equation:

Hours Worked = (Units/Act. Units) x **Act. Estimated Hours**

If **Type** is **SF** and you enter a value for **Units**, then the system populates **Hours Worked** based on the following equation:

Hours Worked : Received = (Units/Act. Units) x Ordered

Enter the scheduled **Start Time** and **End Time** of the work order activity.

Activity-Trade
Select the activity-trade performing the work for which to book vendor hours.

The system automatically populates **Act. Units** and the corresponding unit of measure, **Act. Estimated Hours**, **Act. Hours Remaining**, **Department**, and **Trade**.

Equipment
Specify one of the following options if the work order is a multiple equipment work order:

All Equipment
Select **All Equipment** to evenly split the booked vendor hours to each equipment record on the work order for the selected work order and activity. Upon saving the transaction, the system creates labor booking records and applies them to each related work order and selected activity. The system divides the number entered for **Hours Worked** by the number of equipment records added on the

Equipment page to determine the booked labor to apply to each equipment. The **Rate** applicable to the multiple equipment work order is also applied to all of the MEC work orders.
Note: **Equipment** is populated with **All Equipment** if the **Type** is SH, otherwise the system populates **Equipment** from the associated **PO-Line**.

The system automatically applies any remainder of the **Hours Worked** to the last equipment record on the **Equipment** tab of the **Work Orders** page.

If you select **All Equipment** for **Equipment** and at least one of the related work orders has a Completed status (or equivalent user status), the system displays a message enabling you to select whether to split the labor hours against only equipment with open related work orders or against all equipment, regardless of whether the related work orders are Open or Completed (or their user-status equivalents).

Also, the system disregards the setting of the COMDAYS installation parameter when posting labor booking transactions on related work orders if you select All Equipment.

WO Header Equipment
Select **WO Header Equipment** to distribute the booked vendor hours to the selected **Work Order** only.

Enter a specific **Equipment** record to distribute the booked vendor hours to the selected **Equipment** and the corresponding **Related Work Order** only.

Note: Although **Equipment** is only editable when the **Type** is SH, the system still distributes costs for the booked vendor hours to the **Equipment** populated from the **PO-Line** for Type SF and ST.

If you are making corrections to booked labor for a multiple equipment work order and you select All Equipment or a specific equipment record for **Equipment**, the system also splits the booked hours and applies the correction to all the equipment on the work order or the selected equipment.

See Adding equipment to work orders to split work order costs on page 789.

% Received
Specify the percentage of time received. You may only enter this percentage if the **Type** is SF (Fixed price).

When you enter a value for **% Received**, **Received** is populated based on the following equation:

Received = (% Received/100) x Ordered

Received
Specify the value of time received.

5 Click **Submit**.

Booking labor by employee

Book labor by employee to record the hours required for an employee to perform work orders and non-WO time.

To book labor by employee:

1 Select **Work > Process > Book Labor By Employee**.
2 Specify the employee code for which to book hours.

The employee's name is automatically populated in the adjacent field, as well as **WO Organization**, **Date Entered**, **Equipment**, **Equipment Org.**, **Related Work Order**, **Act. Estimated Hours**, **Act. Hours Remaining**, **Act. Regular Hours Worked**, and **Act. OT Hours Worked**.

3 Click **Add Labor**.

4 Specify this information:

WO-Activity
Specify the work order performed by the employee, and then enter the work order activity in the adjacent field. The description for the selected work order is automatically populated.
Note: You cannot book hours for work requests or PMs.

Department
Specify the department associated with the work order.

Trade
Specify the trade associated with the work order.

Date Worked
Specify the date the work order was performed.

Type of Hours
Specify the type of hours completed for the work order.
Note: Use Non-WO Time to record sick, vacation, or travel time.

Rate
Specify or modify a pay rate for the employee performing the work order. **Rate** is automatically populated for the employee if a trade rate or employee rate are established in the system.
Note: **Rate** can only be modified if the default rate is 0 or null.

If you make changes to **Department**, **Trade**, or **Type of Hours**, the value of **Rate** is edited.

Hours Worked
Specify the number of hours the work order was performed.

Start Time/End Time
Specify a start time and end time for the work order. If the end time will span beyond midnight, two booked labor records will be created.
Note: The **`WOBKMIDN`** organization option must be set to Yes to book labor across midnight. Contact your system administrator for more information.

5 Click **Submit**.

Note: If the work order is a multiple equipment child work order, **Equipment**, **Equipment Org.**, and **Related Work Order** are automatically populated.

Booking labor for work orders in a batch

Book labor to work orders during batch work order updates.

To book labor for work orders in a batch:

1 Select **Work > Process > Batch Work Order Updates**.

2 Specify this information:

Organization
Specify an organization for the work orders to update.

Allow Trade Rate to be Zero
Select to allow the system to apply a zero trade rate if the system does not find a value for trade rate.

Include Transactions on Completed Multiple Equipment Child Work Orders
Select to include transactions on multiple equipment child work orders that are both released and completed.

Work Order
Specify the code identifying the work order for which to book labor.

Activity
Specify the activity.

Employee
Specify the employee.

Department
Specify the department.

Trade
Specify the trade.

Date Worked
Specify the date the work order was performed.

Type of Hours
Specify the type of hours completed for the work order.

Hours Worked
Specify the number of labor hours performed for the work order.

Equipment
Specify the equipment used for the work order. The system automatically populates **Equipment Org.** and **Related Work Order** if you selected **Equipment**.
Note: If you edit **Equipment**, the system clears the values for **Equipment Org.** and **Related Work Order**.

Start Time
Specify the start time for the work order.

End Time
Specify the end time for the work order.

3 Click **Update Work Order**. The system automatically populates **Error Message**.

Note: Click **Copy Line** to copy the information from the currently selected row to the next available row.

Click **Clear Line** to delete the information from the selected row.

Defining nonconformities for work orders

Define nonconformities for a work order. Nonconformities reference an equipment and can be tracked through re-inspections.

To define nonconformities for work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to define nonconformities, and then click the **Nonconformities** tab.
3. Specify this information:

   Equipment
   Specify the equipment associated with the nonconformity.

   Type
   Optionally, specify the type of nonconformity.

   Status
   Specify the status of the nonconformity.

   Severity
   Optionally, specify the severity of the nonconformity.

   Intensity
   Optionally, specify the intensity of the nonconformity.

   Size
   Optionally, specify the size of the nonconformity.

   Importance
   Optionally, specify the importance of the nonconformity.

   Priority
   Optionally, specify the priority of the nonconformity.

   Closed
   Select if the nonconformity no longer needs attention. The nonconformity will not be included in any more re-inspections.

   Repaired
   Select if the nonconformity has been repaired.

4. Click **Submit**.
   a. Optionally, click **Import Nonconformities** to import nonconformities from the selected equipment for re-inspection or repair.
   b. Optionally, click **Add/Edit Comments** to add or edit comments for the nonconformity.
   c. Optionally, click **Add/Edit Documents**to add or edit documents for the nonconformity.
   d. Optionally, click **Update Status** to change the status of one or more nonconformities.

Importing nonconformities to work orders from equipment

Import nonconformity records from selected equipment to a work order header for repair or re-inspection.

To import nonconformities to work orders from equipment:

1. Select **Work > Work Orders**.
2. Select the work order to which to import nonconformities, and then click the **Nonconformities** tab.
3. In the **Actions** menu click **Import Nonconformities**.
4. Specify this information:

   Equipment
   Select the equipment from which to import nonconformity records.

   Nonconformity
   Specify one or more nonconformities to import to the work order for re-inspection or repair.

5. Optionally, select the **For Repair** check box to flag the nonconformity for repair on the work order. Otherwise the nonconformity is flagged for re-inspection.
6. Click **Submit**.

Changing the status of nonconformities on work orders

Change the status of one or more nonconformities or nonconformity observations attached to the work order header.

To change the status of nonconformities on work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to change the status of nonconformities, and then click the **Nonconformities** tab.
3. In the **Actions** menu click **Update Status**.
4. Specify this information:

   Record Type
   Select nonconformity or nonconformity observation.

   From Status
   Specify the beginning status of the nonconformity or nonconformity observation you are changing.

   To Status
   Specify the status to which to change the nonconformity or nonconformity observation.

5. Click **Submit**.

Managing tools for work orders

Add, delete, modify, or view lists of tools associated to work order activities and jobs. Using the tool records, create planned tools for work orders, scheduled tools for work orders, or both.

Manually add tools to work order activities that do not have an associated task plan, or to work order activities for which the task plan is not enabled for enhanced planning.

View tools associated to the work order task plan if the task plan is enabled for enhanced planning.

To manage tools for regular work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to manage tools, and then click the **Plan Tools** tab.
3. Select the **Activity** for which to manage tools.

   Note: If **Job** is set to **Show All Records**, **Job** is automatically populated, protected, and set to **Show All Records**.
4. Select the **Job** of the activity for which to manage tools.
5. Click **Add Tool**.
6. Specify this information:

   Activity
   Select the activity for which to manage tools. **Job** is automatically populated.

   Tool
   Enter the tool to add to the work order. The tool description and **Tool Org.** are automatically populated.

   Hours Requested
   Enter the number of hours estimated to use the tool to complete the activity.

   Qty. Required
   Enter the tool quantity estimated to complete the activity. **Total Hours Required** and **Activity Duration** are automatically populated.

7. Click **Submit**.

Viewing and entering results of checklists for work orders

View a checklist for a work order activity to verify the progress or completion of the checklist. Alternately you may enter results for a checklist of a work order activity. To enter results for checklist items associated to the work order, the work order must have a status of **Released**.

To view and enter results of checklists for work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to view checklists, and then click the **Checklist** tab.
3. Optionally, select the work order activity for the checklist item, or select **Show All Records** to display all of the work order activity records that are not flagged as deferred but that have an associated checklist.
4. Optionally, select the specific job of the work order activity for the checklist item, or select **Show All Records** to display all of the job records for the work order activity that are not flagged as deferred but that have an associated checklist.
5. Specify this information:

Activity
Specify the work order activity for which to view checklists.

6 View the information.

7 Specify results of the checklist based on the checklist item:

Completed
Select the check box if **Type** is **Checklist Item**.

Select **Yes** or **No** if **Type** is **Question**.

Enter **Finding** if **Type** is **Qualitative**.

Enter **Value** if **Type** is **Quantitative** or **Meter Reading**.

Enter **Finding** and **Value** if **Type** is **Inspection**.

Select **OK** or **Repairs Needed** if **Type** is OK/Repair Needed.

Notes
Specify any relevant notes for the checklist item results.

Final Occ.
Select the check box if the results entered represent the final occurrence of the specific checklist item. This only applies to repeating checklist items.

Follow-up
Select the check box for specific checklist items to later generate follow-up work orders for the checklist item.

8 Click **Create Follow-up WO** to generate follow-up work orders for previously entered results, where **Follow-up** is selected.

9 Optionally, click **View Comments** to view comments related to the task plan or job plan of the work order activity.

10 Optionally, click **View Checklist Item Comments** for a selected checklist line to view the comments for that particular checklist item.

11 Optionally, click **View Documents** to view the documents related to the task plan or job plan of the work order activity.

12 Optionally, click **Add/Edit Checklist Item Documents** to add or edit the checklist item documents associated to the selected checklist item.

13 Optionally, click **Create Deferred Maintenance** to generate deferred maintenance activities for previously entered results, where **Follow-up** is selected and **Follow-up Work Order** and **Deferred Maintenance No**. are still blank. For every checklist item selected, an activity is added to the Deferred Maintenance list, e.g., if the checklist item references a task plan, then the task plan related data is copied to the deferred maintenance activity.

14 Optionally, click **Linear Location Details** to specify and adjust location details for linear equipment on checklists or inspection records.

15 Click **Submit**.

Identifying detailed location information for equipment on checklists

Identify, set, and adjust detailed location information of linear equipment on checklists and inspections, using linear references associated to the equipment.

To identify detailed location information for equipment on checklists:

1. Select **Work > Works Orders**.
2. Select the work order for which to view checklists, and then click the **Checklist** tab.
3. Optionally, select the work order activity for the checklist item, or select **Show All Records** to display all of the work order activity records that are not flagged as deferred but that have an associated checklist.
4. Optionally, select the specific job of the work order activity for the checklist item, or select **Show All Records** to display all of the job records for the work order activity that are not flagged as deferred but that have an associated checklist.
5. Click **Actions**, and then select Linear Location Details to identify and set linear reference points for relevant equipment.
6. Specify the linear reference point details information:

   From Reference Point
   Specify the origin or starting point where the work will begin.

   From Offset
   Specify the offset of the point of origin, i.e., the amount in distance it is offset from the starting point of the work to the reference point.

   From Offset %
   Alternatively, specify the offset indirectly by entering a percentage of the distance between two reference points.

   From Offset Direction
   Specify the direction of the offset relative to the origin point, e.g., North or South.

   To Reference Point
   Specify the ending point on the route where the work will conclude.

   To Offset
   Specify the ending point of the offset of the segment, i.e., the amount of distance it is offset from the ending point of the linear equipment record.

   To Offset %
   Specify the percentage the ending (to) point is offset.

   To Offset Direction
   Specify the direction the ending point is offset from the linear equipment record, e.g., East or West.

7. Optionally, in the Additional Reference Details section, specify this information to map the coordinates where the work will begin:

   From X Coordinate
   Specify the X coordinate on the map for the starting (from) point of the work, e.g., the origin of the work.

From Y Coordinate
Specify the Y coordinate on the map for the starting (from) point of the work, e.g., the origin of the work.

From Latitude
Specify the latitude on the map for the starting (from) point of the work.

From Longitude
Specify the longitude on the map for the starting (from) point of the work.

From Relationship Type
Specify the relationship type of the starting (from) point of the work, e.g., parallel, perpendicular, crossing, overpass.

From Horizontal Offset
Specify the horizontal distance to the work, e.g., the fire hydrant could be 40 feet away from the edge of the road with the starting point being the fire hydrant.

From Horizontal Offset Type
Specify the type of horizontal offset, e.g., North, South, Right, Left, etc.

From Vertical Offset
Specify the vertical distance to the work, e.g., the traffic light could be hanging 20 feet above the road with the starting point being the traffic light.

From Vertical Offset Type
Specify the type of vertical offset, e.g., Above, Below, Underground, etc.

8 Click **Submit**.

Planning labor for work orders

Plan the labor necessary to complete a work order and it's activities and jobs. Plan both internal and external labor.

Note: The work order must have at least one activity to plan labor on this page. Use this page to plan labor for work order activities or activity jobs but not both.

To plan labor for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to plan labor, and then click the **Plan Labor** tab.
3 Choose one of the following options for **Activity**:
   - Select to display the work order activity or activities in the grid.

   Show All Records
   Select this option if you want to plan labor for multiple activities on the work order.

4 Choose one of the following options for **Job**:
   - Select to display the job or jobs in the grid.

Show All Records
Select this option if you want to plan labor for multiple jobs on the work order.

5 Click **Add Plan Labor**.

6 Specify this information:

Activity
Select the activity for which to plan the labor. **Activity** is automatically populated if the work order has only one associated activity and it is not deferred.

Job
Select the job for which to plan the labor. **Job** is automatically populated if the work order has only one associated job.

Trade
Specify the trade required to perform the activity or job.

Estimated Hours
Specify the hours estimated to complete the labor.

People Required
Specify the number of people required to complete the labor.

Hours Remaining
Specify the estimated number of hours remaining for the activity.

Hired Labor
Select to indicate that the job will be completed by an external source.

Labor Type
Select the type of labor needed if you selected **Hired Labor**.

Supplier
Specify the supplier for the activity or job.

7 Click **Submit**.

Note: To create a labor requisition for the work order activity to hire labor for the activity from an external source, click **Create Labor Requisition**.

Adding Documoto details to work order activities and jobs

Add a part line or multiple part lines to a work order activity or job by accessing technical documents and drawings that are stored in Documoto.

Note: To access Documoto on this screen you must first perform the following steps:

- Define the work order equipment's **Documoto Book ID**, **Documoto Part ID**, and the **Documoto URL** on the equipment record. (**Assets**, **Positions**, **Systems**, or **Vehicles** forms.)
- Set the organization options for DOCUMURL, DOCUMKEY, and DOCUMUSR on the **Options** tab of the **Organizations** form.

To add Documoto details:

1 Select the activity associated to the specific work order for which to add Documoto details on the **Activities** tab of the **Work Orders** form.
2 Click **Actions**, and then select **Add Documoto Details**.
3 Select one or more parts from the Documoto technical documents and drawings and add them to the Documoto shopping cart.
4 Return the shopping cart to Infor EAM. A pick ticket is automatically created for the selected work order activity.

   For each part selected in Documoto, a part line is created for the work order activity specified. The Infor EAM parts flagged as **Out of Service** will not be available.

   The planned quantity for the part line of the work order is populated based on the quantity requested in the Documoto data.

Entering work orders on the quick entry form

Create, update, and complete work orders on the **WO Quick Entry** form. When you create a work order, the system automatically enters a status of **Released** on the work order header. Insert and update activities, book labor for existing activities, and issue parts to an activity. Add or view work order comments and activity comments.

Creating, updating, and completing work orders

To create, update, and complete work orders:

1 Select **Work > WO Quick Entry** form.
2 Specify this information:

   Organization
   Enter the organization.

3 Choose one of the following options:

   Create a new work order
   Specify for the **work order description**, a description of the work to be done.

   Update or complete an existing work order
   Specify for **Work Order**, the work order number for which to update or complete.

4 Specify this information:

   Equipment
   Specify the equipment on which the work will be performed.

   Status
   Specify the status of the work order.

   Type
   Specify the work order type.

Location
Specify the location of the work to be completed.

Class
Specify the class of the work order.

Problem Code
Specify the code to identify the type of problem.

Shift
Specify the shift during which the work is requested to be performed.

Project-Budget
Specify the project and the project budget to associate with the work order.

Department
Specify the department.

Safety
Select if this work requires special safety precautions.

Warranty
Select if the equipment is under manufacturer warranty.

Print
Select to print the work order when work orders are batch printed.

Standard WO
Specify the standard work order if it has been stored in the system library. The standard work order activities are copied to the current work order. If the standard work order is a template, child work orders are created as defined on the standard work order.

Priority
Specify the priority of the work order.

Cost Code
Specify the cost code of the work order.

Failure Code
Specify the cause of failure for the equipment.

Action Code
Specify the action taken to resolve the problem.

Cause Code
Specify the cause code identifying the cause of the problem.

Downtime Cost
Specify the cost that resulted from the equipment being out of operation due to failure.

Downtime Hours
Specify the number of hours that the equipment was out of operation due to failure.

Last Meter Reading is populated with the value of the last meter reading and the unit of measure of the reading in the adjacent field.

Trigger Event is populated which indicates the MS Project planning session is associated with the equipment on the work order.

Reported By
Specify the employee requesting the work.

Date Reported
Specify the date and time that the problem was reported.
Note: If the BOOKDATE installation parameter is set to ON, you are not allowed to book hours for labor for a date that is earlier than the **Date Reported**. If BOOKDATE is set to OFF, you can book hours without any date restrictions related to the **Date Reported**.

Assigned By
Specify the supervisor who assigned the work order.

Assigned To
Specify the person responsible for the work order.

Sched. Start Date
Specify the starting date for the work order.

Sched. End Date
Specify the date the work is scheduled to be complete.

Req. Start Date
Specify the requested starting date for the work order.

Req. End Date
Specify the requested ending date for the work order.

Start Date
Specify the actual date on which the work order is started.

Date Completed
Specify the actual date on which the work order is completed.

Target Value
Specify the estimated maximum cost for the work order.

Service Request
If populated, the value displayed for **Service Request** is a hyperlink to the service request associated with the work order. Click the number to view the associated service request.

5 Click **Save Record**.
Note: Click **Add/Edit Activity Comments** to add or edit work order comments.

Click **Save and Create Another Work Order** to save the work order and create a new work order.

Click **Clear** to clear the **Work Order Header** section.

Click **Create Work Order** to create a new work order.

You may also click **Create Activity** to add an activity.

Creating activities for work orders on the WO Quick Entry form

Insert and update activities as necessary.

To create activities for work orders:

1. Select **Work > WO Quick Entry**.
2. Choose one of the following options:

   Create a new activity
   Specify for **Work Order**, the work order number for which to create a new activity. Go to **Organization**.

   Update an existing activity
   Enter for **Work Order**, the work order number for which to update an existing activity. Go to **Trade**.

3. Specify this information:

   Organization
   Specify the organization.

   Work Order Description
   Specify a description for the work order.

   Equipment
   Specify the equipment.

   Status
   Specify the status of the work order.

   Type
   Specify the work order type.

   Department
   Specify the department.

   Activity
   Specify an activity number for the activity. **Original Deferred WO-Activity** and **Direct Materials** are shown on **Deferred Activity**.

   Trade
   Specify the trade required to perform the activity. The system automatically populates **Type of Hours**. The system automatically populates **Activity** with the next available activity number, Start Date and **End Date** with the scheduled start and end dates of the work order, and **People Required** with a default value of "1."

   Estimated Hours
   Specify the estimated hours for the activity.

   Hours Remaining
   Specify the estimated number of hours remaining for the activity.

Specify this information only if you use the American Trucking Association's Vehicle Maintenance Reporting System (VMRS).

Reason for Repair
Specify the reason the vehicle needs repair (Code Key 14).

Work Accomplished
Specify the work performed on the vehicle (Code Key 15).

Technician Part Failure
Specify the reason the technician or supplier thinks the vehicle failed (Code Key 18).

Manufacturer
Specify the Manufacturer/Supplier Code (Code Key 34) to associate with the vehicle.

Warranty
Select if the equipment is under manufacturer warranty.

Completed
Select if the activity is completed.

Task Plan
Specify the task plan code for the activity.

Percent Complete
Specify the percentage of work that has been completed for the activity.

People Required
Specify the number of people required to complete the activity.

Task Plan Qty.
Specify the required number of units of the task to associate with the activity, and then select the unit of measure for the **Task Plan Qty.** in the adjacent field. For example, a work order activity to pave 100 miles of highway today indicates a **Task Plan Qty.** of "100" and a unit of measure of "Miles", whereas the same task plan on another day indicates only 80 miles due to the steep inclines of the stretch of highway being paved on that day.

Hired Labor
Select to indicate that the activity will be completed by an external source.

System Level
Specify the VMRS code identifying the system, e.g., brakes, frame, suspension, needing repair (Code Key 31).

Assembly Level
Specify the VMRS code identifying the subsystem needing repair (Code Key 32). The values available are based on the system-level code.

Component Level
Specify the VMRS code identifying the specific component or part needing repair (Code Key 33). The values available are based on a combination of the system-level code and the assembly-level code.

4 Click **Save Record**.

Note: Click **Clear** to clear the **Activity** section.

Booking labor for work orders

Record the number of hours that employees worked for each work order activity. You may book labor hours before closing work orders or until a specified number of days after closing work orders.

Note: Hours can only be booked against work orders with activities.

To book labor for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to book labor, and then click the **Book Labor** tab.
3 Click **Add Labor**.
4 Specify this information:

Activity-Trade
Select the activity-trade performing the work for which to book labor hours.
Note: You can also select the task for which the work is performed to differentiate between multiple activities on the work order that may be assigned to the same trade.

Specify one of the following:

Employee
Specify the personnel performing the work for which to book hours.

Crew
Specify the crew performing the work for which to book hours.

Department
Specify the department where the activity was performed.

Trade
Specify the trade that performed the activity.

Date Worked
Specify the date on which the work was performed.

Type of Hours
Select the type of hours worked (e.g., normal rate, overtime rate, etc.).

Rate
Specify or modify the hourly pay rate for the employee, trade, or crew performing the work. If you defined a trade rate for the selected employee or trade, **Rate** is automatically populated with the appropriate hourly rate. If you selected a **Crew**, **Rate** is not populated; when you submit the booked labor, the trade rate for each employee on the crew is reviewed.

If you defined a trade rate for the selected **Employee**, **Rate** is populated with the employee trade rate. However, if you did not define trade rates for the selected **Employee**, **Rate** is populated with

the trade rate defined for the selected **Trade**. If you enter a **Rate** for the selected **Crew**, the system overrides the trade rate defined for each employee on the crew if the calculated rate is zero.

Hours Worked
Specify the number of hours spent performing the work.

Start Time/End Time
Specify the scheduled start time and end time of the work order activity. If the end time will span beyond midnight, two booked labor records will be created.
Note: The **`WOBKMIDN`** organization option must be set to Yes to book labor across midnight. Contact your system administrator for more information.

Equipment
Specify one of the following options if the work order is a multiple equipment work order:

- Specify a specific **Equipment** record to apply the booked labor to the selected **Equipment** and its corresponding related work order.
  Note: If you are making corrections to booked labor for a multiple equipment work order and you select All Equipment or a specific equipment record for **Equipment**, the booked hours are split and the correction is applied to all the equipment on the work order or the selected equipment.
- Specify **`All Equipment`** to evenly split the booked labor to each equipment record on the work order for the selected work order and activity. Upon saving the transaction, labor booking records are created and applied to each related work order and selected activity. The number entered for **Hours Worked** is divided by the number of equipment records added on the **Equipment** tab of the **Work Orders** page to determine the booked labor to apply to each equipment. The **Rate** applicable to the multiple equipment work order is also applied to all of the MEC work orders.
  Note: Any remainder of the **Hours Worked** are applied to the last equipment record on the **Equipment** tab of the **Work Orders** page.

  If you select **`All Equipment`** for **Equipment** and at least one of the related work orders has a Completed status (or equivalent user status), a message is displayed enabling you to select whether to split the labor hours against only equipment with open related work orders or against all equipment, regardless of whether the related work orders are Open or Completed (or their user-status equivalents).

  Also, the setting of the `COMDAYS` installation parameter is disregarded when posting labor booking transactions related work orders if you select **`All Equipment`**.
- Specify **`WO Header Equipment`** to apply the booked labor to the work order header only.

5 Click **Submit**.

Note: After submitting the transaction, the original booked labor transaction entered when the **Hours Worked** are split across multiple equipment records is not displayed. Instead, the booked labor transactions for each equipment to which the labor was split are displayed.

Booking labor automatically for fleet work orders

Automatically post a book labor record for an employee and a fleet work order.

To book labor automatically for fleet work orders:

1 Enter the employee for which to book labor for the fleet work order. The system automatically populates the employee name.

2 Specify this information:

Work Order
Enter the fleet work order for which to book labor. The system automatically populates work order header information for the selected work order.

Type of Hours
Enter the type of hours worked, e.g., normal rate, overtime rate, etc.

User Password
Enter the password for the current session.

3 Optionally, select the **Auto Book Hours** check box to automatically book hours for the selected employee and fleet work order.

4 Click **Start**. The system records the time the labor begins.

Note: Once the system begins recording the book labor record, the system books the hours without any notification or prompting when the work is stopped.

To manually stop the book labor process, click **Stop**.

Issuing parts to work orders

Issue parts to work orders.

To issue parts to work orders:

1 Select **Work > WO Quick Entry**.

2 Specify this information:

Work Order
Specify the work order for which to issue parts. The system automatically populates work order header information for the selected work order.

Part
Specify the part to issue to the work order. The system automatically populates **Part Description**, **Part Org.**, **Available Qty.**, and **Track by Asset**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Store
Specify the store from which to issue parts.

Bin
Specify the bin from which to issue the parts.

Lot
Specify the lot from which to issue the parts.

Failed Qty.
Specify the quantity of the part that failed.
Note: The system does not allow part failures on an Issue for parts tracked by asset.

Date/Time
Specify the desired date and time of the transaction.

Date Failed
Specify the date the part failed.

Failure Notes
Enter comments about the part failure.

Transaction Qty.
Specify the number of parts to issue to the work order. The number must be greater than zero.

Asset ID
Specify the asset ID if the part is tracked by asset. The system automatically populates **Asset Org.**

Problem Code
Specify the code of the problem that required work.

Failure Code
Specify the reason that the part failed.

Action Code
Specify the action taken to correct the part failure.

Cause Code
Specify the problem cause code, i.e., the root cause of the part failure.

3 Click **Save Record**.

Note: Click **View Part Details** to view part details for the selected work order.

Managing parts for work orders

Use the **Parts** page to add parts to work orders, reserve parts for work orders, import a preplanned parts list, delete a planned part, delete a reservation, or create a parts requisition. You may also issue or return parts to a work order on the **Parts** page.

Adding planned parts to work orders

To add planned parts to work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to add parts, and then click the **Parts** tab.
3 Click **Add Part**.

The system automatically populates **Activity-Trade** with the activity-trade performing the work for the selected work order and populates **Store** with the store defined for the department of the work order if available.

4 Specify this information:

Part
Specify the part to add to the work order. The system automatically populates the part description, **Part Org.**, **UOM**, **Track By Asset**, **Track By Lot**, **Total Qty. Available**, and **Available**.

Available indicates the quantity of the part available in the selected store for the work order activity. **Total Qty. Available** indicates the quantity of the part available in the selected store for the work order activity, as well as the quantity of the part available in any child stores of the selected store.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Planned Qty.
Specify the quantity of the part planned for the work order activity.

5 Click **Submit**.

Viewing planned part availability for work orders

View planned part availability for work orders to display a list of parts that have been planned for a work order on the **Parts** tab of the **Work Orders** page.

See Managing Parts for Work Orders on page 819.

To view planned part availability for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to view planned part availability, and then click the **Record View** tab.
3 Right-click on the form, and then choose **View Planned Part Availability**. **Store** is automatically populated with the default store of the department of the work order.
4 Specify this information:

Store
Specify a different store for which to view part availability information as necessary.

See the following table when viewing the planned part availability information:

Field	Description
Work Order	The number identifying the selected work order
Activity	The number identifying the activity on the selected work order for which the part is planned
Trade	The trade to which the work is assigned for completion
Part	The code identifying the part on the work order
Part Org.	The organization of the part
Part Description	The description of the part

Field	Description
Planned Qty.	The **Planned Qty.** of the part entered on the **Parts** tab of the **Work Orders** page
Reserved Qty.	The **Reserved Qty.** of the part entered on the **Parts** tab of the **Work Orders** page
Allocated Qty.	The **Allocated Qty.** of the part entered on the **Parts** tab of the **Work Orders** page
Used Qty.	The **Used** quantity of the part entered on the **Parts** tab of the **Work Orders** page
Available Qty.	The system calculates the **Available Qty.** of the part as the difference between the **Qty. on Hand** of the part in the selected **Store** and any allocations of the part that have been allocated to other work orders, which is displayed in **Allocated Qty.** on the **Parts** tab of the **Work Orders** page. **Note: Available Qty.** normally displays the **Qty. on Hand** in the selected **Store** minus the **Allocated Qty.** of the part for all work order/activity combinations except the selected **Work Order** and **Activity** for which you are viewing the **Available Qty.** However, on the Planned Part Availability pop-up, the system displays the **Available Qty.** for multiple activities on the same work order at the same time. Therefore, the system calculates the **Available Qty.** without subtracting the **Allocated Qty.** for other activities on the same work order and the **Available Qty.** for a given part is the same for every activity on the selected **Work Order**.
Total Available Qty.	The system calculates the **Total Available Qty.** as the sum of the **Available Qty.** of the part in the selected **Store** and the **Available Qty.** in all child stores of the selected **Store**.
UOM	The unit of measure of the part
Direct	Indicates whether the part is designated as a **Direct Purchase** part on the **Parts** tab of the **Work Orders** page

Field	Description
Held Qty.	The system calculates **Held Qty.** as the total quantity of the part(s) that are being held for the selected **Store**. **Note:** A part is "held" if the part is on a purchase order. If no purchase order exists for the part, then the "held" quantity corresponds with a store-to-store issue transaction.
On Order Qty.	**On Order Qty.** is calculated as the total remaining quantity (the quantity ordered minus the **Receipt Qty.**) on approved purchase order lines. **Note:** Only approved receipts are considered in the calculation. However, **Scrapped Qty.** are considered as a received quantity of the part in the calculation of the number of parts that still needs to be received for the **On Order Qty.** For parts with the **Direct** checkbox not selected, only purchase order lines of type **Stock Purchase** are included. For parts with the **Direct** checkbox selected, the only purchase order lines included are those PO lines of type **Direct Purchase** that are associated with the same **Work Order** and **Activity**.
Shortage Qty.	The system calculates the **Shortage Qty.** based on the following equation: Shortage Qty. = Used + Held Qty. + Available Qty. + On Order Qty. – Planned Qty. If there is no shortage of the part, then the system displays 0 as the **Shortage Qty.** If there is a shortage of the part, then the system displays the quantity of the part shortage as the **Shortage Qty.**and highlights the value in red.

5 Click **Close**.

Adding core tracked parts to work orders for repair

A repairable spare work order is a work order for core tracked parts to be repaired internally. Designate a repairable spare work order as such by selecting Repairable Spare as the work order **Type** on the header, and then add the parts to repair on the **Repair Parts** tab.

If you selected **Auto-Assign** for a part on the **Stores** tab of the **Parts** form, the auto-assignment process is followed for the part.

To add core tracked parts to work orders for repair:

1 Select **Work > Work Orders**.
2 Select the work order to which to add a core tracked part, and then click the **Repair Parts** tab.
3 Specify this information:

Part
Specify the part to add. **Qty. to Repair** is automatically calculated based on the **Core Qty.** entered for the part on the **Repair Details** tab of the **Parts** form.

Store
Specify the store holding the part for repair.
Note: The default **Qty. for Repair** is automatically calculated when you enter a **Store**.

You must enter a **Store** if you want to utilize the auto assignment feature.

If you modify the **Store** entered for the repair part on the **Repair Parts** tab of the **Work Orders** form, the default **Qty. for Repair** is automatically recalculated. If you clear the **Store** for the repair work order, **Qty. for Repair** is not cleared. If the **Qty. Assigned** is greater than 0, then **Store** is protected.

Qty. to Repair
Specify the quantity of the part to repair.
Note: After submitting the record, you can update **Qty. to Repair** based on the following conditions:
- **Qty. to Repair** is greater than 0.
- **Qty. to Repair** is less than or equal to the **Qty. for Repair**.
- You have received or scrapped parts for this work order.

Qty. Completed
Specify the quantity of the parts on which repairs are completed.
Note: If the RSPCOMP installation parameter is set to NO, **Qty. Completed** is hidden. If the RSPCOMP installation parameter is set to YES, you can modify the **Qty. Completed** based on the following conditions after submitting the record:
- You must assign repair details for the full **Qty. to Repair**.
- **Qty. Completed** is greater than or equal to 0.

4 Click **Submit**.

Manually assigning repair details for core tracked parts on work orders

Manually assign repair details for core tracked parts on work orders. If you did not select **Auto-Assign** on a core tracked part record, you must manually assign repair details for the repair parts on work orders. Manually assigning repair details for parts enables you to designate the store, bin, lot, and asset information to identify the parts to repair and their location.

You can also change repair details that were created during the system's automatic assignment process using the Repair Details popup.

See Understanding the auto-assignment processes for core tracked parts on page 535 .

To manually assign repair details for core tracked parts on work orders:

1 Select **Work > Work Orders**.

2 Select the work order to which to assign repair details for core tracked parts, and then click the **Repair Parts** tab.

3 Select the part to which to manually assign repair details. The system automatically populates the Repair Part Details with the part information.

Note: You can modify **Qty. to Repair** and **Qty. Completed** for a repair part if necessary. If you make any changes to **Qty. to Repair** or **Qty. Completed**, you can use the Repair Details popup to edit **Qty. Assigned** as necessary.

4 Click **Assign Repair Details**.

The system displays the **Part** and **Part Org.** of the selected part. **Track by Asset** is selected if the part is tracked by asset. The system automatically populates **Total Qty. to Repair** and **Total Qty. Assigned**. **Total Qty. to Repair** indicates the **Qty. to Repair** for the part from the **Repair Parts** tab of the **Work Orders** form. The **Total Qty. Assigned** indicates the quantity of the part to repair on this work order that has already been assigned from a repair bin location.

5 Select the store, bin, lot, and asset from which to assign a quantity of the part to repair.

6 Specify this information:

Qty. Assigned
Specify the quantity of the part to assign for repair.
Note: The value entered for **Qty. Assigned** cannot be greater than the quantity of the part that is in stock for repair.

7 Click **Submit**.

Manually adding part failure details to work orders

Add, view, modify, and delete part failures on the **Part Failures** tab. Record details are normally displayed on the **Part Failures**tab as the result of an issue or return part being flagged as a failure. You can also manually add part failure details to work orders.

To manually add part failure details to work orders:

1 Select **Work > Work Orders**.

2 Select the work order for which to add part failure details, and then click the **Part Failures** tab.

3 Click **Add Part Failure**.

4 Specify this information:

Part
Specify the part that failed. The system automatically populates the part description and **Part Org.**

Failed Qty.
Specify the quantity of the part that failed.

Asset ID
Specify the asset ID if the part is tracked by asset. The system automatically populates the description and **Asset Org.**

Component Location
Specify the component location.

Problem Code
Specify the code of the problem that required work.

Failure Code
Specify the reason that the part failed.

Failure Notes
Enter comments about the part failure.

Date Failed
Specify the date the part failed.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Action Code
Specify the action taken to correct the part failure.

Cause Code
Specify the problem cause code, i.e., the root cause of the part failure.

5 Click **Submit**.

Reserving parts for work orders

To reserve parts for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to add parts, and then click the **Parts** tab.
3 Click **Add Part**.

The system automatically populates **Activity-Trade** with the activity-trade performing the work for the selected work order and populates **Store** with the store defined for the department of the work order.

4 Specify this information:

Part
Specify the part to reserve for the work order. The system automatically populates the part description, **Part Org.**, **UOM**, **Track By Asset**, **Track By Lot**, **Total Qty. Available**, and **Available**.

Available indicates the quantity of the part available in the selected store for the work order activity. **Total Qty. Available** indicates the quantity of the part available in the selected store for the work order activity, as well as the quantity of the part available in any child stores of the selected store.

Reserved Qty.
Specify the quantity of the part to reserve for the work order activity. The number must be greater than 0 (zero).

5 Click **Submit**.

Importing a parts list for a work order

To import a parts list for a work order:

1. Select **Work > Work Orders**.
2. Select the work order for which to import a parts list, and then click the **Parts** tab.
3. Click **Import Parts List**.
4. Specify this information:

   From
   Select one of the following options:

   Work Order EQ
   Select to import the part from work order equipment.

   Material List
   Select to import a material list.

   Equipment
   Select to import the part from an equipment record.

   Activity-Trade
   Select the activity-trade performing the work for which to import a parts list.

5. Select the parts to import.
6. Click **Submit**.

Creating a parts requisition

Create a parts requisition to order a part from an external source if the **Planned Source** of the part is Direct Purchase.

To create a parts requisition:

1. Select **Work > Work Orders**.
2. Select the work order for which to create a parts requisition, and then click the **Parts** tab.
3. Click **Create Parts Requisition**.
4. Specify this information:

   Description
   Specify a description of the requisition.

   Store
   Specify the **Store** requesting the part.

   Requested By
   Specify the employee requesting the part.

   Supplier
   Specify the supplier for the part.

5 Select the activity/part for which to create a parts requisition.

Note: Select multiple activities as necessary.

6 Click **Create Requisition**.

Note: Click **Cancel** to close the Create Parts Requisition popup without saving changes.

Creating a pick ticket

Create a pick ticket to identify a set of parts that are required for a work order activity.

To create a pick ticket:

1 Select **Work > Work Orders**.

2 Select the work order for which to create a pick ticket, and then click the **Parts** tab.

3 Click **Create Pick Ticket**.

4 Specify this information:

Description
Specify a description of the pick ticket.

Store
Specify the store for which to create the pick ticket.

Date Required
Specify the date by which the list of parts is needed.

Status
Select the status of the pick ticket. The system automatically assigns Unfinished as the status of the pick ticket.

Class
Specify the class of the pick ticket.

Delivery Address
Specify the address to which to deliver the parts.

Deliver to Supplier
Specify the supplier to whom to deliver the parts.

Deliver to Employee
Specify the employee to whom to deliver the parts.

Default Approver
Specify the individual responsible for approving the pick ticket.

5 Select the parts to add to the pick ticket, and then click **Create Pick Ticket**.

Note: Click **Refresh Part List** to update the **Available Qty.** for the selected store and to reset **Required Qty.**

Creating a parts requisition

Create a parts requisition to order a part from an external source if the **Planned Source** of the part is Direct Purchase.

To create a parts requisition:

1. Select **Work > Work Orders**.
2. Select the work order for which to create a parts requisition, and then click the **Parts** tab.
3. Click **Create Parts Requisition**.
4. Specify this information:

   Description
   Specify a description of the requisition.

   Store
   Specify the **Store** requesting the part.

   Requested By
   Specify the employee requesting the part.

   Supplier
   Specify the supplier for the part.

5. Select the activity/part for which to create a parts requisition.

   Note: Select multiple activities as necessary.

6. Click **Create Requisition**.

   Note: Click **Cancel** to close the Create Parts Requisition popup without saving changes.

Viewing unreturned core parts

View and track core parts issued to a work order, equipment, project-budget or employee for which a corresponding core was never returned to the store after failing. When core parts remain outstanding, the value of the core part remains charged against the work order, or to whatever it was issued. Once the core part is returned the core value is removed from the work order.

Note: The total value of cores which remain unreturned for a work order can be seen on the **Cost Summary** page of the **Work Orders** form.

To view unreturned core parts:

1. Select **Work > Overview > Unreturned Cores**.
2. View the unreturned core parts.

Entering monitored data results for work orders

Enter a new work order inspection point (location) for a monitored data object (equipment) or modify an existing work order inspection point.

To enter monitored data results for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to enter monitored data results, and then click the **Monitored Data Results** tab.
3 Click **Add Result**.
4 Specify this information:

Monitored Equipment
Specify the equipment to monitor. The system populates the description in the adjacent field. The system automatically populates **Monitored Equipment Org.**

Aspect
Specify the inspection aspect with which to associate the monitored data object.

Point Type
Specify the inspection type to associate with the equipment or equipment category.

Point
Specify the inspection point number.

Date
Specify the date of the inspection.

5 Click **Submit**.

Issuing and returning parts for work orders

You may issue or return parts to a work order on the **Parts** page.

Issuing parts to work orders

Issue parts to work orders.

To issue parts to work orders:

1 Select **Work > WO Quick Entry**.
2 Specify this information:

Work Order
Specify the work order for which to issue parts. The system automatically populates work order header information for the selected work order.

Part
Specify the part to issue to the work order. The system automatically populates **Part Description**, **Part Org.**, **Available Qty.**, and **Track by Asset**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Store
Specify the store from which to issue parts.

Bin
Specify the bin from which to issue the parts.

Lot
Specify the lot from which to issue the parts.

Failed Qty.
Specify the quantity of the part that failed.
Note: The system does not allow part failures on an Issue for parts tracked by asset.

Date/Time
Specify the desired date and time of the transaction.

Date Failed
Specify the date the part failed.

Failure Notes
Enter comments about the part failure.

Transaction Qty.
Specify the number of parts to issue to the work order. The number must be greater than zero.

Asset ID
Specify the asset ID if the part is tracked by asset. The system automatically populates **Asset Org.**

Problem Code
Specify the code of the problem that required work.

Failure Code
Specify the reason that the part failed.

Action Code
Specify the action taken to correct the part failure.

Cause Code
Specify the problem cause code, i.e., the root cause of the part failure.

3 Click **Save Record**.

Note: Click **View Part Details** to view part details for the selected work order.

Returning parts from work orders

Return unused parts issued to work orders back to stores.

To return parts from work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to return parts, and then click the **Parts** tab.
3 Specify this information:

Part
Specify the part to return. The system automatically populates the part description, **Part Org.**, **UOM**, **Track By Asset**, **Track By Lot**, **Total Qty. Available**, **Available**, **New Orders Not Allowed**,**Primary Manufacturer**, and **Primary Manufacturer Part Number**.

Available indicates the quantity of the part available in the selected store for the work order activity. **Total Qty. Available** indicates the quantity of the part available in the selected store for the work order activity, as well as the quantity of the part available in any child stores of the selected store.

Activity-Trade
Specify the activity-trade performing the work for the selected work order.

Store
Specify the store to which to return parts.

Transaction Type
Select **Return**.

Date
Specify the desired date of the transaction.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:

- Enter a specific equipment to which to distribute the return **Quantity**.
- Enter **All Equipment** to evenly distribute the return **Quantity** to each equipment on the work order.
- Enter **WO Header Equipment** to distribute the return **Quantity** to the work order header only.

Note: The system automatically applies any remainder of the return quantity that cannot be evenly split to the last equipment record on the **Equipment** page of the **Work Orders** form.

If you select All Equipment and at least one of the related work orders has a Completed status (or equivalent user status), the system displays a message enabling you to select whether to distribute the cost of the return against only open related work orders or against all equipment, regardless of whether the related work orders are Open or Completed (or their user-status equivalents).

The value displayed for **Used** in the Parts list displays the quantity of the part issued/returned for the header work order and all related MEC work orders for the activity.

The setting of the RTNANY installation parameter can also affect returns for which there is an insufficient issue quantity against which to make a return when returning against All Equipment. If RTNANY is set to Yes, the system distributes the return **Quantity** evenly across all equipment on the work order. If RTNANY is set to No, the system does not allow you to make the return if there is an insufficient quantity of the part.

Quantity
Specify the number of parts to return to the work order. The number must be greater than 0 (zero).
Note: If the part is tracked by asset, **Quantity** must be equal to 1.

Asset ID
Specify the asset ID if the part is tracked by asset.

Bin
Specify the bin to which to return the parts.

Lot
Specify the lot to which to return the parts.

Tool Hours
If the part you are returning is identified as a tool, specify the number of hours the tool was in use.
Note: If the work order is a MEC work order, then the system splits the tool hours based on the selected **Equipment**.

Manufacturer
Specify the manufacturer of the part.

Return for Repair
Select if the part to return is a repairable spare and you want to return the part to the store for repair. The system adds the return quantity to the **Qty. for Repair** in the store to which the part is returned when you submit the return.
Note: If you select Return as the **Transaction Type** and the selected **Part** is a repairable spare part, the system enables **Return for Repair**. If you select **Return for Repair**, the system allows part failures and populates **Bin** with the **Default Repair Bin**. If the **Default Repair Bin** overwrites a different bin, then the system clears **Lot**.

If the **Part** is a repairable spare part that is also tracked by asset and you unselect **Return for Repair**, the system clears **Asset ID**.

If you submit a return transaction for a repairable spare part and you unselect **Return for Repair**, the system processes the return as a normal return.

Manufacturer Part Number
Specify the part number as identified by the manufacturer.

Failed Qty.
Specify the quantity of the part that failed.
Note: The system does not allow part failures on a Return for parts tracked by asset or repairable spare.

Date Failed
Specify the date the part failed.

Problem Code
Specify the code of the problem that required work.

Failure Code
Specify the reason that the part failed.

Action Code
Specify the action taken to correct the problem.

Cause Code
Specify the problem cause code, i.e., the root cause of the problem.

Failure Notes
Enter comments about the failure.

4 Click **Submit**.

Adding child work orders to a parent work order

Create one or more work orders that are considered children of another work order to identify the work orders as children of the parent. In some cases, the child work orders are dependent on the parent work order, which means that the parent work order cannot be completed until all child work orders have a system **Status** of Completed.

To add child work orders to a parent work order:

1. Select **Work > Work Orders**.
2. Select the work order for which to add child work orders, and then click the **Children** tab.

   Note: If the selected work order is a multiple equipment work order or MEC work order, then the system protects all fields on the page, and they cannot be updated.
3. Click **Add Child WO**.
4. Specify this information:

   Child WO
   Specify the work order number to associate with the parent work order. The system automatically populates the child work order description, **Type**, **Status**, **Equipment**, **Equipment Org.**, and **Equipment Type**.

   Dependent
   The system automatically selects **Dependent**. Unselect to indicate that the child work order is not dependent on the parent.
   Note: If **Dependent** is selected and the installation parameter EVTCASCD is set to NO, the parent Work Order cannot be completed unless all of its child work orders are completed.

   If **Dependent** is selected and the installation parameter EVTCASCD is set to YES, completing the parent work order will also complete the Child WO.
5. Click **Submit**. The system automatically populates **Parent Work Order** with the work order header number.

Adding permits to work orders

You may associate permits with a work order on the **Permits** page. You may also view permits associated with work order equipment.

Note: A work order may not have two active permit lines that refer to the same permit code.

To add permits to work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to add permits, and then click the **Permits** tab.
3. Click **Add Permit**. The system automatically selects the **Active** check box.

   Note: The system automatically flags a new permit as **Active**, and this setting cannot be changed while adding the permit reference to the work order. You may deactivate permits after adding the permit if necessary.
4. Specify this information:

Permit
Select the permit to associate with the work order. The system automatically populates the permit description, **Permit Org.**, **Date Printed**, **Permit Reference**, and **Permit Comments** to correspond with the selected permit.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:
- Specify a specific equipment with which to associate the permit.
- Specify WO Header Equipment to associate the permit with the equipment on the work order header only.

5 Click **Submit**.

Note: You cannot delete work order permits after they have been added as a permit reference for the work order.

To deactivate a permit, select the permit to deactivate, and then click **Deactivate Permit**.

Scheduling tools for work orders

Schedule tools from a department for specified work order activities. Record tool requirements of multiple activities of a specified work order.

To schedule tools for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to request tools, and then click the **Schedule Tools** tab.

Note: You must enter an activity for the work order before you schedule a tool.

3 Click **Add Tool**. The system automatically populates **Qty. Required** and **Department**.
4 Specify this information:

Activity-Trade
Select the appropriate activity-trade for the work order.

Tool
Specify the tool to request. The system automatically populates the description of the tool.

Date Required
Specify the date when you need the tool.

Scheduled Hours
Specify the number of hours required to complete the activity.

Qty. Required
Specify the number of tools you need.

Activity-Trade
Select the appropriate activity-trade for the work order.
Note: The system only displays the activity-trade if one activity-trade exists. When two or more exist, **Activity-Trade** is empty.

Hours Required
The system calculates and displays the number of tools required times the number of hours required to complete the activity.

Available Hours
The system displays the hours that the tool is available.

Activity Start Date
The system displays the beginning date for which you need the tool.

Activity End Date
The system displays the final date of the activity.

Department
Specify the department associated with this tool. If the tool applies to all departments, enter *.

Daily Capacity
The system calculates and displays the quantity of tools times the hours the tool is available to the department.

5 Click **Submit**.

Recording tool usage for work orders

Record tool usage for work orders to enter the quantity, usage hours, and departmental information for equipment/parts defined as tools. The costs associated are automatically calculated with the use of the tool based on the usage and the rates defined for the tool, department, and organization.

To record tool usage for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to record tool usage, and then click the **Tools Usage** tab.

Note: If the status of the work order is Completed (or equivalent user status), the setting of the TOOLDAYS installation parameter determines whether you can add/update tool usage for the work order.

3 Click **Add Tool Usage**.

The system automatically populates **Activity-Trade** (if there is only one activity on the work order), **Department**, **Date Used**, **Quantity**, **Hours Used**, **Scheduled Qty.**, **Scheduled Hours**, **Rate**, and **Costs**. **Rate** is the default rate for the **Department**, **Organization** (of the work order), and **Tool**. **Costs** is calculated as the product of the **Quantity**, **Hours Used**, and the **Rate**.

4 Specify this information:

Tool
Specify the tool for which to add usage information.

Date Used
Specify the date of the tool usage.

Quantity
Specify the quantity of the tool that was used.

Hours Used
Specify the number of hours the tool was used.
Note: The BOOKDATE installation parameter indicates the manner in which the system handles entries for **Date Used** and **Hours Used** when booking hours for the tool.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:

- Enter a specific equipment to which to distribute the **Hours Used**.
- Enter **All Equipment** to evenly distribute the **Hours Used** to each equipment record on the work order.
- Enter **WO Header Equipment** to distribute the **Hours Used** to the equipment on the work order header only.

Note: The system automatically applies any remainder of the **Hours Used** to the last equipment record on the **Equipment** page of the **Work Orders** page.

If you select **All Equipment** for **Equipment** and at least one of the related work orders has a Completed status (or equivalent user status), the system displays a message enabling you to select whether to distribute the cost of the tool usage against all equipment or only open related work orders.

Also, the system disregards the setting of the TOOLDAYS installation parameter when posting tool usage transactions if you select **All Equipment**.

The value displayed for **Used** in the Tools Usage list displays the quantity of the tool issued for the header work order and all related work orders for the activity.

Activity-Trade
Specify the activity and trade for the work order for which the tool was used.

Department
Specify the department of the work order for which the tool was used.

5 Click **Submit**.

Note: To import a scheduled tool, click **Import Scheduled Tools**. The system imports any tools that are scheduled for the work order. If the work order is a multiple equipment work order, the system creates a record for the work order header for 0 **Hours Used**, creates a tool usage record for each of the MEC work orders, and divides the **Hours Used** for the tool equally between each of the MEC work orders.

Adding safety hazards and precautions to work orders

Add hazards to work orders to alert your employees to of all the dangers (bodily harm, environmental issues like spills) they face when performing required maintenance. Attach precautions to these hazards so they can safeguard themselves and their surroundings from these potential dangers. For example, if you must maintain electrical equipment, electrocution is a hazard. Add a precaution to turn that equipment off and remove from the power outlet before performing repairs on that electrical equipment.

To add safety hazards and precautions to work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to add safety precautions and hazards, and then click the **Safety** tab.
3. Click **Add Safety Record**.
4. Specify this information:

   Hazard
   Specify the hazard to add to the work order.

   Precaution
   Specify the safety measure to protect your employees from the hazard.

   Timing
   Select the timing which is used to identify when the precaution should be taken. For example, if your employee is working with fire, you can enter the timing of "during" to alert the employee that they should wear fire-resistant clothing during the task.

   Sequence
   Specify the sequence number which is used to identify the order in which your employee should be made aware of the precaution. All precautions are important regardless of the sequence number entered.

   Select the **Delete Pending** check box to delete the pending safety record during the next review. This checkbox is enabled when organization option **SAFERREQ** is set to **YES**.

   Health Hazard
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates the degree to which the materials used poses a hazard to the health of the employee.

   Flammability
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates the degree to which the materials used are flammable.

   Instability
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates the degree to which the materials used can detonate or explode.

   Special Hazards
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates any special hazards related to the materials used.

   Equipment
   Specify the equipment for which to observe the hazards and precautions for multi-equipment work orders.

5. Click **Submit**.

Viewing and modifying work orders

Review the status of work orders and/or modify work orders.

To view and modify work orders:

1 Select **Work > Work Orders**.

Note: Apply a Dataspy or filter, and/or sort work orders as necessary.

See these topics:

- Managing lists on page 315
- Using a Dataspy on page 328

2 View the list of work orders, and then double-click the row containing the work order to view or modify.

3 View and modify work order details as necessary.

See Creating Regular Work Orders on page 775.

4 Click **Save Record**.

Updating work orders

Update details on a work order in a batch.

To update work orders:

1 Select **Work > Process > WO Update**.

2 Run the default dataspy. The system displays a list of work orders with a system status of "R" or "Q" in the editable grid.

3 Select the work orders to update, and then make changes to the following fields as necessary:

Description
Update the description of the work order.

Equipment
Update the equipment on which to perform work.

Type
Update the work order type.

Department
Update the department.

Status
Update the status of the work order.

Class
Specify the class of the work order.

Problem Code
Specify the code to identify the type of problem.

Cost Code
Specify the cost code of the work order.

Failure Code
Specify the cause of failure for the equipment.

Action Code
Specify the action taken to resolve the problem.

Cause Code
Specify the cause code identifying the cause of the problem.

Priority
Specify the priority of the work order.

Assigned To
Specify the person responsible for the work order.

Sched. Start Date
Specify the starting date for the work order.

4 Click **Update WOs**.

Note: To print work order updates, select the work orders to print, and then click **Print Selected WO**.

Viewing work order costs

View a list of all existing costs for the selected work order and all of its children.

Note: If the work order is a multiple equipment work order, then the system distributes the costs to any MEC work order(s) associated with the work order based on the value entered for **Equipment** on the work order header and the equipment records added to the **Equipment** page of the **Work Orders** form.

See Adding Equipment to Work Orders to Split Work Order Costs on page 789.

Estimated costs are not copied to related MEC work orders. Therefore, the system determines the estimated costs for MEC work orders by calculating the quotient of the estimated costs of the parent work order and the number of equipment records added to the **Equipment** page of the **Work Orders** form.

To view work order costs:

1 Select **Work > Work Orders**.
2 Select the work order for which to view costs, and then click the **Cost Summary** tab.
3 View the work order cost information.

See the following table when viewing work order cost information:

Table 4: Work order costs

Cost Type	Explanation
Estimated Labor Cost	Activity lines' estimated hours multiplied by trade rate when hired labor is unchecked
Estimated Hired Labor	Activity lines' estimated hours multiplied by trade rate when hired labor is checked
Estimated Stock Items	Parts associated with the work order that are not tools or direct purchase
Estimated Services	Price on the purchase order line associated with the work order
Estimated Direct Purchases	Parts associated with the work order when direct is checked
Estimated Tool Cost	Tool quantity multiplied by hours multiplied by price for the department
Estimated WO Totals	Sum of all estimated costs
Planned Labor Cost	Remaining hours unless remaining hours is null; then = 0
Planned Hired Labor	Rate multiplied by estimated hours when hired is checked, ordered is unchecked, PLNDRQPO installation parameter is ON, and is an ST (hours from service) line type or is undefined and the work order activity is not associated with a requisition or purchase order with a line order type of ST (hours from service). If the PLNDRQPO parameter is OFF, then the same information as above applies except the work order activity is not associated to a purchase order that is approved. **Note:** Line types of SH (contractor hire) would never be part of the planned cost because they are recorded as the work is done.
Planned Stock Items	Material list quantity minus quantity of parts already issued plus quantity returned (net issued) that is not line type of PD (direct purchase) and is not a tool
Planned Services	The same as Planned Hired Labor except the line order type is SF (fixed price)

Cost Type	Explanation
Planned Direct Purchases	Requisition line minus received quantity minus scrap quantity multiplied by price on the requisition line when the requisition is not in a status of cancelled, the requisition line type is PD (direct purchase) and active, and is not on a purchase order. If it is on a purchase order, then the value is the order quantity minus the received quantity minus the scrap quantity multiplied by price on the purchase order line plus total extra charges multiplied by the order quantity minus the received quantity minus the scrap quantity divided by the order quantity when the purchase order is not in a status of cancelled or approved and the purchase order line type is PD (direct purchase) and active.
Planned Tool Cost	Estimated Tool Cost minus Actual Tool Cost
Planned WO Totals	Sum of all planned costs
On Order Labor Cost	N/A
On Order Hired Labor	Order quantity minus received quantity minus scrap quantity when the order line type is ST (hours from service), the line is active, and the purchase order is approved.
On Order Stock Items	N/A
On Order Services	Order quantity minus received quantity minus scrap quantity when the order line type is SF (fixed price), the line is active, and the purchase order is approved
On Order Direct Purchases	Remaining quantity multiplied by price plus remaining extra charges when the purchase order is approved, the order line type is PD (direct purchase), and the order quantity is greater than zero
On Order Tool Cost	N/A
On Order WO Totals	Sum of all on order costs
Invoice Differences Labor Cost	N/A
Invoice Differences Hired Labor	Difference of actual cost and the invoiced cost for hired labor
Invoice Differences Stock Items	N/A
Invoice Differences Services	Difference of actual cost and the invoiced cost for services

Cost Type	Explanation
Invoice Differences Direct Purchases	Difference of actual cost and the invoiced cost for direct purchases
Invoice Differences Tool Cost	N/A
Invoice Differences WO Totals	Sum of all invoice difference costs
Actual Labor Cost	Sum of booked hours cost when order line type is ST (hours from service) or SH (contractor hire)
Actual Hired Labor	Sum of booked hours costs that are not hired labor
Actual Stock Items	Sum of transaction line quantity multiplied by transaction price when the transaction line is a stock issue, return, or return for repair and is not a direct purchase
Actual Services	Sum of booked hours costs when order line type is SF (fixed price)
Actual Direct Purchases	Quantity multiplied by price plus the proportional amount of extra charges plus the proportional amount of taxes when the transaction status is approved and is a direct purchase minus any proportional return cost. Proportional is the transaction line quantity divided by the order line quantity, returning a fraction that is used as a pro rata multiplier.
Actual Tool Cost	Sum of all tool costs
Actual WO Totals	Sum of all actual costs
Total Cost Labor Cost	Sum of Invoice Differences Labor Cost, Actual Labor Cost, and Planned Labor Cost
Total Cost Hired Labor	Sum of Invoice Differences Hired Labor, Actual Hired Labor, Planned Hired Labor, and On Order Hired Labor
Total Cost Stock Items	Sum of Remaining Balance Stock Items and Actual Stock Items
Total Cost Services	Sum of Planned Services, Invoice Differences Services, Actual Services, and On Order Services
Total Cost Direct Purchases	Sum of Planned Direct Purchases, Invoice Differences Direct Purchases, Actual Direct Purchases, and Remaining Balance Direct Purchases

Cost Type	Explanation
Total Cost Tool Cost	Sum of Planned Tool Cost and Actual Tool Cost
Total Cost WO Totals	Sum of all WO Totals
Remaining Balance Labor Cost	Estimated Labor Cost minus Total Cost Labor Cost
Remaining Balance Hired Labor	Estimated Hired Labor minus Total Cost Hired Labor
Remaining Balance Stock Items	Estimated Stock Items minus Total Cost Stock Items
Remaining Balance Services	Estimated Services minus Total Cost Services
Remaining Balance Direct Purchases	Estimated Direct Purchases minus Total Cost Direct Purchases
Remaining Balance Tool Cost	Estimated Tool Cost minus Total Cost Tool Cost
Remaining Balance WO Totals	Estimated WO Totals minus Total Cost WO Totals
Unreturned Core Charges	Total Quantity Issued minus Total Quantity Returned multiplied by the core value for all core tracked parts issued to the selected work order.

See the following table when viewing contractor estimates cost information collected from work order activities, not actual work order planning:

Table 5: Contractor estimates

Cost Type	Explanation
Estimated Labor Costs	Total labor costs estimated on work order activities
Estimated Material Costs	Total material costs estimated on work order activities
Estimated Misc. Costs	Total miscellaneous costs estimated on work order activities
Total Estimated Costs	Total labor plus materials plus miscelleaneous costs estimated on all work order activities

Viewing child work orders on a parent work order

View a list of child work orders on a parent multiple equipment work order.

To view child work orders on a parent work order:

1 Select **Work > Work Orders**.
2 Select the work order for which to view child work orders, and then click the **Children** tab.
3 Select the child work order for which to view details.
4 View the child work order detail information.

Viewing service request details

To view service request details:

1 Select **Work > Work Orders**.
2 Select the work order for which to view service request details, and then click the **Service Request Details** tab.
3 View the service request details.

Viewing equipment custom fields from a work order

View the Equipment Custom Fields popup from the **Work Orders** form to see custom fields associated with equipment on the work order.

To view equipment custom fields from a work order:

1 Select **Work > Work Orders**.
2 Select the work order for which to view equipment custom fields, and then click the **Record View** tab.
3 Right-click on the form, and then choose **View Equipment Custom Fields**.
4 View the equipment custom fields information.

Viewing purchasing for work orders

View purchasing information for a work order to access a list of detailed information about requisition and purchase order lines for a specific work order. The system displays information about Direct Purchase materials on purchase order lines associated with the work order and/or requisition lines that are associated with the work order that are not yet associated with purchase order lines.

To view purchasing for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to view purchasing, and then click the **Purchasing** tab.
3 View the purchasing history for the work order.

   See Creating Requisitions on page 569 and Creating and Revising Purchase Orders on page 678.

   Note: If a purchase order line contains a multiple equipment work order, the system also displays information about how the purchase order is split among the equipment and related work order(s).

Booking labor for purchase orders

Receive vendor labor for purchase orders.

To book labor for purchase orders:

1 Select **Work > Process > Book PO Labor**.
2 Specify this information:

Purchase Order
Specify the purchase order for which to book labor. The system automatically populates the purchase order description in the adjacent field and the **Organization**.

When Date Worked Outside Activity-Date Range
Select to allow labor bookings for purchase orders when the date worked falls outside the activity date range.

To be Applied to Completed Multi-Equipment WOs where Equipment is All Equipment
Select to allow labor bookings for purchase orders to be applied to completed multi-equipment work orders where Equipment=All Equipment.

PO Line
Specify the line number of the purchase order.

Employee
Specify the personnel performing the work for which to book hours. The system automatically populates the employee description.

Equipment
Specify the equipment on which to perform labor.

Hours Worked
Specify the number of hours spent performing the work.

Start Time
Specify the scheduled start time of the work order activity.

Booked Labor Description
Specify the description of the booked labor.

Date Worked
Specify the date the labor was performed.

Received
Specify the number of the parts received.

End Time
Specify the scheduled end time of the work order activity.

Work Order-Activity
Specify the work order-activity for the selected PO line.

Type of Hours
Specify the type of hours for the labor.

% Received
Specify the percentage of the lines received on the purchase order.

Task Qty.
Specify the number of units required for the service.

3 Click **Book Labor**.

Managing repairs for work orders

Add, modify, or delete repairs for work order activities and jobs. Specify the reason for the repair, the work performed, and the components repaired.

To manage repairs for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to manage repairs, and then click the **Repairs** tab.
3 Click **Add Repair**.
4 Specify this information:

Activity
Select the activity for which to add repairs.

Job
Select the job of the activity for which to add repairs if applicable.

Reason for Repair
Specify the reason the repair is necessary.

Work Accomplished
Specify the work performed towards the repair.

Include on Warranty Claim
Select if the repair is covered under warranty.

Completed
Select if the repair has been completed.

Percent Complete
Specify the percentage of completion for the repair.

System Level
Specify the system on which the repair is to be completed.

Assembly Level
Specify the assembly on which the repair is to be completed.

Component Level
Specify the component on which the repair is to be completed.

Component Location
Specify the component location on which the repair is to be completed.

Repair Comments
Enter any comments on the repair as necessary.

5 Click **Submit**.

Creating capital planning requests

Create capital planning requests to request a capital expenditure. Capital planning requests are based on forecasted labor costs, forecasted material costs, and expected cost avoidance.

To create capital planning requests:

1 Select **Work > Capital Planning Request**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the purchase order belongs if you use multi-organization security.

CPR
Specify a description of the capital planning request in the adjacent field. A capital planning request number is assigned after you save the record.

Status
Select the status value of the capital planning request.
Note: Authorized By and **Authorization Date** are populated when the capital planning request **Status** is Approved.

Equipment
Select the equipment for which to make the capital planning request.

WO Type
Choose one of the following options:

Breakdown
Select to create a work order in response to an equipment breakdown or failure.

PM
Select to create a preventive maintenance work order. .

See Creating Preventive Maintenance Work Orders on page 851

Scheduled
Select to create a scheduled work order.

Repairable Spare
Select to create a work order for repairable spare parts. If you are creating a work order for repairable spare parts, you must also add the parts to repair on the **Repair Parts** page.

See Adding Repairable Spare Parts to Work Orders for Repair on page 822.

Standard WO
Select to create a standard work order.

See Creating Standard Work Orders on page 766.

Note: The previously listed work order types are standard types in the system. You can also create user-defined work order types.

See "Defining system codes" in the *Infor EAM System Administator Guide*.

Department
Specify the department.

Requested By
Specify the employee making the capital planning request.

Assigned To
Specify the person responsible for the work to be completed for the capital planning request.

Priority
Select the priority level of the capital planning request.

Sustainability
Select if the capital planning request is related to asset sustainability features.

Class
Specify the class of the capital planning request.

Objective
Specify the objective to associate with the capital planning request.

Assigned By
Specify the supervisor who assigned the work order.

Estimated Labor Cost
Specify the estimated labor costs for the capital planning request. **Total Estimated Cost** is automatically calculated with the sum of the **Estimated Labor Cost**and **Estimated Material Cost**.

Estimated Material Cost
Specify the estimated material costs of the capital planning request. **Total Estimated Cost** is automatically calculated with the sum of the **Estimated Labor Cost** and **Estimated Material Cost**.

Cost Avoidance
Specify the estimated cost avoidance for the capital planning request.

Appropriation Date
Specify the date by which the capital request must be appropriated.

Requested Appropriation Date
Specify the date by which you are requesting the appropriation of the capital request.

ROI % (Return on Investment)
Specify the return on investment percentage for the capital planning request.

NPV (Net Present Value)
Specify the net present value for the capital planning request.

IRR % (Internal Rate of Return)
Specify the internal rate of return percentage for the capital planning request.

Major Group
Specify the major group for the capital planning request.

Group
Specify the group for which the capital request must be appropriated.

Individual
Specify the individual element for the capital request.

Additional Information
Specify additional information for the capital request as necessary.

Default Authorizer
Specify the default authorizer for the capital request.

4 Click **Save Record**.
Note: To create a work order for the capital planning request, right-click on the **Capital Planning Request** form, and then click **Create WO**. **Work Order** is automatically populated with the generated work order number.

To create a project to associate to a capital planning request, right-click on the Capital Planning Request form, and then click **Create Project**.

See Associating Projects to Capital Planning Requests on page 849.

Associating projects to capital planning requests

Create a project to associate to a capital planning request.

To associate a project to a capital planning request:

1 Select **Work > Capital Planning Requests**.
2 Select the capital planning request for which to associate a project, and then click the **Record View** tab.
3 Click **Create Project**.
The system automatically populates **Capital Planning Request**.
4 Specify this information:

Project
Specify a unique code identifying the project, and then enter a description of the project in the adjacent field.

Organization
Specify the organization of the project.

Parent Project
Specify the parent project if applicable.

Shutdown
Specify a shutdown identification code to associate with the project if the project requires the shutdown of equipment.

Status
Select the status of the project.
Note: All projects start with a **Status** of **Awaiting Approval**.

Class
Specify the class of the project. The system automatically populates **Class Org.**

Coordinator
Specify the employee code of the project coordinator.

Estimated Start Date
Specify the intended starting date for the project.

Estimated End Date
Specify the intended ending date for the project.

Actual Start Date
Specify the actual starting date for the project.

Actual End Date
Specify the actual ending date for the project.

Current Budget
Specify the total budget amount for the project. Budgets of child projects do not roll up to the budget of the parent project.

Labor
Specify the estimated internal labor costs.

Stock Items
Specify the estimated stock material costs.

Services
Specify the estimated services costs.

Budget Date
Specify the date the budget was established.
Note: You must enter a **Budget Date** that is before or equal to the current date.

Hired Labor
Specify the estimated hired external labor costs.

Direct Purchases
Specify the estimated amount of money needed to purchase materials not normally stocked in house.

Tool Cost
Specify the estimated cost of the tools.

5 Click **Submit**.

Creating preventive maintenance work orders

Create preventive maintenance (PM) work orders to generate periodic work orders for specified frequencies or meter readings.

Preventive maintenance work orders apply to single pieces of equipment or to systems that include several pieces of equipment.

Note: You can only insert, update, or delete work orders if you are authorized to do so.

When you are creating PM schedules to generate periodic work orders, you can establish a "nesting reference" between major and minor PMs to bypass a minor PM that coincides with the release of a major PM. For example, you create a major PM for 90,000-mile service on a truck, for which the PM work order activities include changing the oil. You have also created a minor PM for changing the oil every 3000 miles. You can establish a nesting reference between the major PM for 90,000-mile service and the minor PM for changing the oil after 3000 miles to enable the system to bypass the PM for changing the oil after 3000 miles if its release coincides with the release of the PM for 90,000-mile service.

The system can only bypass a minor PM if it is currently associated with a major PM with a status of **Released**.

When bypassing a nested minor PM, the system assigns a status of Bypassed to the minor PM until the major PM is completed. Upon completion of the major PM, the system automatically assigns the status specified for **Complete Status** on the **Record View** page of the **PM Schedules** form to the minor PM, e.g., **Completed** or **Rejected**.

Additionally, if you change the status of a released major PM to **Awaiting release**, the system also sets the status of any related bypassed minor PMs to **Awaiting release**.

Note: If you have set up the system to require an electronic signature to authorize status changes to PM work orders, the system will display the eSignature popup when status changes occur for major and minor PM work orders associated with each other through a nesting reference.

Defining PM routes and equipment within routes

A route is a list of equipment that may be associated with a work order or preventive maintenance equipment record as an indication of the scope of work to be performed, i.e., number of repetitions. Several pieces of equipment that are serviced together often follow a particular route. Identify these routes and give them a route code.

Note: If you have purchased the GIS integration, you may view routes on a GIS map from the Routes form.

See Viewing GIS maps from equipment records on page 1098.

If installation parameter ROUTEEOB is set to Y, the system creates MEC work orders when their parent work order is released, assuming the parent work order is associated with an equipment based route. Additionally, if the child equipment is configured to associate its map with work orders when they are released, the system associates the appropriate map with each MEC work order.

See Adding Equipment to Work Orders to Split Work Order Costs on page 789.

To define PM routes and equipment within routes:

1. Select **Work > WO Planning > Routes**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the route belongs if you use multi-organization security.

   Route
   Specify a unique code identifying the route, and then enter a description of the route in the adjacent field.

   Equipment Class
   Specify the class of the equipment to inspect. The classes shown belong to the OBJ entity.

   Category
   Specify the category of equipment or route to associate with a regular route inspection.

   Template
   Select to associate categories with the route. Unselect to associate equipment with the route.

   Routing templates apply to similar equipment requiring the same maintenance action and to equipment that moves so frequently that updating routes may be impractical. When you select **Template**, the system generates a dynamic list of all equipment that might apply to that work order, regardless of where you move the equipment. When you unselect **Template**, the system lists only the specific equipment listed on the work order. When you select **Template**, you may not specify a **Category**. If you select **Template** after entering a **Category**, the system clears the **Category** you entered.

   Revision Status
   Specify the revision status for the route.

   The system automatically populates **Revision**.

   Note: You can enter a **Revision Status** only if the PMRVCTRL installation parameter is set to Yes. Contact your system administrator for more information.

4. Click **Save Record**.
5. Click the **Equipment** tab.
6. Click **Add Equipment**.

   The system automatically populates **Sequence Number** with the next consecutive number according to the INCRLINO installation parameter.

7 Specify this information:

Equipment
Enter the equipment to include in the route. The system automatically populates the equipment description, **Equipment Type**, and **Equipment Org.**

Sequence Number
Modify the sequence number as necessary.

8 Click **Submit**.

Defining preventive maintenance schedules

Define the PM work order and its schedule. Define PM work orders based on meter readings (readings are taken after a certain amount of usage), frequency of use (readings are taken at certain time intervals), or both.

Define PM generation "windows." Establish **Ok Window %**, **Near Window %**, and **Release Window %** values based on a percentage of the meter or frequency interval. For example, assume that the **Ok Window %** is set to 25% and the frequency of the PM schedule is 60 days. This indicates that during the 15 days (25% of 60) after closing a PM work order, none of the work needs to be redone when the equipment breaks down. The **Near Window %** indicates that when a breakdown occurs in this window, it may be worthwhile to execute the PM together with the breakdown maintenance. The work order is generated as soon as the **Release Window %** is reached.

Note: You can only insert, update, or delete work orders if you are authorized to do so.

To define preventive maintenance schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Click **New Record**.

Requested By is automatically populated with the **User ID** of the logged in user and the current date is inserted in **Date Requested**. **Date Approved** is automatically populated with the system date and time that the status of the PM is set to Approved. A **Revision** number is also entered each time the PM schedule is released/updated.

3 Specify this information:

Organization
Specify the organization to which the PM schedule belongs if you use multi-organization security.

PM Schedule
Specify a unique code identifying the PM schedule, and then enter a description of the PM schedule in the adjacent field.

Type
Specify the PM schedule type. See the following list for default status values:

Fixed
Select for the system to issue the PM based on a fixed schedule, e.g., based on date or reading when the last PM was originally due.

Variable
Select for the system to issue the PM based on a variable schedule, e.g., based on the date or reading on which the last PM was completed.

Duplicate
Select to allow multiple PM work orders to be open at the same time.
Note: Selecting **Duplicate** as the PM type enables you to create an exception to the rule that a PM equipment may have only one work order for the PM work order at a time.

Out of Service
Select to restrict the system from displaying the PM schedule in lookups.

Class
Specify the class of the PM. The classes shown belong to the PPM entity.

Work Package
Select to indicate that this PM schedule can be associated with a work package. The system automatically populates **Plan** with the PM plan.

4 Specify one of the following options:

Perform Every
If the PM schedule is based on the passage of a period of time
Specify the length of time to elapse before the system generates the PM work order, and then select the unit of measure for the PM period in the adjacent field. The unit of measure for the PM period can be days, weeks, months, quarters, or years.

Meter Interval
If the PM schedule is meter-based
Specify for **Meter Interval** and/or **Meter #2 Interval**, the interval(s) between PM work orders, and then enter the corresponding unit(s) of measure in the adjacent field.
Note: You can specify more than one meter interval for a PM. For example, you may want to change the oil in a truck every 3000 miles, which is **Meter Interval**. However, you may also want to change the oil in the same truck after 720 hours of running time, which is **Meter #2 Interval**. Enter values for **Meter Interval**, **Meter # 2 Interval**, and the meter units of measure as necessary; however, you must enter a value for **Meter Interval** to enter a value for **Meter #2 Interval**.

5 Specify one of the following options for **Nesting Reference**:

To create a nesting reference to an existing PM
Specify a previously scheduled PM.

To create a name by which to identify the PM schedule you are creating for nesting
Specify a name for the PM schedule to use for nesting references. After saving the PM schedule to the database, the name you enter will appear in the lookup for **Nesting Reference**, enabling you to create a nest between this PM schedule and other PM schedules.

6 Specify this information:

Complete Status
Specify the status to assign to minor work orders automatically bypassed and closed by the release of this PM through a nesting reference.

Est. Workload
Specify the estimated number of hours required to complete the work order.

Nest Buff. (-/+)
Specify the percent value of the nesting buffer. This value is multiplied by the value specified for **Perform Every** for a period-based minor PM. This value is multiplied by the value specified for **Meter Interval** and/or **Meter # 2 Interval** for a meter-based PM.

For both period-based and meter-based PMs, the product of this equation is applied to the associated major PM to determine the backward nesting window of the due date for the major PM. This field is automatically populated with 25; however, you can enter any value between 0 and 99999.

Note: The **Nest Buff. (-/+)** is only related to time-based preventive maintenance schedule setup.

M1 Nest Buff. (-/+)
Specify the percent value of the nesting buffer for the first meter. This value is multiplied by the value specified for **Perform Every** for a period-based minor PM. This value is multiplied by the value specified for **Meter Interval** and/or **Meter # 2 Interval** for a meter-based PM.

For both period-based and meter-based PMs, the product of this equation is applied to the associated major PM to determine the forward nesting window of the due date for the major PM. This field is automatically populated with 25; however, you can enter any value between 0 and 99999.

M2 Nest Buff. (-/+)
Specify the percent value of the nesting buffer for the second meter. This value is multiplied by the value specified for **Perform every** for a period-based minor PM. This value is multiplied by the value specified for **Meter Interval** and/or **Meter # 2 Interval** for a meter-based PM.

For both period-based and meter-based PMs, the product of this equation is applied to the associated major PM to determine the nesting window of the due date for the major PM. This field is automatically populated with 25; however, you can enter any value between 0 and 99999.

Note: You can enter a backward and forward nesting buffer for **Perform Every** or for one or both **Meter Interval** and **Meter #2 Interval**. Enter values for **Nesting Nest Buffer (- / +)**, **M1 Nest Buffer (- / +)**, and **M2 Nest Buffer (- / +)** for each PM interval as necessary.

Ok Window
Specify the value to use for the Ok window.

Near Window
Specify the value to use for the near window.

Release Window
Specify the value to use for the release window.

Perform On
Specify the week of the month and the day of the week on which to perform the work on the equipment, e.g., 2nd Tuesday of the month due. Select **Last** to handle scenarios in which there are five weeks in a month. The due date is set to the last week of the month.
Note: Perform On is only available for duplicate PMs, and is not available for daily or weekly frequencies.

Production Priority
Specify the production priority to assign to resulting work orders.
Note: Production Priority Desc. is populated on resulting PM work orders whose equipment have **Track Resources** selected.

Req. Start Date Buff. (Days)
Specify the number of days for which to buffer the requested start date.
Note: Req. Start Date is populated on resulting PM work orders, based on this buffer, whose equipment have **Track Resources** selected.

Req. End Date Buff. (Days)
Specify the number of days for which to buffer the requested end date.
Note: Req. End Date is populated on resulting PM work orders, based on this buffer, whose equipment have **Track Resources** selected.

Revision Status
Specify the status for the current revision of the PM schedule.

Revision Reason
Specify an explanation of any revisions to the PM schedule.

Revision Status
Specify the revision status for the route.
Note: You can enter a **Revision Status** only if the PMRVCTRL installation parameter is set to Yes. Contact your system administrator for more information.

WO Type
Specify the work order type for the PM schedule.

Duration
Specify the duration of the work order for the PM schedule.

Approval List
Specify the approval list for the PM schedule.

WO Class
Specify the class of the work order. The classes shown belong to the EVNT entity.

Supervisor
Specify the supervisor for the PM schedule.

Priority
Specify the priority level of the PM schedule.

7 Click **Save Record**.

Defining activities of PM work orders

To define activities of PM work orders:

1 Select **Work > WO Planning > PM Schedules** .

2 Select the PM schedule for which to define activities, and then click the **Activities** tab.

3 Click **Add Activity**.

The system automatically populates **Activity** with the next available line number, and it also populates **People Required**, **Start**, and **Duration** with a default value of 1.

4 Specify this information:

Activity
Enter a unique code identifying the activity number. If you do not provide a number, the system enters a number, starting at 1 and increasing by 1 for each record.

Trade
Enter the trade to perform this activity.

Task
Enter the task code for this activity.

Task Qty.
Enter the required number of units of the task to associate with the activity, and then select the unit of measure in the adjacent field.

Material List
Enter the material list for this activity.

Estimated Hours
Enter the number of estimated hours for the activity.

People Required
Enter the number of people needed to complete the activity.

Start
Enter `1` if the activity is to start on the same day that the standard work order starts. Enter `2` if the activity should start on day 2 of the standard work order, etc.

Duration
Enter the duration of the activity in days.

Hired Labor
Select to indicate that the activity will be completed by an external source.

Specify this information only if you use the American Trucking Association's Vehicle Maintenance Reporting System (VMRS):

Note: Depending on your system configuration, the **VMRS-related** fields may not be displayed. Contact your system administrator for more information.

Reason For Repair
Enter the reason the vehicle needs repair (Code Key 14).

Work Accomplished
Enter the work performed on the vehicle (Code Key 15).

Technician Part Failure
Enter the reason the technician or supplier thinks the vehicle failed (Code Key 18).

Manufacturer
Enter the Manufacturer/Supplier Code (Code Key 34) to associate with the vehicle.

System Level
Enter the VMRS code identifying the system, e.g., brakes, frame, suspension, needing repair (Code Key 31).

Assembly Level
Enter the VMRS code identifying the subsystem needing repair (Code Key 32). The values available are based on the system-level code.

Component Level
Enter the VMRS code identifying the specific component or part needing repair (Code Key 33). The values available are based on a combination of the system-level code and the assembly-level code.

Activity Comments
Enter any comments relevant to the activity.

5 Click **Submit**.

Defining equipment for PM schedules

Define equipment for PM schedules on the **Equipment** tab of the **PM Schedules** page.

Note: If you edit the length of a linear equipment record, the system may automatically edit associated PM records when installation parameter PMRVCTRL is set to No. If the new equipment length falls on or within the length of the PM, the system automatically updates the **To Point** of the PM record based on the new equipment length. If the new equipment length falls outside of the length of the PM, the system does not update the PM record.

To define equipment for PM schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule for which to define equipment, and then click the **Equipment** tab.
3 Click **Add Equipment**.

The system automatically populates **Equip. Org.**, **Work Order Org.**, **Perform Every**, **Work Order**, **WO Class**, **Supervisor**, and **Meter Interval**.

The system automatically populates **Date of Last Work Order** with the **Due Date** of the current work order for the PM. If the work order is a duplicate PM, the system displays the latest date.

4 Specify this Equipment Details information:

Equipment
Specify the equipment for which to define a PM schedule. The system automatically populates the equipment description, **Department**, **Cost Code**, and **Assigned To**.

Work Order Org.
Specify the organization to which the work order belongs if you use multi-organization security.

Department
Specify the department of the work order.

Location
Specify the location.

Route
Specify the route for the PM equipment. If the ROUTEEOB installation parameter is set to Y, a **Route** is specified on the PM schedule, and the PM schedule **Type** is either Fixed or Variable, then the system will also create MEC work orders for the route equipment (as indicated by the setting of the MEROUTWO installation parameter). The system generates the MEC work orders in addition to the initial PM work order when the PPMSTAT installation parameter is set to R (Released), and the system automatically selects **Multiple Equipment** on the PM work order header.
Note: Updating the **Route** for an existing PM equipment does not affect the creation or deletion of MEC work orders for any existing PM work orders that are pending for the PM equipment.

Perform Every
Specify the length of the interval of time to pass before the system generates the next PM routine work order. You can enter any value between 0 and 99999, and then select the unit of measure in the adjacent field. The unit of measure for the PM period can be days, weeks, months, quarters, or years.

Due Date
Specify the due date of the first work order.
Note: Each work order determines the due date of the following work order. If you update the **Due Date** on the **Equipment** tab, the system updates the work order **Due Date** so that this due date is later than the last work order completion date. The system adds the interval to the entered **Due Date** on the **Equipment** tab until a date later than the last completion date is reached. Future due dates are accepted without validation.

After a work order is generated for a PM, the system automatically updates **Due Date** and **Meter Due** on the **Equipment** tab of the **PM Schedules** page to reflect the next anticipated time that the PM will be performed on the associated equipment. The system automatically synchronizes the **Due Date** on the **Work Orders** tab of the **PM Schedules** page with a generated work order when a new work order is completed or when the **Due Date** is updated on a work order, which includes any minor work orders that are awaiting release when a major PM work order is completed.

Due Nonconformities Only
Select to include only new observations created for nonconformities that are due for inspection.
Note: The inspector will not see nonconformities on the work order that are present but not due for inspection. The inspector may be confused if he finds nonconformities during the inspection that were not on the list, which may lead to duplicate nonconformities

Include Nonconformities
Select to include new observations for re-inspection for existing nonconformities.

Dormant Start
Specify the date on which the dormant period for the PM begins.

Dormant End
Specify the date on which the dormant period for the PM ends.

Reuse Dormant Period
Select to use the same specified dormant period for the PM on a yearly basis. If you select **Reuse Dormant Period**, the system automatically updates the specified **Dormant Start** and **Dormant End** dates after the dormant period has elapsed.

Test Point Set
Specify the test point set for calibration of the equipment.
Note: Depending on your system configuration, **Test Point Set** may not be displayed. Contact your system administrator for more information.

If the work order is a calibration work order, the system copies the test points for the specified equipment record to the work order when it is released. The system copies the test points related to the selected **Test Point Set**.

Include Nonconformities
Select to include new observations for re-inspection for existing nonconformities.

Due Nonconformities Only
Select to include only new observations created for nonconformities that are due for inspection.
Note: The inspector will not see nonconformities on the work order that are present but not due for inspection. The inspector may be confused if he finds nonconformities during the inspection that were not on the list, which may lead to duplicate nonconformities

PM Type
Choose one of the following PM routine types:

PM routine type	Description
Fixed	Select for the system to issue the PM based on a fixed schedule, e.g., based on date or reading when the last PM was originally due.
Variable	Select for the system to issue the PM based on a variable schedule, e.g., based on the date or reading on which the last PM was completed.
Duplicate	Select to allow multiple PM work orders to be open at the same time. **Note:** Selecting **Duplicate** as the PM type enables you to create an exception to the rule that a PM equipment may have only one open work order for the PM work order at a time.

WO Class
Specify the class of the work order.

Cost Code
Specify the cost code associated with the PM.

Assigned To
Specify the person responsible for the equipment.

Supervisor
Specify the supervisor for the equipment.

Date Deactivated
Specify the date after which work order generation stops.

Meter Interval
Specify the length of the interval of time indicating how frequently the first meter is used/read, e.g., 30 to indicate that the first meter is read every 30 days, and then enter the unit of measure for the first meter that triggers release on usage in the adjacent field.

Meter Due
Specify the reading due value for the first meter.
Note: Each work order determines the due reading of the following work order. If you update **Meter Due** on the **Equipment** tab, the system updates the work order **Meter Due** so that this due reading is higher than the reading on the last work order completed. The system adds the interval to the entered **Meter Due** on the **Equipment** tab until a reading higher than the reading on the last work order completed is reached. Future due readings are accepted without validation.

Meter # 2 Interval
Specify the length of the interval of time indicating how frequently the second meter is used/read, e.g., 30 to indicate that the second meter is read every 30 days.

Meter #2 Due
Specify the reading due value for the second meter.

Perform On
Specify the week of the month and the day of the week on which to perform the work on the equipment, e.g., 2nd Tuesday of the month due. Select **Last** to handle scenarios in which there are five weeks in a month. The system sets the due date to the last week of the month.

5 Specify this Linear Reference Details information:

From Point
Specify the point on the linear equipment record from which to begin the reference.

Ref. Description
Specify the description for the **From Point** reference.

Geographical Ref.
Specify the geographical reference for the **From Point** reference.

To Point
Specify the point on the linear equipment record from which to end the reference

Ref. Description
Specify the description for the **To Point** reference.

Geographical Ref.
Specify the geographical reference to the **To Point** reference.

6 Click **Submit**.

Including nonconformities on PM schedules

Identify which nonconformities to include when generating periodic work orders.

Note: The nonconformity and equipment data available on this screen are used to filter relevant nonconformities when the **Include Nonconformities** check box on the **Equipment** tab of the **PM Schedules** form is selected.

To include a nonconformity on a PM schedule:

1. Select **Work > WO Planning > PM Schedules**.
2. Select the PM schedule for which to include a nonconformity, and then click the **Nonconformities** tab.
3. Click **Add Record**.
4. Optionally, specify this nonconformity selection criteria information:

   Equipment Class
   Specify the equipment class of the equipment for which to include nonconformities.

   Nonconformity Class
   Specify the nonconformity class. Nonconformity classes are associated and defined at the nonconformity type level.

   Type
   Specify the type of nonconformity, such as rotting, cracked, loose.

   Type Class
   Specify the class of the nonconformity type.

   Part
   Specify the part associated with the nonconformity type. For example, specify a tire for nonconformity types like flat, underinflated, or punctured.

   System Level, Assembly Level, Component Level
   Specify the system, assembly, and component levels.

   Material Type
   Specify the material type associated with the nonconformity. For example, specify fabric as the material type for torn, stained, or faded nonconformity types.

   Severity
   Specify the severity level of the nonconformity, such as minor, major, or catastrophic.

   Intensity
   Specify the intensity level of the nonconformity, such as low, moderate, or high.

   Size From/To
   Specify the size range of the nonconformity.

   Importance
   Specify the importance level of the component of the nonconformity.

Priority
Specify the priority of the nonconformity.

Department
Optionally, specify the department.

5 Click **Submit**.

Viewing work orders per PM schedule

View work order information associated with each PM Schedule.

To view work orders per PM Schedule:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule for which to view work orders, and then click the **Work Orders** tab.
3 View the work orders per PM Schedule.

Note: The PMCRPAST installation parameter specifies whether or not a new fixed PM work order can be released with a due date in the past.

See the *Infor EAM System Administrator Guide*.

Viewing comments for PM work order activities

View comments for PM work order activities to access comments entered for PM work order activity records.

See Defining Activities of PM Work Orders on page 856.

To view comments for PM work order activities:

1 Select **Work > Work Orders**.
2 Select the PM work order for which to view comments, and then click the **Activities** tab.
3 Select the activity for which to view comments, and then click **View PM Activity Comments**. **Print with Document** is automatically selected if the comments are selected for printing on the work order activity.

See Entering Comments on page 324.

4 Specify this information:

Language
Select the language for which to view the comments.

5 View the comments.
6 Click **Close**.

Viewing jobs for PM schedules

View jobs for PM schedules if the PM has one or more activities that reference a task plan with associated jobs.

Note: `SHOWJOB` must be enabled to access this tab.

To view jobs for PM schedules:

1. Select **Work > WO Planning > PM Schedules**.
2. Select the PM schedule for which to view jobs, and then click the **Jobs** tab.
3. View the information.

Viewing planned labor for PM schedules

View planned labor for PM schedules if the PM has one or more activities that reference a task plan with associated jobs.

To view planned labor for PM schedules:

1. Select **Work > WO Planning > PM Schedules**.
2. Select the PM schedule for which to view planned labor, and then click the **Plan Labor** tab.
3. View the information.

Viewing planned parts for PM schedules

View the planned parts required to complete a PM schedule. Planned parts are displayed on this tab if the PM schedule work order has one or more activities referenced.

To view planned parts for PM schedules:

1. Select **Work > WO Planning > PM schedules**.
2. Select the PM schedule for which to view planned parts, and then click the **Plan Parts** tab.
3. View the information.

Viewing estimated costs for PM schedules

View the estimated costs for a PM schedule, including the estimated costs of all jobs or a single job on the PM schedule.

The following cost categories are estimated based on the information provided: internal labor, external labor, stock items, direct purchases, and tools. The total cost is then calculated.

To view estimated costs for PM schedules:

1. Select **Work > WO Planning > PM schedules**.
2. Select the PM schedule for which to view estimated costs, and then click the **Estimated Costs** tab.
3. Optionally, select the specific job for which to view the estimated costs for the PM schedule.

Note: If **Job** is set to **Show All Records** the cost for the PM schedule is displayed including all associated jobs.

4 Specify this information:

Organization
Specify the organization of the PM schedule. The organization of the selected PM schedule is defaulted if it is a specific organization.

Department
Specify the department of the PM schedule.

Store
Specify the store of the PM schedule to calculate estimated costs per store.
Note: This field is hidden unless `PRICELEV` is set to `S` for store level. If `PRICELEV` is set to `P`, prices are retrieved from the Prices tab for the part of the selected organization.

Supplier
Specify the supplier of the PM schedule to calculate estimated costs per supplier. The preferred supplier of the selected PM schedule is defaulted.

5 View the estimated costs.

Managing tools for PM schedules

Request tools from a department for specified PM schedule activities and jobs. Record tool requirements of multiple activities for a specified PM schedule. View tools for all activities and all jobs associated to the PM schedule. Alternately you can view tools for a selected activity and all jobs for that activity, or view tools for a selected activity and a selected job for that activity.

To request tools for PM schedules:

1 Select **Work > WO Planning > PM Schedules** form.
2 Select the PM schedule for which to request tools, and then click the **Plan Tools** tab.

Note: You must enter an activity for the work order before you request a tool.

See Defining Activities of PM Work Orders on page 856.

3 Optionally, select the specific activity for which to plan tools, or select **Show All Records** to display all of the activity records for the PM schedule.

Note: You may use this selector to view all activities and all jobs, or view tools for a selected activity and all jobs for that activity if you select **Show All Records** for **Job**.

4 Optionally, select the specific job for which to plan tools, or select **Show All Records** to display all of the job records for the PM schedule.

Note: You may use this selector to view all activities and all jobs if you selected **Show All Records** for **Activity** in the previous step, and then select **Show All Records** for **Job**. Alternately you may view tools for a selected activity and a selected job but you must select that specific job here.

5 Click **Add Tool**.
6 Specify this information:

Activity
Specify the appropriate activity for the PM work order. **Activity Duration** is automatically populated.
Note: The activity value is automatically populated if only one activity exists for the selected PM schedule. When two or more exist, **Activity** must be selected from the list.

Tool
Specify the tool required to complete the activity. The system automatically populates the description of the tool and **Tool Org.**

Hours Requested
Specify the number of hours the tool is needed for the activity.

Quantity Required
Specify the number of tools needed to complete the activity.

7 Click **Submit**.

Defining sales prices for PM schedules

Define sales prices for PM schedule. Use the sales prices defined here for sales transactions on the PM schedule. Sales prices can be defined for specific PM schedules to create invoice lines using a fixed sales price rather than use the actual work order costs tracked by the system, like part issues, time sheets, tool costs, etc.

To define sales prices for PM schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule for which to define sales prices, and then click the **Sales Prices** tab.
3 Click **Add Record**.
4 Specify this information:

Job
Specify the job associated with the PM schedule for which to define sales prices. **Job Plan** is automatically populated.

Organization
Specify the organization of the PM schedule.

Sales Price
Specify the sales price to specify for the selected PM schedule.

Date Effective
Specify the date this sales prices will become effective.

5 Click **Submit**.

Breaking down work on linear equipment for PM schedules

Enter and view preventive maintenance work for linear equipment. If necessary break down that work into manageable, linear segments for easier planning and scheduling of the work. For more information on linear equipment, see

Defining linear equipment on page 364.

To break down work on linear equipment for PM schedules:

1. Select **Work > WO Planning > PM Schedules**.
2. Select the PM schedule for which to break down work on linear equipment, and then click the **Breakdown Linear Work** tab.
3. Specify this information:

   Equipment
   Specify the PM equipment for which to break down the work into linear segments. The system automatically populates the equipment description, **Equip. Org.**, **Equipment Length**, and the equipment length UOM.
   Note: You must first define this equipment on the **Equipment** tab. Only one record may exist.

   Precision
   Select the precision in which the system calculates **From Point** and **To Point**. Default is 0.

   Breakdown Into
   Specify the number of segments into which to break down the linear work, e.g., enter 12 if you plan to break down the work into a one year (twelve month) cycle with work performed each month in that year.

   Breakdown From/To
   Specify the starting **From Point** and the ending **To Point** on the linear equipment record to determine where and how to break down or divide the work on the equipment.

   Start Date
   Specify the date to begin the work for the first segment.

   Perform Every
   Specify the intervals at which time to perform the work on the segments, e.g., enter 1 and then select **Years** if work should be performed on an annual basis or once every year.

4. Click **Create/Refresh Preview**. Adjust individual segments as necessary once the grid is populated.
5. See the linear overview section to view the breakdown records.
6. Click **Submit**.

Associating permits to PM schedules

You may associate permits with a PM schedule on the **Permits** tab. The permits will be copied to the work orders released against the specified PM schedule.

To associate permits to PM schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule to which to associate permits, and then click the **Permits** tab.
3 Click **Add Permit**.
4 Specify this information:

Permit
Select the permit to associate to the PM schedule. The permit description and **Permit Org.** are automatically populated.

Mandatory

Activity

Auto Create PTW

PTW Type

Type of Work

Priority

Risk

LOTO Required

Isolation Type

Delete Pending

5 Click **Submit**.

Associating ERP resources to PM schedules

Associate ERP resources to selected PM schedules for specific equipment. The system copies these ERP resources to planned work orders in order to communicate equipment downtime for any resources impacted when the selected equipment is taken out of service for the specific work order.

A resource is a line of products, equipment, or materials used to complete a job.

To associate ERP resources to PM schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule with which to associate ERP resources, and then click the **Resources** tab.
3 Click **Add Resource**.
4 Specify this information:

Equipment
Select an equipment to associate resources.
Note: Equipment must be associated to the PM schedule prior to associating resources.

Resource
Select the resource to associate to the selected PM schedule equipment. The system automatically populates **Resource Name** and **Accounting Entity**.

Operation Sequence
Specify the order in which the resource will be impacted when the equipment is taken down for maintenance.

Cool-down Time (Hours)
Specify the time it takes in hours for the resource line to cool down before performing maintenance work.

Warm-up Time (Hours)
Specify the time it takes in hours for the resource line to warm up before normal use.

Downtime (Hours)
Specify the expected downtime in hours for the selected PM schedule and equipment.

Active
Select to designate this resource line as active to display the resources on the PM work order.

Offset
Select to designate this resource line as offset, or that the resource impacted by down equipment will overlap with the previous resource.

Offset Value
Specify the amount of time in hours in which the resource impacted by down equipment, overlaps the previous resource.

5 Click **Submit**.

Note: When deleting a resource, the system deletes the resource if the resource is not indirectly related to the selected equipment by parent equipment.

To associate resources to the PM schedule not associated with the selected equipment, click **All Resources**. Select a resource, and then click **Submit**.

To refresh resources associated, select the resource record to refresh, and then click **Refresh Resources**.

To view the resource history for the selected PM schedule, click **View Resource History**.

Adding safety hazards and precautions to PM schedules

Add hazards and precautions to PM schedules that inform your employees on how to use equipment safely when working in hazards that can cause bodily harm and alert them in advance of the precautions to take to protect themselves from the hazard. For example, you can add a precaution to turn equipment off and remove the power cord from the power outlet before performing repairs on electrical equipment.

If PMRVCTRL is set to YES, existing safety records can only be modified when the PM schedule **Revision Status** is **Unfinished**.

To add safety hazards and precautions to PM schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule for which to add safety precautions and hazards, and then click the **Safety** tab.
3 Click **Add Safety Record**.
4 Specify this information:

Hazard
Specify the hazard to add to the PM schedule. The system automatically populates a description of the hazard, **Hazard Org.**, and **Hazard Type**.

Precaution
Specify the safety measure to protect your employees from the hazard. The system automatically populates a description of the precaution, **Precaution Org.**, **Timing**, **Sequence**, and **Precaution Revision**.

Timing
Select the timing which is used to identify when the precaution should be taken. For example, if your employee is working with fire, you can enter the timing of pre-work to alert the employee that they should wear fire-resistant clothing before beginning the task.

Sequence
Specify the sequence number which is used to identify the order in which your employee should be made aware of the precaution. All precautions are important regardless of the sequence number entered.

5 Select the **Delete Pending** check box to delete the pending safety record during the next review.
6 Click **Submit**. The system automatically populates **Created By** and **Date Created**.

Releasing PM work orders

Release PM work orders awaiting execution in a batch. Select the work orders to be released by changing the **WO Status** and updating the **Scheduled Start Date**.

After the system completes the batch release process, the system retains the records that have been successfully updated in the Release PMs list enabling you to print the released PM work orders individually or in a batch.

If you have established a nesting reference between major and minor PMs to bypass a minor PM that coincides with the release of a major PM, the system bypasses the minor PM as indicated by the nesting reference.

See Creating Preventive Maintenance Work Orders on page 851.

Note: The system can only bypass a minor PM if the minor PM is currently associated with an existing major PM with a status of Released, regardless of a specified back or forward nesting tolerance.

To release PM work orders:

1 Select **Work > Process > Release Individual PM Work Orders**.

The system retrieves all PM work orders with a **WO Status** (system status or user status equivalent) of **Awaiting Release**.

The system automatically populates **WO Status**, **Scheduled Start Date**, **Work Order**, **PM**, **Equipment Type**, **Equipment**, **Equipment Description**, **Equipment Org.**, **WO Type**, **WO Due Date**, **Department**, **Location**, **Location Org.**, **Priority**, **Period**, **Interval**, **Reading Due**, and **Error Message** (for updates) for each record.

2 Select the PM work order to release.

3 Specify this information:

WO Status
Change the status of the PM work order to `R` (`Released`).

Scheduled Start Date
Update the scheduled start date for the PM work order if necessary. Any changes made to the start date shifts the activity start date but does not affect the duration for the work order.

Print All Released PMs
Select to release all PM work orders with a **WO Status** of Released.
Note: To print all PMs, select **Print All Released PMs** and then click **Update PMs**. The system updates the PM work orders, and then prints all of the released PM work orders.

4 Update additional PM work orders as necessary.

5 Click **Update PMs**.

The system generates the PM work orders for the selected records. The system also retains the records that have been successfully updated in the Release PMs list enabling you to print the released PM work orders individually.

Note: To print individual PMs, select the PM work order, and then click **Print Selected Released PM**. If the selected PM work order has a WO Status of Released and there are no unsaved changes for the record, then the system prints the selected PM work order based on the report definition for the **Release PMs** form.

If a PM work order is associated with a **Route** and the ROUTEEOB installation parameter is set to Y, then the system creates MEC work orders for each equipment on the route as indicated by the setting of the MEROUTWO installation parameter.

See Adding Equipment to Work Orders to Split Work Order Costs on page 789.

If the route equipment on the work order header is associated with calibration data/test points, the system only copies the calibration data/test points to the related MEC work orders created by the system and not to the work order header.

The MEROUTWO installation parameter identifies which equipment to copy to route-based PM work orders created by the system for multiple equipment records on the work order.

See the *Infor EAM System Administrator Guide*.

If the AUTOPMCL installation parameter is set to YES, the system automatically closes all released minor PM work orders when the major PM with which they are associated is released.

Understanding PM work packages

A PM work package consists of PM work orders of the same period that have been grouped together under a single "umbrella" work order. PM work packages function similarly to batch processes, and

they can be released together at the same time. Before creating a PM work package, gather an inventory of period-based PMs that have been flagged for use in work packages.

Creating and editing PM work packages

Create multiple PM work orders for equipment, and then package them together so that they release at the same time.

To create and edit PM work packages:

1. Select **Work > WO Planning > PM Work Packages**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the work package belongs.

   PM Work Package
   Specify a unique code identifying the work package, and then enter a description of the work package in the adjacent field.

   Class
   Specify the class of the work package. The system automatically populates **Class Org.**

   WO Type
   Select the work order type of the work package.

   Parent Equipment
   Specify the equipment on which to perform the work package. The system automatically populates **Parent Equipment Org.**and **Department**.

   Department
   Specify the department to which the work package belongs.

   WO Status
   Select the work order status of the umbrella work order under which the work package is created.

   Trade
   Specify the trade performing the work package.

   WO Class
   Specify the work order class of the work package. The system automatically populates **WO Class Org.**

   PM Type
   Select the PM type of the work package.

   Due Date
   Specify the date that the work package should begin.

Perform Every
Specify the length of the interval of time to pass before the system generates the next PM routine work order. You can enter any value between 1 and 99999, and then select the unit of measure in the adjacent field. The unit of measure for the PM period can be days, months, quarters, or years.

Duration
Specify the estimated number of days needed to complete the entire work package.

People Required
Specify the number of people required to complete the work package.

Est. Workload
Specify the estimated number of hours needed to complete the work package. The system automatically populates **Calc. Workload**, **Last Parent WO**, and **Changed**.
Note: The system calculates **Calc. Workload** based on the sum of the estimated workload for each PM work order.

4 Click **Save Record**.

Defining equipment for PM work packages

Define and specify equipment to include on PM work packages.

To define equipment for PM work packages:

1 Select **Work > WO Planning > PM Work Packages**.
2 Select the PM work package for which to define equipment, and then click the **Equipment** tab.
3 Click **Add Equipment**.
4 Specify this information:

Equipment
Enter the equipment to add to the PM work package. The system automatically populates the equipment description.
Note: The system displays PM equipment for selection if the PM equipment is marked as work package on the PM header, the PM equipment is a child or grandchild of the parent equipment on the work package header, and meets the following criteria:

- the status of the PM schedule is **Approved**
- the PM equipment's period UOM and type match the period UOM and type of the work package header
- PM equipment **Perform Every** and **Perform On** match the work package header
- the PM equipment is not currently assigned to another PM work package
- the PM equipment record is not locked by a scheduling or forecasting session
- If DEPTSEC=ON, the system displays equipment records if the department of the equipment has corresponding records on the Department Security tab of the logged in user and is not marked read-only
- the PM equipment is a child or grandchild of the parent equipment on the work package header

5 Click **Submit**.

Scheduling employees for PM work packages

Schedule employees to accomplish all of the activities of all the PM equipment listed on a work package.

To schedule employees for PM work packages:

1. Select **Work > WO Planning > PM Work Packages**.
2. Select the PM work package for which to schedule employees, and then click the **Employees** tab.
3. Click **Add Employee**.
4. Specify this information:

   Employee
   Specify the employee to assign to the PM work package. The system automatically populates **Name**.

5. Click **Submit**.

Understanding PM forecasting

Forecast preventive maintenance for equipment beyond creating PM work orders. Define parameters to gather a group of selected equipment for which to forecast preventive maintenance. Forecasting PMs allows you to view the preventive maintenance on equipment for a selected period of time as much as one year in advance. Adjust the due dates for preventive maintenance as necessary to balance the resource workload.

Note: Due dates can only be updated for forecasted PMs. For existing PM work orders, the due date cannot be changed.

The system will not forecast preventive maintenance for equipment used in a PM work package.

The system supports only frequency-based PMs on the **PM Forecasting** form. Meter-based PMs are not supported.

The system supports only duplicate PMs on the **PM Forecasting** form. Fixed and variable PMs are not supported.

Defining equipment parameters for PM forecasting

Define parameters to select the equipment and PMs for which to forecast preventive maintenance.

To define equipment parameters for PM forecasting:

1. Select **Work > WO Planning > PM Forecasting**.
2. Specify this information:

   Parameter List
   Select the saved selection parameters.

   Forecast Start Date
   Specify the estimated start date for the forecasting session.

Forecast End Date
Specify the estimated end date for the forecasting session.

Session ID
Specify the ID for the session.
Note: Specify **Session ID** if you are working on an existing session. If you are creating a new session, the system automatically populates **Session ID**after you click **Process**.

Equipment
Specify the equipment for which to forecast preventive maintenance.

Top Level
Specify the top level equipment. The system does not display on the **Preview** page any equipment above the selected equipment in the structure.

Type
Specify the type of equipment.

Class
Specify the class of the equipment.

Category
Specify the category of the equipment.

Criticality
Specify the criticality code to indicate the relative importance of the equipment to the overall production of PM.

Specify this information to define PM parameters:

PM Schedule
Specify the PM schedule.

Class
Specify the class of the PM schedule.

Nesting Reference
Specify the nesting reference for the PM schedule.

Priority
Specify the priority of the PM schedule.

WO Type
Specify the work order type of the PM.

Specify this information to define PM equipment parameters:

Work Order Org.
Specify the work order organization of the PM.

WO Class
Specify the class of the work order of the PM.

Department
Specify the department of the PM equipment.

Location
Specify the location of the PM equipment.

Assigned To
Specify the person responsible for the PM equipment.

Cost Code
Specify the cost code of the PM equipment.

Supervisor
Specify the supervisor for the PM equipment.

Specify this information to select the options for generating PM work orders:

Parent Equipment Type
Select the check box to display **Parent**, **Parent Org.**, and **Parent Description** for each equipment displayed on the **Preview** page.

Include Children
Select the check box to include the children of the selected equipment in the list of equipment for which to forecast PMs.

Minimum PM Frequency (Days)
Specify a number to determine whether the system will include or exclude PMs for equipment with periods less than the number of days specified.

Enable Child Equipment Tab
Select the check box to enable the **Child Equipment** page so that the system displays the page.

Specify this information to select the forecasting options:

Work Order Background Color
Specify the background color for the work order.

Actual Due Date Background Color
Specify the background color for the actual due date.

Forecast PM Background Color
Specify the background color for the forecasted PMs.

Weekend Background Color
Specify the background color for weekends.

Locked PM Due Date Text Color
Specify the text color for locked PM due dates.

Perform On Day Text
Select one of the following options for the text type for which to display the value for **Perform On Day**:

Select **Underscore** to display the text value for **Perform On Day** as Underscore type.

Select **Italics** to display the text value for **Perform On Day** as Italics type.

Yearly Designator
Specify a value to designate a year, e.g., **Y** for Yearly.

Quarterly Designator
Specify a value to designate a quarter, e.g., **Q** for Quarterly.

Monthly Designator
Specify a value to designate a month, e.g., **M** for Monthly.

Weekly Designator
Specify a value to designate a week, e.g., **W** for Weekly.

Daily Designator
Specify a value to designate a day, e.g., **D** for Daily.

Work Hours per Day
Specify the number of hour per workday.
Note: The system automatically populates **Work Hours per Day** based on the WORKDAY installation parameter. **Work Hours per Day** is used by the View Resource Load popup and the Resource Load Graph on the **Forecasting** page.

Maximum Rows per Page
Specify the maximum number of rows of equipment to display on the **Forecasting** page. Specifying a value greater than 20 may cause the system to delay the performance.

Prevent Separation Greater than 1 Period Between Forecast Start Date and new PM Due Dates
Select the check box to prevent the due date from being greater than 1 frequency after the forecasted start date.

Prevent new PM Due Dates prior to Forecast Start Date
Select the check box to prevent new PM due dates prior to the forecasted start date when no work orders exist for the PM. If a work order exists for the PM the system prevents the separation between the work order and the first PM due date from exceeding the frequency.

Allow Session Approval with Active Warnings
Select the check box to allow the system to approve sessions with active warnings.

3 Click **Process**. The system displays the **Preview** page listing all of the equipment for which to forecast PMs.

Note: When **Process** is clicked, the fields are protected and editing of these values is not allowed for the current session.

When **Process** is clicked, only the Equipment parameters are considered, work order organization, and the **Include Children** checkbox to present equipment on the **Preview** tab. The remaining parameters are not considered when building the Preview list.

Forecasting PMs

View and adjust the due dates for selected equipment in a forecasted PM session to balance the PM workload. Drag and drop dates as necessary to change due dates and balance the workload.

Note: The system displays existing PM work orders with a **Released** or **Completed** status on this form; however, their due dates cannot be changed.

To forecast PM's:

1. Select **Work > WO Planning > PM Forecasting**.
2. Choose one of the following options:

   For a new session
   Enter the appropriate parameters.
   Note: You must select equipment for which to forecast PMs on the **Preview** page. To begin PM forecasting, click **Start PM Forecasting** on the **Preview** page.

   To view the **Preview** page, select **Tab Available** on the **Child Equipment** page for your user group, and then select **Enable Child Equipment Tab** on the **Parameters** page of the **PM Forecasting** form. Contact your System Administrator for more information.

   For an existing session
   Enter the **Session ID**.

3. Click the **Forecasting** tab.
4. Select the equipment for which to forecast PMs on the **Preview** page, and then click the **Forecasting** tab, or click **Start PM Forecasting** on the **Preview** page. Drag and drop date cells as necessary to change due dates and balance the workload.

   Note: The system locks all PM equipment records related to the selected equipment and PMs. The system does not allow changes to the PM equipment record or PM generation until after the forecasting session is **Approved** or **Cancelled**. The system displays the **Session ID** responsible for locking the record on the PM equipment record.

   To cancel the forecasting session, click **Cancel Session**.

   If a PM is brought into the session via parameters selected and the PM equipment is selected on the **Preview** page, the system automatically includes all PMs in the nest regardless of whether or not the other PMs in the nest meet the selected criteria.

   All PMs in a nest for specific equipment are represented by a single row on the **Forecasting** page, i.e. all frequencies in the nest are represented on the calendar portion of the row. Otherwise a row represents a unique PM and equipment.

Understanding PM forecasting options

There are several options available for adjusting the due dates for forecasted PMs.

See the following table for a list of icons available:

Icon	Description	Results
Show Legend	View the calendar legend	The calendar legend is displayed with the parameters set on the **Parameters** page.
Validate Session	Validate all records in a session to see if any active warnings exist	Any active warnings are displayed. To ignore an active warning, select **Ignore Warning**, and then click **Submit**. The warning is ignored and the sessions is validated.
Process	Process all due date changes and approve a session	All relevant PM equipment records are updated with the new due dates and **Perform On Day** information, if a perform on day was set. Sessions with active warningsare not approved unless **Allow Session Approval with Active Warnings** is selected on the **Parameters** page.
View Resource Load	View the resource load required to perform PMs	The View Resource Load popup is displayed.
Run Resource Load Graph	Run the resource balance report	The view resource load report is initiated for the current session.
Run Future Maintenance Cost Report	Run the future maintenance cost report	The maintenance cost report is initiated for the current session.
Cancel Session	Delete and cancel a session	The session is cancelled, and then the **Parameters** page is displayed. The **Session ID** is deleted.
Previous Month	View the same day of the previous month	The same day of the previous month is displayed. If the same day does not exist in the previous month, the last day in the previous month is displayed.
Next Month	View the same day of the next month	The same day of the subsequent month is displayed. If the same day does not exist in the subsequent month, the last day of the next month is displayed.

There are several right-click options available for PM equipment. To view and choose the options, right-click on the PM equipment record, and then select the appropriate right-click option.

See the following table for the available right-click options:

Right-click Option	Description	Results
View Equipment Details	View details for PM equipment	The View Equipment Details popup is displayed.
Update PM Due Date	Update a PM **Due Date**	The Update Due Date popup is displayed. **Note:** If the record represents a nest, all PMs in a nest are displayed. **Original Due Date** is the PM due date as it exists currently in the system. **Due Date** is the PM due date as it exists within the current session.
Validate Record	Validate a single record in a session	If the validation fails, the failures are displayed in the Validation Warnings popup.

There are numerous right-click options available on a calendar grid cell. To view and choose the options, right-click on the calendar grid cell, and then select the appropriate right-click option.

See the following table for the available right-click options:

Right-click Option	Description	Results
View WO Details	View the details of a work order	The View Work Order Details popup is displayed.
View PM Details	View the details of a PM	The View PM Details popup is displayed.
Shift PM Schedule	Shift the PM schedule	The PM schedule is shifted.
Enable Perform On Day	Enable **Perform On Day**	**Perform On Day** is enabled.
Disable Perform On Day	Disable **Perform On Day**	**Perform On Day** is disabled.
Lock PM Due Date	Lock the PM **Due Date**	The PM **Due Date** is locked.
Unlock PM Due Date	Unlock the PM **Due Date**	The PM **Due Date** is unlocked.

Viewing the resource load

View the resource loading required for the current PM forecasting session to determine the number of resource days required to complete the work. View the number of estimated hours and resource days required by trade per month, week, or day in the forecasting session. Modify the date ranges to plan PMs for a specific time period, and then make changes to the underlying PM forecasting session to balance the resource load. This popup considers both Released and Forecasted PMs.

To view the resource load:

1 Select **Work > WO Planning > PM Forecasting**.
2 Choose to create a new PM forecasting session or work with an existing PM forecasting session.
3 Click **View Resource Load**.
4 Specify this information:

Start Date
Specify the starting date for the current PM forecasting session.

End Date
Specify the ending date for the current PM forecasting session. **Work Hours per Day** are automatically populated based on the value on the **Parameters** page.

Specify one of the following options:

Group by Day
Specify to group the defined date range by days.
The time period is displayed in days. **Group Start Date** matches **Group End Date** for each record. **Estimated Hours**, **Resource Day Requirements**, and **Total Resource Day Requirements** are calculated by this selection.

Group by Week
Specify to group the defined date range by weeks.
The time period is displayed in weeks. **Estimated Hours**, **Resource Day Requirements**, and **Total Resource Day Requirements** are calculated by this selection.

Group by Month
Specify to group the defined date range by month.
The date range records are displayed until the **End Date** is the same as **Group End Date**.

Note: Resource Days Required is calculated as:

```
Resource Days Required = Estimated Hours / Work Hours per Day
```

Resource Days Required is calculated as the number of person-days required for the trade for the defined date range.

5 View the current resource load. Modify the PM due dates in the underlying PM forecasting session.
6 Click **Refresh Resource Data**. **Date Last Refreshed** is automatically populated and the data on the popup is refreshed based on the current PM forecasting session.
7 Click **Close**.

Note: The changes to the PM forecasting session made while the View Resource Load popup is open are not automatically displayed. To view the changes made in the grid, click **Refresh Resource Data**.

Generating work orders

Create or update multiple work orders using the **Generate Work Orders** form.

The **Generate Work Orders** form consists of two pages: the **Parameters** page, on which you define the selection criteria for locating the work orders to process in the batch; and the **Preview** page, on

which you can preview the work orders in the batch prior to actually processing them and select or unselect the work orders to process as necessary.

The **Generate Options** section of the **Parameters** page enables you to specify the manner in which the system processes the work orders during the batch generation process. **Release WOs for Fixed/Variable PMs** is selected by default, enabling the system to automatically release all PM work orders of **PM Type**Fixed or Variable with a **Status** of Awaiting release. When you unselect **Release WOs for Fixed/Variable PMs**, the system does not automatically release any fixed or variable PM work orders during the batch generation process.

If you choose to release fixed/variable PM work orders, the system releases the fixed or variable PM work orders based on their due dates. If you specified a dormant period for the equipment attached to the fixed/variable PM, the system temporarily postpones the release of the fixed/variable PM if the due date for the PM falls within the specified dormant period.

The system automatically recalculates the next due date for a fixed PM falling within a dormant period by incrementally adding the PM period to the due date until the due date for the PM is greater than the specified **Dormant End** date for the equipment.

The system recalculates the next due date for a variable PM falling within a dormant period by assigning the new due date as the next day following the specified **Dormant End** date for the equipment associated with the PM.

Note: Adding a dormant period to PM equipment does not affect any previously created or released PM work orders.

If you choose to release duplicate PMs, the system searches for any PMs that meet the parameter criteria. If **Perform On** is specified for the PM equipment record, the system automatically adjusts the calculated **Due Date** based on **Perform On**. Within the month in which the normally calculated **Due Date** falls, the system sets to the week of the month and day of the week defined by **Perform On** for the PM equipment record.

The **Preview** page allows you to preview all of the work orders selected for processing based on the selection parameters, enabling you to select or unselect work orders to include in the batch generation process before you actually process the work order batch. You can select or unselect individual work orders for processing, or you can select or unselect all work orders for processing.

To generate work orders:

1. Select **Work > Process > Generate WOs**.
2. Specify this information:

   Organization
   Specify the organization to which the work order belongs if you use multi-organization security.

Department
Supervisor
Equipment
Location
Assigned To
PM
PM Class
WO Type
Cost Code
Specify one or all of these selection parameters for generating the work order batch.

Generate Through
Specify the date until which to process the work orders.
Note: To generate all work orders meeting the specified selection criteria up to the current date, leave **Generate Through** blank.

Change WO Status
Select to change the work order status.

Current WO Status
Specify the current status of the work order.

New WO Status
Specify the status to which to change the current work order status.

Generate WOs for Repairable Spares
Select to generate work orders for repairable spares.

Store
Specify the store for which to generate work orders for repairable spares.

Generate PM Work Package
Select to create PM work orders for the parent equipment specified on a selected work package.

Department
Specify the department to which the work package belongs.

Work Package
Specify the code identifying the work package for which to generate a work order for the parent equipment.

WO Status
Specify the status of the work package.

Period
Specify the period under which the work package PM work orders were grouped.

Parent Equipment
Specify the parent equipment for which to generate PM work orders for all child equipment listed on the work package.

WO Type
Specify the work order type of the work package.

Release WOs for Fixed/Variable PMs
Select to create PM work orders that are of the type **Fixed** or **Variable** when processing the work order batch. The system releases the fixed PM work order's status to the status specified in the WORKWOST installation parameter.

If the ROUTEEOB installation parameter is set to Y, a **Route** is specified on a PM schedule, and the PM schedule **Type** is either Fixed or Variable, then the system also creates MEC work orders for the route equipment (as indicated by the setting of the MEROUTWO installation parameter). The system generates the MEC work orders in addition to the initial PM work order when the PPMSTAT installation parameter is set to R (Released), and the system automatically selects **Multiple Equipment** on the PM work order header.

If AUTOPMCL installation parameter is set to YES, the system automatically closes all released minor PM work orders when a major PM is released. If the minor PM work orders being closed are multiple equipment work orders, then the system also closes all MEC work orders related to the minor PM work orders.

In the current version of the system, if the ROUTEEOB installation parameter is set to Y, the system creates MEC work orders when a parent work order is released for a route-based PM.

Note: In previous versions of the system (version 7.9 or earlier), if installation parameter ROUTEEOB is set to Y, the system created RC (route child) work orders when a parent work order was released for a route-based PM.

See Defining PM routes and equipment within routes on page 851.

Generate WOs for Duplicate PMs
Select to create PM work orders that are of the type **Duplicate** when processing the work order batch. The system automatically assigns the status entered for the PPMSTAT installation parameter to the PM work orders created during the batch process and then releases the work order's status to the status specified in the WORKWOST installation parameter.
Note: Work orders are not generated for PMs locked by a PM forecasting session.

Generate WOs for Repairable Cores
Select to create work orders for repairable core parts to be repaired internally. **Store** is enabled and it is required. See Generating work orders for repairable core parts on page 885

Include Child Equipment
Select to generate work orders for any child equipment of the selected **Equipment** when processing the work order batch.

Release Other WOs
Select to update other existing work orders that have the specified **Current WO Status**. **Current WO Status** is enabled and it is required.

Current WO Status
Specify the current work order status for which to update existing work orders.

If you selected **Release Other WOs** and entered a **Current WO Status**, upon initiation of the work order generation process, the system locates and updates all existing work orders that have the specified **Current WO Status** and updates the status of the work orders to the value specified in the WORKWOST installation parameter.

Print Summary Report
Select to generate a summary report of all the generated work orders after the batch generation process is complete.

Print Work Orders
Select to print work order cards for the work orders created/updated when processing the work order batch.

3 Click **Process**.

The system displays the **Preview** page listing all of the work orders meeting the selection criteria.

The **Preview** page retains the settings for **Print Work Orders** from the **Parameters** page. You can select or unselect **Print Work Orders** as necessary.

4 Select each work order you wish to generate in the work order batch as necessary, or you can unselect each work order you do not wish to generate in the work order batch as necessary.

Note: To select all the work orders at once, click **Select**. To unselect all the work orders at once, deselect **Select**.

The system does not display MEC work orders on the **Preview** page. However, the MEC work orders are generated/released when the parent multiple equipment work order is generated or released.

5 Click **Generate**.

The system generates the work order for the selected records. If any errors occur, then the system changes the record's visual attribute to red and displays an error message in the **Error Message** column of the Preview list.

The system automatically copies **From Point**, unit of measure, **Ref. Description**, and **Geographical Ref.** and **To Point**, unit of measure, **Ref. Description**, and **Geographical Ref.** to work orders that are released for linear equipment PMs.

Note: If you have set up the system to require an electronic signature to authorize status changes to work order headers, the system displays the eSignature popup once for every work order in the work order batch for which there is a status change.

Generating work orders for repairable core parts

Generate work orders for repairable core parts to be repaired internally. If you select to generate work orders for internal repairs, the system checks to see if there is a **Qty. for Repair** for any parts in store. If a positive quantity for repair exists, the system generates a work order of **Type** Repairable Core containing the part(s) to be repaired internally. If **Auto-Assign** and **Active** are on, the system automatically moves the part from **Qty. on Hand** to **Qty. at Shop**when the internal repair work order is generated.

To generate work orders for repairable core parts:

1 Select **Work > Process > Generate WOs**.

2 Specify this information:

Organization
Specify the organization to which the work order belongs if you use multi-organization security.

Department
Equipment
Location
PM
PM Class
WO Type
Specify one or all of these selection parameters for generating the work order batch.

Generate Through
Specify the due date through which to process the work orders.
Note: To generate all work orders meeting the specified selection criteria up to the current date, leave **Generate Through** blank.

Print Summary Report
Select to generate a summary report of all the generated work orders after the batch generation process is complete.

Print Work Orders
Select to print work order cards for the work orders created/updated when processing the work order batch.

Generate WOs for Repairable Cores
Select to create work orders for repairable core parts to be repaired internally. The system enables **Store** and it is required. The system populates **Store Org.** based on the selected **Store**.

3 Click **Process**. The system displays the **Preview** page listing all of the work orders meeting the selection criteria.

The **Preview** page retains the settings for **Print Work Orders** from the **Parameters** page. You can select or unselect **Print Work Orders** as necessary.

4 Select each work order you wish to generate in the work order batch as necessary.

Note: To select all the work orders at once, check Select. To unselect all the work orders at once, uncheck **Select**.

5 Click **Generate**. The system generates the work order for the selected records. If any errors occur, then the system changes the record's visual attribute to red and displays an error message in the **Error Message** column of the Preview list.

Note: If you set up the system to require an electronic signature to authorize status changes to work order headers, the system displays the eSignature popup once for every work order in the work order batch for which there is a status change.

See the following processing rules when generating work orders for repairable spare parts:

- If you selected **Use Stock Method** for a part on the **Repair Details** tab of the **Parts** form, the system calculates the **Qty. to Repair** based on the stock replenishment method specified for the part in the holding store. For example, you create a part OOV-REX-TRA-25G for which Min/Max is the **Stock Method** with a **Minimum Qty.** of 5 and a **Maximum Qty.** of 10. The current **Qty. on Hand** of OOV-REX-TRA-25G is 4 and the stock **Qty. for Repair**is 9. When you generate an internal repair work order for the part, the system calculates the **Qty. to Repair** on the work order as 6 parts rather than 9 to update the **Qty. on Hand** of the part in stock to the specified maximum of 10.

- If you do not select **Use Stock Method** for a part on the **Repair Details** tab of the **Parts** form, the system automatically generates the work order for the full **Qty. for Repair** on the **Repair Details** tab of the **Parts** form.
- If you do not select **Auto Assign** on the **Repair Details** tab of the **Parts** form, the system automatically generates the work order for a **Qty. Assigned** of 0, and you must use the Assign Repair Details popup on the work order to make assignments.

Scheduling work

View the current work order schedule, calculate labor availability, and view labor utilization. Schedule unscheduled or backlogged work orders. Reschedule work orders as necessary. Additionally, you can view work order comments, change the work order status, and freeze or unfreeze activity schedules. You may balance the workload on the **WO Load Balancing** form.

Viewing the work order schedule

View the work order schedule to gather information concerning current maintenance projects and to assist in future scheduling.

To view the work order schedule:

1. Select **Work > WO Planning > WO Scheduling**.
2. Specify this information:

   Organization
   Specify the organization for which to view schedules if you use multi-organization security.

   Schedule By
   Select one of the following options:

   Employee
   Select to view the schedule by employee.
   The system displays **Employee**. Enter for **Employee**, the Employee for whom you wish to view the work order schedule for the date selected on the calendar.

   Trade/Department
   Select to view the schedule by trade/department.
   The system displays **Trade** and **Department**. Enter for **Trade**, the trade for which you wish to view the work order schedule for the date selected on the calendar. You may also enter, for **Department**, the department for which you wish to view the work order schedule to further filter the trade records for the date selected on the calendar.

   Note: To refresh the work order schedule, click **Refresh**.

   See this table when viewing the work order schedule:

View	Procedure
Daily schedule	Select from the calendar the day for which to view the schedule. The system displays the daily schedule in the top portion of the form.
Unscheduled work orders	Select Unscheduled WOs for **Dataspy** in the **Activities** section of the form.
Backlogged work orders	Select Backlogged WOs for **Dataspy** in the **Activities** section of the form.

Calculating labor availability

Calculate the total number of hours that are available for work during a given period. Use the available hours to schedule labor.

Organization, **Trade**, and **Department** serve as filters for employees who are associated with specific organizations, trades, and departments. Enter an organization to calculate labor availability for all employees assigned to that organization and to an active shift. Enter a trade to calculate labor availability for all employees assigned to that trade and to an active shift. Enter a department to calculate labor availability for all employees assigned to that department and to an active shift. Finally, enter any combination of **Organization**, **Trade**, or **Department** to calculate labor availability for all employees that match that specific combination. Leave **Organization**, **Trade**, and **Department** empty to calculate labor availability for all active shifts.

Note: You have to assign the employee to a shift in order for the employee's availability to be part of the calculation.

You may also calculate labor availability on the **Record View** tab of the **Employees** page.

Note: Infor strongly recommends that you calculate labor availabilities before scheduling work orders in the system.

To calculate labor availability:

1. Select **Work > WO Planning > WO Scheduling**.
2. Click **Calculate Availability**.
3. Specify this information:

   Organization
   Specify the organization for which to calculate labor availability.

   Trade
   Specify the trade for which to calculate labor availability.

   Department
   Specify the department for which to calculate labor availability.
   Note: The system totals employee exceptions for **Trade** and **Department** to calculate the total amount of labor hours available for a specific time-frame.

   Enter the **Start Date** and **End Date** of the period for which to calculate available labor.

Note: **End Date** must be later than or equal to **Start Date**.

4 Click **Calculate**.

5 Click **Close**.

Viewing labor utilization

View labor utilization percentages for each calendar day.

To view labor utilization:

1 Select **Work > WO Planning > WO Scheduling**.

2 Specify this information:

Organization
Specify the organization for which to view labor utilization if you use multi-organization security.

Schedule By
Select one of the following options:

Employee
Select to view the schedule by employee.

The system displays **Employee**. Enter for **Employee**, the Employee for whom you wish to view the labor utilization for the date selected on the calendar.

Trade/Department
Select to view the schedule by trade/department.

The system displays **Trade** and **Department**. Enter for **Trade**, the trade for which you wish to view the labor utilization for the date selected on the calendar. You may also enter, for **Department**, the department for which you wish to view the labor utilization to further filter the trade records for the date selected on the calendar.

3 Place the cursor over a calendar day to view the employee or trade/department utilization percentage for that day. The colors indicating labor utilization only appear on the calendar after you calculate labor availability. See this table when viewing the labor utilization.

Color	Significance
Gray	Non-working day for the organization or no labor scheduled for this day.
Green	Total scheduled hours are less than total available hours, and labor utilization is less than 80%.
Yellow	Total scheduled hours are between 80% and 100% of total available hours.
Red	Total scheduled hours exceed the total available hours.

Scheduling or rescheduling work orders

Schedule unscheduled or backlogged work orders. Reschedule work orders as necessary.

To schedule or reschedule work orders:

1 Select **Work > WO Planning > WO Scheduling**.

2 Specify this information:

Organization
Specify the organization for which to schedule work if you use multi-organization security.

Schedule By
Select one of the following options:

Employee
Select to schedule by employee. The system displays **Employee**. Enter, for **Employee**, the Employee for whom you wish to schedule the work.

Trade/Department
Select to schedule by trade/department. The system displays **Trade** and **Department**. Enter, for **Trade** and **Department**, the trade and department for which you wish to schedule the work.

Auto Refresh
Select for the system to automatically refresh the Daily Schedule list after scheduling an activity on the calendar. If you do not select **Auto Refresh**, the activity will not automatically appear in the Daily Schedule list until you manually click **Refresh**.

See this table when scheduling or rescheduling work orders:

Function	Procedure
Schedule unscheduled work orders	Select Unscheduled WOs for **Dataspy** in the **Activities** section of the form, and then select a work order from the list and drag it to the day on the calendar for which to schedule it. The system creates a new work order schedule record.
Schedule backlogged work orders	Select Backlogged WOs for **Dataspy** in the **Activities** section of the form, and then select a work order from the list and drag it to the day on the calendar for which to schedule it. The system creates a new work order schedule record.
Reschedule work orders	Select the work order to reschedule in the Daily Schedule list, and then drag it to the day on the calendar for which to reschedule it. You must select either today's date or a future date as the reschedule date on the calendar.

Viewing work order comments

View work order planning and work order activity-related comments on the **Work Order Scheduling** form.

To view work order comments:

1. Select **Work > WO Planning > WO Scheduling**.
2. Select a work order for which to view comments from the Activities list, and then click **View Comments**.
3. Specify this information:

   Comments Type
   Select one of the following options:

   - **Activity**
     Select to view comments associated with the work order activity.

   - **Task Instructions**
     Select to view task instructions associated with the task defined on the work order activity.

   - **Work Order**
     Select to view work requested comments associated with the work order.

4. Click **Close**.

Changing work order status

Change work order status on the **Work Order Scheduling** form.

To change work order status:

1. Select **Work > WO Planning > WO Scheduling**.
2. Select a work order and a daily schedule record for which to change the status, and then click **Actions > Change WO Status**.
3. Specify this information:

   New Status
   Select the status to which to change the work order.
   Note: You may only select a **New Status** with a system status of R.

4. Click **Submit**.

Freezing and unfreezing activity schedules

Temporarily freeze a schedule to compare the actual work done against the work that you scheduled. Frozen activity schedules cannot be updated.

To freeze and unfreeze activity schedules:

1 Select **Work > WO Planning > WO Scheduling**.
2 Right-click on the form, and then choose **Freeze/Unfreeze**.
3 Specify this information:

   Freeze/Unfreeze
   Select **Freeze** to freeze the schedule, or select **Unfreeze** to unfreeze the schedule.

   From Date/To Date
   Specify the starting and ending dates for the freeze period.

   Department
   Specify the department for which to freeze or unfreeze schedules.

4 Click **Submit**.

Balancing the workload

Balance the workload by adjusting the schedule. The **WO Load Balancing** form consists of three pages: the **Parameters** page, on which you define the selection criteria for locating the work orders to balance; the **Preview** page, on which you can preview the work orders prior to actually balancing them and select or unselect the work orders to process as necessary; and the **Balance Load** page, on which you can balance the work order load.

The **Generate Options** section of the **Parameters** page enables you to specify the manner in which the system processes the work orders.

The **Preview** page allows you to preview all of the work orders selected for processing based on the selection parameters, enabling you to select or unselect work orders to balance. You can select or unselect individual work orders for processing, or you can select or unselect all work orders for processing.

Note: The system does not enable you to balance the workload for work orders of **Type ST** (standing work order) or **MEC** (multiple equipment child).

The **Balance Load** page enables you to view labor availability and reschedule work.

To balance the workload:

1 Select **Work > WO Planning > WO Load Balancing**.
2 Specify this information:

   Work Order Org.
   Specify the organization to which the work order belongs if you use multi-organization security.

3 Enter selection criteria as necessary in the **Selection Parameters** section of the form.

   Note: You can enter wildcards for the **Department**, **PM Schedule**, **Project Budget**, **WO Type**, **Priority**, **Trade**, **Status**, **Reported By**, **Work Order**, **Assigned To**, and **Assigned By** parameters. Enter the first character of the parameter followed by a percentage sign, and then click **Process**. For example, if you enter E% for **Trade**, the system retrieves all work orders with a trade that begin with the letter "E" on the **Preview** tab.

4 Specify this information:

Schedule Window (Days)
Specify the number of days into the future for which to calculate labor availability.

Sort By
Select whether to sort by **Reported Date** or by **Scheduled Start Date**.

5 Click **Process**.

6 Select each work order you wish to balance, or you can unselect each work order you do not wish to balance as necessary.

Note: To select all the work orders at once, select **Select**. To unselect all the work orders at once, clear **Select**.

7 Click **Lock Selected Work Orders**.

8 Select a work order, and then click the next arrow to move the current work order ahead in time. Click the previous arrow to move the current work order back in time. You may also click a specific date cell to change the work order date. In the lower section of the form, the system displays colors to represent labor availability versus labor required for the work order:

Green
Available labor hours exceed required labor hours

Yellow
Required labor hours equal available labor hours

Red
Required labor hours exceed available labor hours

By adjusting work orders in the schedule, you can reschedule them at times when enough labor is available, and thus balance the workload.

9 Click **Update Activity** to update the work order activity.

10 Specify this information:

Activity-Trade
Select the activity-trade for which to update the trade or start date.

Trade
Specify the trade to update for the activity.

Start Date
Specify the starting date to update for the activity.

11 Click **Save**.

12 Click **Close Session and Update Work Orders**.

Note: To save the work order balancing session, click **Save Session**.

To cancel the work order balancing session, click **Cancel Session**.

Viewing work order details while balancing the workload

View work order details while balancing the workload for a work order to access specific information about a work order that can affect the scheduling of the work order, such as the location, priority, start and due dates, etc.

To view work order details while balancing the workload:

1. Select **Work > WO Planning > WO Load Balancing**.
2. Generate, preview, and lock the list of work orders to balance as necessary.
   See Balancing the Workload on page 892.
3. Select the work order for which to view details, and then click **View WO Details**.
4. View the work order details for the work order to balance.
5. Click **Close**.

Completing work

This section describes the process for completing work information. You may close work orders on the **Closing** page or on the **Work Order Quick Close** form. Depending on your particular system parameter configuration, you may or may not be able to complete transactions for the closed work order. Also, in certain cases, you may not be able to close work orders if there are still purchases outstanding. Reopen closed work orders if necessary.

Closing work orders

Close completed work orders.

Note: If you close a PM work order, the system generates the next PM work order.

You may also close work orders on the **Work Order Quick Close** page.

See Closing work orders on the quick close page on page 896.

You cannot close a work order if any of the following conditions is true:

- If **Prevent WO Completion** is selected for the **Equipment** on the work order header or any of the associated MEC work orders
- If the WOCLPOUT installation parameter is set to NO and the work order or one of the MEC work orders is referenced on an active purchase order or requisition line
- If the WOCLPOUT installation parameter is set to NO and the work order or one of the MEC work orders contains one or more direct purchase parts that have been received to a **Store** but not yet issued to the work order
- If the EVTCASCD installation parameter is set to NO and the work order is the parent of at least one open dependent child work order
  Note: The setting of the EVTCASCD installation parameter does not affect the **Status** of a MEC work order when you change the Status of the parent multiple equipment order because the system always cascades the Status of the parent multiple equipment work order to the associated MEC work orders.

To close work orders:

1 Select **Work > Work Orders**.
2 Select the work order to close, and then click the **Closing** tab.
3 Specify this information:

Status
Select **Completed** as the status of the work order.
Note: If you close a work order that is a template standard work order and that has children attached, the system recalculates and updates the status of all child work orders attached. If you close the last child work order in a sequence, the system recalculates the requested start and end dates for all child work orders.

Depending on your system configuration, you may not be able to close a parent work order until all dependent child work orders have been closed. Contact your system administrator for more information.

You can reopen a work order after it is closed if the REOPENPM installation parameter is set to YES and you have the proper status authorization to do so. However re-opening a parent work order does not affect any child work orders of the parent work order regardless of whether the child work order is dependent on the parent or the setting of the EVTCASCD installation parameter.

If the work order is a multiple equipment work order, then the system updates the **Status** of all MEC work orders associated with the work order to the **Status** of the parent work order.

Equipment
Specify the equipment on which the work was performed.
Note: If the equipment record was previously flagged as **Prevent WO Completion**, you will not be able to close the work order.

Start Date
Specify the date on which the work started.

Date Completed
Specify the date on which the work was completed.
Note: When closing a multiple equipment work order, the system copies the **Date Completed** to any open MEC work orders associated with the parent multiple equipment work order and overwrites the existing **Date Completed** on the MEC work orders. However, the system does not overwrite the **Date Completed** on any MEC work orders that were completed prior to closing parent multiple equipment work order.

Downtime Cost
Specify the cost of the downtime to the production process.

Downtime Hours
Specify the number of hours that the equipment was down.

Problem Code
Specify the code of the problem that required work.

Failure Code
Specify the reason that the equipment or component failed.

Cause Code
Specify the problem cause code, i.e., the root cause of the problem.

Action Code
Specify the code of the action taken to correct the problem.
Note: If the work order is a multiple equipment work order and you modify the **Problem Code**, **Failure Code**, **Cause Code**, and/or **Action Code**, the system cascades the change to the corresponding codes on any MEC work orders that are not completed, overwriting any existing values.

4 Click **Save Record**.

Closing work orders on the quick close page

Quickly close completed work orders on the **Work Order Quick Close** page. When you enter a work order number, the system automatically enters a status of Completed and enters today's date as the date completed so that you may quickly close the work order. However, you may also update any information about the work order and book additional hours for the work order activities on this page.

Note: If you close a PM work order, the system generates the next PM work order as long as the PM work order is not a duplicate.

You may also close work orders on the **Closing** tab.

See Closing Work Orders on page 894.

To close work orders on the **Work Order Quick Close** page:

1 Select **Work > WO Quick Close**.
2 Specify this information:

Work Order
Specify the work order number of the work order you wish to close.

The system automatically populates the work order description, **Organization**, and **New Status** with a value of Completed.

Equipment
Specify the equipment on which the work was performed.
Note: If the work order is a multiple equipment work order, then **Equipment** (on the work order header) is protected.

New Status
Select **Completed** as the new status of the work order.
Note: If you close a work order that is a template standard work order and that has children attached, the system recalculates and updates the status of all child work orders attached. If you close the last child work order in a sequence, the system recalculates the requested start and end dates for all child work orders.

A parent work order cannot be closed until all dependent child work orders have been closed.

Start Date
Specify the date and time on which the work started.

Date Completed
Specify the date on which the work was completed.

Downtime Cost
Specify the cost of the downtime to the production process.

Downtime Hours
Specify the number of hours that the equipment was down.

Problem Code
Specify the code of the problem that required work.

Failure Code
Specify the reason that the equipment or component failed.

Cause Code
Specify problem cause code, i.e., the root cause of the problem.

Action Code
Specify the action taken to correct the problem.

Closing Comments
Enter closing comments about the work order.

Specify the following information to book additional hours to the work order:

Activity-Trade
Select the activity-trade performing the work for which to book labor hours.
Note: When you select an **Activity-Trade**, the system temporarily protects **Work Order** to prevent an accidental change during the process of booking hours. However, upon saving the booked hours or clicking **Clear**, the system enables Work Order and clears the **Activity-Trade**. However, if you manually clear **Activity-Trade**, **Work Order** remains protected.

If the selected **Work Order** is a multiple equipment work order, then the system enables **Equipment** in the details section of the form, and it is required. If you clear **Activity-Trade** for a multiple equipment work order, the system also clears the **Equipment**, **Equipment Org.**, and **Related Work Order**.

Employee
Specify the personnel performing the work for which to book hours.

Date
Specify the date on which the work was performed.

Equipment
Choose one of the following options if the work order is a multiple equipment work order:

- **All Equipment**
Enter **All Equipment** to evenly distribute the booked labor to each equipment record on the work order. Upon saving the transaction, the system creates the labor booking records and applies them to each related work order for each equipment and selected activity. The **Rate** applicable to the multiple equipment work order will also be applied to all MEC work orders.
Note: The system automatically applies any remainder of the **Hours Worked** to the last equipment record added to the work order.

If you select All Equipment for **Equipment** and at least one of the related work orders has Completed status (or equivalent user status), the system displays a message enabling you to select whether to distribute the labor hours against only open related work orders or against all equipment.

Also, the system disregards the setting of the COMDAYS installation parameter when posting labor booking transactions if you select All Equipment.

WO Header Equipment
Enter **WO Header Equipment** to apply the booked labor to the work order header only.

Equipment
Enter a specific **Equipment** record to apply the booked labor to the selected **Equipment** and the corresponding **Related Work Order**. The system automatically populates **Equipment Org.** and **Related Work Order** from the selected **Equipment** record.

See Adding Equipment to Work Orders to Split Work Order Costs on page 789.

Type of Hours
Select the type of hours worked (e.g., hourly rate, overtime rate, corrective booking, etc.).

Hours
Specify the number of hours spent performing the work.

End Time
Specify the scheduled start time and end time of the work order activity.

3 Click **Save Hours**.
4 Repeat these steps as necessary to book any additional hours against the work order activity.
5 Click **Save Record**.

Reopening closed work orders

Reopen closed work orders when changes to the work order are required or when requisitions or purchase orders related to the closed work order must be generated. Only users with proper authorization may reopen closed work orders. Depending on your system configuration, you may not be able to reopen closed work orders. Contact your system administrator for more information.

To reopen closed work orders:

1 Select **Work > Work Orders**.
2 Select the work order to reopen, and then click the **Closing** tab.
3 Specify this information:

Status
Select **Released** as the status of the work order.

4 Click **Save Record**.

Note: Reopened is selected when the work order is saved.

Entering meter readings for work order equipment

Enter meter readings for equipment defined on a work order. You can view recent meter readings for equipment, and you can also add a new meter reading for equipment on a work order.

Note: You can delete a meter reading if you find that the reading has been entered in error; however, you cannot modify the value of an existing meter reading.

In many cases, the meter for a piece of equipment on a work order is the child meter of a meter attached to the parent equipment in an asset hierarchy. In such cases, the new meter reading needs to be entered/submitted for the parent equipment/meter even though you are entering the reading via the child equipment/meter on the work order. Also, the new reading must also roll down to all children of the parent within the asset hierarchy. Use **Target Equipment** to indicate the equipment for which to add the meter reading.

Note: The **Target Equipment** for a meter reading is the equipment of the work order only if the equipment meter is a standalone meter.

However, if the equipment on the work order is a child in a hierarchy; and both the child and parent equipment have the same unit of measure for the meter usage definition; and the usage definitions are defined as parent-child meters, then **Target Equipment** can also be a parent of the equipment on the work order.

To enter meter readings for work order equipment:

1. Select **Work > Work Orders**.
2. Select the work order containing the equipment for which to enter meter readings, and then click the **Meter Readings** tab.
3. Specify this information:

   Target Equipment
   Modify the equipment for which to enter meter readings as necessary. **Target Equipment** is automatically populated with the top-level equipment in the meter structure and **Equipment** with the equipment defined on the work order.

   If you select a new **Target Equipment**, all the fields are updated on the form based on the new combination of the **Target Equipment** and **UOM**, with the exception of **Equipment**, **Equipment Org.**, and **Equipment Description**.

   Note: The meter for the **Equipment** on a work order can be the child meter of a meter attached to a parent of the **Equipment**. In such cases, the parent equipment and parent meter should receive the new reading submitted for the child meter, and the new reading must roll down to all of the child equipment of the parent.

   The **Target Equipment** is the **Equipment** on the work order header only if the equipment meter is a stand-alone meter. However, if the **Equipment** on the work order header is a child equipment in an asset hierarchy whose parent equipment has the same UOM on the usage definition and the usage definitions are defined as parent-child meters, then the **Target Equipment** may be the parent of the **Equipment** on the work order header.

   Equipment
   Specify the equipment for which to enter the meter reading if the work order is a multiple equipment work order.

   If a usage definition exists for the equipment, then the system automatically populates **Equipment** with the equipment on the work order header. However, if a usage definition does not exist for any

of the work order equipment or if the work order is not a multiple equipment work order, then **Equipment** is protected.

If you select a new **Equipment**, the system updates all the fields on the form based on the new combination of the **Target Equipment**, **UOM**, and **Equipment**.

UOM
Select the unit of measure.
Note: If the primary **UOM** on the equipment record is equal to one of the existing usage definitions for the equipment, the system automatically populates **UOM** with the primary **UOM** of the equipment.

Entry Type
Select one of the following options:

Reading
Select to enter the current meter reading.
Note: You may enter **Reading** only if the meter is selected as **Up/Down Meter** on the **Meters** tab of the **Assets**, **Positions**, **Systems**, or **Locations** page.

Difference
Select to enter the difference between the last reading and the current reading.

Date/Time
Specify the date and time of the meter reading.

New Value
Specify the meter reading value.

4 Click **Submit**.

This table shows how the system updates the Meter Readings list with the following information:

Field	Value
Last Value	Indicates the value of the previous meter reading. **Note:** **Last Value** is zero when the new meter reading record is the first entry made for the **UOM** of the **Target Equipment**.
Meter	Identifies the meter of the reading.
Meter Rollover Point	Indicates the value at which the meter rolls over.
Total Usage	Indicates the sum of the previous **Total Usage** and the difference between the **New Value** and the **Last Value**.
Usage Since Last WO	Indicates the difference between the current **Total Usage** and the usage at the time and date that the last work order for the **Target Equipment** was closed or completed.

Field	Value
Average Daily Usage	Indicates the value of the average daily usage for the target equipment **UOM** which is based on the number of readings specified on the usage definitions.
Last Reading	Indicates the date and time of the current/most recent reading entered for the logical/physical meter.
Last Reading Date	Indicates the difference (in days) between the dates of the **Last Reading Date** and the current system date and time.

If a physical meter record is attached to the equipment usage definition, the system also updates the physical meter record by populating the **Last Value** of the physical meter equal to the current/most recent reading. The system populates the **Usage Since Install** equal to the sum of the previous **Usage Since Installation** and the difference between the new and previous **Total Usage**.

Note: If the selected **Target Equipment** is associated with one or more fixed or variable PM schedules released according to a meter interval (usage), entering and submitting a **New Value** for a meter may release any PM work orders for the **Target Equipment** and/or any child equipment affected by the roll-down of the meter reading. If any of the meter intervals for the **Target Equipment** and/or child equipment have reached or exceeded the point at which a new PM work order must be released, the system automatically updates the status of any PM work orders based on the setting of the WORKWOST installation parameter, as long as there are no existing Released work orders for the same PM work order for the **Target Equipment**/child equipment.

The system also updates the **Start Date** of activities for the next PM work order to the current system date and time, updates the **Revision** number for the PM schedule, route, material list, and/or task to the current approved **Revision** number. The system creates reservations for any parts on a material list for the PM activity as necessary, event objects for the next PM work order based on the current parent structure defined for the **Target Equipment**, and inspection points if the PM work order includes an inspection **Route**. If a calibration work order is released as a result of a reading, the system also copies all of the calibration data to the released PM work order.

Creating operator checklist results for equipment

View and create checklist results for equipment and associated task plans on this form rather than the **Checklist** tab of the **Work Order** form. Optionally, create follow-up work orders or deferred maintenance activities for checklist items on this screen.After an operator checklist is created, complete or cancel it on this screen.

To create operator checklist results for equipment:

1 Select **Work > Additional Features > Operator Checklist > Operator Checklist**.

2 Specify this information:

Organization
Specify the organization of the operator of the checklist you are creating.

Equipment
Specify the equipment for which to create or view the checklist results.

Task Plan
Specify the task plan of the equipment.

3 Click **Create Checklist**. **Operator Checklist Number** and **Created By** are automatically populated.

4 Specify this information to modify the checklist items:

Job
Optionally, specify the job for which to modify operator checklist results, or select **Show All Records** to display all of the checklist items for the task plan, including pre-planned jobs or a job created specifically for the task plan.
Note: If the task plan **Planning Level** is set to **Job Plan**, select the job for which to create a planned labor record.

Alternately, if the task plan **Planning Level** is set to **Task Plan** and **Job** is set to **Show All Records** all of the records for the selected task plan are displayed.

Performed By
Specify the person performing the checklist.

Reviewed By
Specify the person reviewing the checklist.

5 Specify results of the checklist based on the checklist item:

Completed
Select the check box if **Type** is **Checklist Item**.

Select **Yes** or **No** if **Type** is **Question**.

Specify **Finding** if **Type** is **Qualitative**.

Specify **Value** if **Type** is **Quantitative** or **Meter Reading**.

Specify **Finding** and **Value** if **Type** is **Inspection**.

Notes
Include any relevant notes for the checklist item results.

6 Optionally, select the Final Occ. check box if the results entered represent the final occurrence of the specific checklist item. This only applies to repeating checklist items.

7 Optionally, select the Follow-up check box for specific checklist items to later generate follow-up work orders for the checklist item.

8 Click **Actions**, and then select **Create Follow-up WO** to generate follow-up work orders for all checklist items of the selected operator checklist record where **Follow-up** is selected and where **Follow-up WO-Activity** and **Deferred Maintenance No.** are not populated.

9 Click **Actions**, and then select **Create Deferred Maintenance** to generate a deferred maintenance activities record for the organization of the selected operator checklist, and the department of the equipment on the selected operator checklist.

10 Choose one of the following options

Move to Complete
Select to indicate the checklist is complete. The status is updated to **Complete Status**.

Move to Cancel
Select to cancel the checklist. The status is updated to **Cancel Status**.

11 Click **Submit**.

Reviewing operator checklist results for equipment

Review and complete checklist results for equipment on this form without going to the **Checklist** tab of the **Work Order** form.

To review operator checklist results for equipment:

1 Select **Work > Additional Features > Operator Checklist > Review Operator Checklist**.
2 Specify this information:

Status
Select the status of the operator checklist you want to review.

Performed By
Specify the person who performed the checklist.

Reviewed By
Specify the person reviewing the checklist.

3 Enter results of the checklist based on the checklist item:

Completed
Select the check box if **Type** is **Checklist Item**.

Select **Yes** or **No** if **Type** is **Question**.

Enter **Finding** if **Type** is **Qualitative**.

Enter **Value** if **Type** is **Quantitative** or **Meter Reading**.

Enter **Finding** and **Value** if **Type** is **Inspection**.

Notes
Specify any relevant notes for the checklist item results.

Final Occ.
Select the check box if the results entered represent the final occurrence of the specific checklist item. This only applies to repeating checklist items.

Follow-up
Select the check box for specific checklist items to later generate follow-up work orders for the checklist item.

4 Click **Actions**, and then select **Create Follow-up WO** to generate follow-up work orders for all checklist items of the selected operator checklist record where **Follow-up** is selected and where **Follow-up WO-Activity** and **Deferred Maintenance No.** are not populated.
5 Click **Actions**, and then select **Create Deferred Maintenance** to generate a deferred maintenance activities record for the organization of the selected operator checklist and the department of the equipment on the selected operator checklist.
6 Optionally, you may add, edit, or view documents attached to task checklist items on the **Checklist** tab. Click **Add/Edit Checklist Item Documents** for a selected checklist item to add or edit associated documents.
7 Click **Save Record**.

Performing a linear equipment search for work orders

Search for work orders along linear equipment records. Specify the range or length along the selected linear equipment record, at which the search for work orders will take place.

Note: Work orders for linear references will not be searched.

To perform a linear equipment search for work orders:

1 Select **Work > Work Orders**.
2 Right-click on the **Work Orders** screen, and then select **Perform Linear Search**.
3 On the **Perform Linear Search** popup, select the linear equipment for which to search.
4 Specify this information:

   Equipment
   Specify the equipment for which to perform the linear search.

   Search Range Start
   Specify the starting point on the linear equipment at which to begin the search.

   Search Range End
   Specify the ending point on the linear equipment at which to end the search.

5 Optionally, select the **Include Children** check box to also search for work orders over the same range for equipment structure children.
6 Click **Search and View Results**.

Performing revision control

Revision control tracks and controls the authorization of modifications to entities.

Note: Set the installation parameter PMRVCTRL to YES to activate Revision Control. Contact your system administrator for more information.

Defining revision control approval lists

Viewing and create revision control approval lists or reservation calendar approval lists.

To define revision control approval lists:

1 Select **Work > Revision Control > Approval Lists**.
2 Click **New Record**.
3 Specify this information:

   Organization
   Specify the organization to which the approval list belongs if you use multi-organization security.

   Approval List
   Specify a name for the approval list, and then enter an approval list description in the adjacent field.

   Revision Control Approvers
   Select this check box if the approval list is for revision control approvers.

   Reservation Calendar Owners
   Select this check box if the approval list is for reservation calendar owners.

4 Click **Save Record**.

Defining users for revision control approval lists

Manage the list of users for an existing revision control approval list on the **Revision Control Approval Lists** form.

To define users for revision control approval lists:

1 Select **Work > Revision Control > Approval Lists**.
2 Select the list for which to define a user, and then click the **Users** tab.
3 Click **Add User**.
4 Specify this information:

   User
   Enter the user to add to the approval list. The system automatically populates the user description.

   Sequence
   Enter an approval order for the user.

   Responsibility
   Enter the designation of the user assigned to the revision, e.g. **Manager1**, **Supervisor1**, **Foreman1**.

   Note: If you selected the **Reservation Calendar Owners** check box on the record view, the system will protect **Sequence** and **Responsibility**.

5 Click **Submit**.

Approving revisions

View revision approval records for various entities (PMs, tasks, material lists, and routes) and approve revisions when necessary.

To approve revisions:

1 Select **Work > Revision Control > Revision Approval**.
2 Select the revision record to approve, and then click **Approve**.

   Note: If the approval list contains multiple approvers, the system updates**Approver** and **Date**. Once the final approver approves the revision, the system removes the record from the **List View** page.

Rejecting revisions

To reject revisions:

1 Select **Work > Revision Control > Revision Approval**.
2 Select the revision record to reject, and then click **Reject**.
3 Specify this information:

   Reject Reason
   Specify a reason for rejecting the revision.

4 Click **OK**.

   Note: Once a revision is rejected, the system removes the record from the **List View** page.

Approving parent PMs for revision control

View the list of PM and PM-related revisions to evaluate the change to the associated entity record in terms of the PM schedule.

To approve parent PMs for revision control:

1 Select **Work > Revision Control > Revision Approval**.
2 Select the revision record for which to approve parent PMs, and then click the **Parent PMs** tab.
3 Select the Parent PM record to approve, and then click **Approve**.

   Note: If you are the final approver in this process, the system assigns a status of Finished and removes the record from the **Parent PMs** page.

   To reject a parent PM for revision control, select the parent PM to reject, and then click **Reject**.

Viewing approvers

Access the **Approvers** page of the **Revision Control Approvals** form to view approvers for the selected revision.

To view approvers:

1 Select **Work > Revision Control > Revision Approval**.
2 Select the revision for which to view approvers, and then click the **Approvers** tab.
3 View the list of approvers.

   Note: To reject an approver for revision control, select the approver to reject, and then click **Reject**.

Viewing revision control approval history

History records are updated when users approve or reject revisions on the **Revision Control Approvals** form. The records display the designated approver and date.

To view revision control approval history:

1 Select **Work > Revision Control > Revision Control History**.
2 View the approval history.

Setting up revision control for PM work orders

Designate which PM work order fields, link buttons, and right-click options the system will protect when PM revision control is enabled for the Work Orders form and all work order-related tabs. Right-click options that are not work order specific, e.g., Audit Trail are not available for revision control setup.

Note: Revision Control must be enabled. Set PMRVCTRL to YES to activate PM Revision Control capabilities. Otherwise the system will not update any changes made on the form. Comments, Documents, and Translations tabs are not revision control enabled.

To set up revision control for PM work orders:

1 Select **Work > Revision Control > Revision Control Setup**.
2 Specify this information:

   Protected
   Select to protect the field on the Work Orders form and all work order-related tabs.

3 Click **Save Record**.

   Note: If no boiler text exists for the field, e.g., work order description, the system displays the ID element for the field.

Setting up revision control for hazards

Designate which hazard fields, and link buttons the system will protect when hazard revision is not **Unfinished**.

To set up revision control for hazards:

1 Select **Work > Revision Control > Revision Control Setup**.
2 Click the **Hazards** tab.
3 Specify this information:

Protect
Select to protect the field on the **Hazards** form and all hazard-related tabs.

4 Click **Save Record**.

Setting up revision control for isolation points

Designate which isolation point fields, tabs, and link buttons will be protected when isolation point revision is not **Unfinished**.

To set up revision control for isolation points:

1 Select **Work > Revision Control > Revision Control Setup**.
2 Click the **Isolation Points** tab.
3 Specify this information:

Protect
Select to protect the field on the **Isolation Points** form and all isolation point-related tabs.

4 Click **Save Record**.

Defining settings for nonconformities

Define settings for nonconformities and nonconformity observations to control synchronization, status changes, and merge restrictions.

To define settings for nonconformities and nonconformity observations:

1 Select **Equipment > Nonconformities > Nonconformities Setup**.
2 Select an organization for which to define settings.
3 Specify this information:

Synchronize Header With Observation
Specify when observation data should be synchronized with the associated nonconformity header.

Merge Restrictions

Specify which nonconformities can be selected for merging.

If set to Unrestricted, there is no constraint. If set to Restricted, Equipment, Type, Part, System Level, Assembly Level, Component Level, and Material Type must be the same or blank

If set to Similar Equipment, only Equipment must be the same. If set to Similar Type, only Type must be the same. And if set to Similar Part, only Part, System Level, Assembly Level, Component Level, and Material Type must be the same.

Use Observation Status

Specify whether nonconformity observations require manual status changes or not.

If set to Yes, the user must manually change the status. If set to No, the system will protect the status and never apply changes.

If Automatic, the system will protect the status and will apply updates automatically.

Note: If you specify Yes for **Observation Status**, the **Superseded Status** and **Re-Inspection Status** fields become required.

4 Optionally, specify this information:

Protect Header Data
Select to protect the header nonconformity data on the **Nonconformity Observations** screen and the **Nonconformities** tab of the **Work Order** screen if more than one observation is present for the nonconformity.
Note: Protection of individual fields is still subject to the selections on the**Nonconformities** tab of the **Revision Control Setup** screen.

Protect Observation Data on Header
Select to protect the observation data on the **Nonconformities** screen in update mode.

Superseded Status
Specify the status of the currently approved observation after approval of a new observation. You can select any value, as long as it is attached to an approved or superseded system code.

Re-Inspection Status

Specify the value of the Status of new observations when created for a re-inspection of an existing nonconformity. This is used for automatically generated observations during the release of PM or Maintenance Pattern work orders.

This is also used when manually creating a new observation for an existing nonconformity on the **Nonconformity Observations** screen.

Auto Approve Status
Specify what status should be automatically set for any unfinished observation associated with the work order.

This only works if the observation was created for the work order or if the observation was for re-inspection and the record was updated. If you leave this value blank the system will prevent closing the work order.

Auto Skip Status
Specify what status should be automatically set for any observation associated with the work order for re-inspection.

This only works if the record was not updated (skipped). If you leave this value blank the system will prevent closing the work order.

Include Condition for Re-Inspection
Select to copy the values of severity, intensity, size, importance, and next inspection date override from the related nonconformity header to the observation when a new observation is created. Otherwise, these fields will remain blank on the new observation.

Previous Observation Count
Specify to determine how many other previous observations for the same nonconformity will be displayed on the comments and documents pop-up screens. If left blank, the default is 0.

5 Click **Save**.

Setting up revision control for precautions

Designate which permit fields, tabs, and link buttons will be protected when precautions revision is not **Unfinished**.

To set up revision control for precautions:

1. Select **Work > Revision Control > Revision Control Setup**.
2. Click the **Precautions** tab.
3. Specify this information:

   Protect
   Select to protect the field on the **Precautions** form and all precaution-related tabs.

4. Click **Save Record**.

Setting up revision control for permits

Designate which permit fields, tabs, and link buttons will be protected when isolation point revision is not **Unfinished**.

To set up revision control for permits:

1. Select **Work > Revision Control > Revision Control Setup**.
2. Click the **Permits** tab.
3. Specify this information:

   Protect
   Select to protect the field on the **Permits** form and all permit-related tabs.

4. Click **Save Record**.

Defining initial service request information

Define initial service request information before creating service requests.

Creating customers

To create customers:

1. Select **Work > Contract Management > Customers**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the customer belongs if you use multi-organization security.

Customer Code
Specify a unique code identifying the customer, and then enter the name or a description of the customer in the adjacent field.

Language
Select the customer's language. The language selected will be the default language for the customer in the system.

Currency
Specify the currency for the customer.

Class
Specify the class of the customer.

Out of Service
Select to indicate that the customer is no longer used.

Status
Specify a status to categorize the customer by status.

Parent
Specify the parent company. Using the "Parent" attribute, you can indicate whether a customer is part of a larger organization.

Customer
Select to indicate that this customer purchases goods or services from you. Selecting **Customer** inserts the customer into the lookup from which you select customers on any other forms within the system. Unselect to indicate that the customer does not purchase goods or services from you.

Customer Account Code
Specify the customer's account code to apply to invoices, contracts, or rental contracts generated for this customer.

Customer Cost Center
Specify the customer's cost center to apply to invoices, contracts, or rental contracts generated for this customer.

Tax Code
Specify the supplier's tax code to indicate the tax that must be applied to invoices generated for this customer.

Enter the customer's **Contact Name**, **Telephone**, **Fax Number**, and **E-mail Address**.

Our Contact
Specify the customer’s primary contact for your organization.

EDI Number
Specify the customer’s electronic data interchange (EDI) number for processing electronic transaction information.

4 Click **Save Record**.

Associating properties with customers

Associate properties with customers to easily create service requests for customers. Properties are based on the property-building-floor/unit structure established on the **Service Request** page.

Note: You must define property structures before associating properties with customers.

See Defining Property Code-structure Combinations for Service Requests on page 913.

To associate properties with customers:

1. Select **Work > AMS-Customer**.
2. Select the customer with which to associate a property, and then click the **SR-Properties** tab.
3. Click **Add Property**.
4. Specify this information:

   Property
   Specify the property to associate with the customer.
   Note: If you enter a **Property** only, the system assumes that lower-level values are implied. In this case, you cannot use the same property twice for the same customer.

   Building
   Specify the building of the property to associate with the customer.

   Floor/Unit
   Specify the floor or unit of the building and property to associate with the customer.

5. Click **Submit**.

Creating callers for customers

Associate customers' employee names with customer records to help identify callers for service requests.

To create callers for customers:

1. Select **Work > AMS-Customer**.
2. Select the customer for which to create a caller, and then click the **Callers** tab.
3. Click **Add Caller**.
4. Specify this information:

   Org.
   Specify the organization to which the customer caller belongs if you use multi-organization security.

   Name
   Specify the name of the caller.

   ID
   Specify the user ID that the customer can use to log in to the customer service request system.

   Phone
   Specify the primary phone number of the caller.

   E-mail
   Specify the primary e-mail address of the caller.

Fax
Specify the primary fax number of the caller.

Property
Specify the default property of the caller.

Building
Specify the default property building of the caller.

Floor/Unit
Specify the default building floor or unit of the caller.

Allow Service Request Creation
Select to indicate that the caller may create new service requests.

5 Click **Submit**.

Optionally, click **Revoke** to remove the caller's record and all references to the record for GDPR compliance.

Note: This process is not reversible.

Viewing customer requests for work orders

To view customer requests for work orders:

1 Select **Work > Work Orders**.
2 Select the work order for which to view customer requests, and then click the **Customer Requests** tab.
3 View the customer request for the work order.

See Entering Customer Requests on page 1170 and Processing an Action Request on page 1176.

Defining property code-structure combinations for service requests

Define property code-structures for service requests that reflect actual property-building-floor/unit hierarchies.

When defining property code-structure combinations for service requests, you must first define a level one property before you can create lower levels. For example, you must insert a record for "Property A" before inserting a record for "Property A – Building 1."

To define property code-structure combinations for service requests:

1 Select **Work > Service Request > Properties**.
2 Click **Add Property**.
3 Specify this information:

Property
Specify the name of the property.

Building
Specify the name of the building to associate with the property.

Floor/Unit
Specify the name of the floor or unit to associate with the building and property combination.

4 Click **Submit**.

Associating properties with employees

To associate properties with employees:

1 Select **Work > Setup > Employees**.
2 Select the employee for whom to associate properties, and then click the **Properties** tab.
3 Click **Add Property**.
4 Specify this information:

Property
Specify the property with which to associate the employee.

5 Click **Submit**.

Managing property information

Enter property information that users can access when creating information requests as customers call in requesting additional information.

To manage property information:

1 Select **Work > Service Request > Property Information**.
2 Click **Add Information**.
3 Specify this information:

Property
Select the property for which to add information.

Information Type
Select the category of information to add.

Information
Specify the relevant information.

4 Click **Submit**.

Creating service codes

Create service codes that identify work request problems to add to service requests. You can create a service code based on a standard work order and the system will populate a service description and priority.

To create service codes:

1. Select **Work > Service Request > Service Codes** .
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the service code belongs if you use multi-organization security.

   Service Code
   Specify a code identifying the service code, and then enter a description in the adjacent field.

   Property
   Specify the property with which to associate the service code.

   System
   Specify the system equipment with which to associate the service code.

   Standard WO
   Specify the standard work order with which to associate the service code.

   Customer Selectable
   Select to allow callers to choose this service code on a service request.

   Billable
   Select to indicate that this service code is billable on a service request. If selected, the system also marks the service request as **Billable** on the **Closing** tab of the **Service Requests** form.

   Std. Response Time
   Specify, in minutes, the standard response time of the service code to use as a benchmark for evaluating response times to service requests that reference this service code.

   Estimated Cost
   Specify the estimated cost of the service code.

   Priority
   Specify the priority level of the service code.

4. Click **Save Record**.

Creating service requests

Create service requests when tenants call in to request maintenance. Use the search bar to quickly locate information associated with the caller. If the caller record does not exist, you may quickly create

a new caller record. If a caller record does exist, you may edit the caller's information and then enter service request details.

To create service requests:

1. Select **Work > Service Requests**.
2. Click **New Record**.

   The system automatically populates **Date/Time Reported** with the current date and time.
3. Specify this information:

   Organization
   Specify the organization to which the service request belongs if you use multi-organization security.

   Find Caller By
   Select the desired search criteria.

   Enter a value for **that contains**, and then click **Search**. A caller record that matches the search criteria is searched for, and one of the following results is returned:

   - **One matching caller record is located**
     The system automatically populates the **Requestor Name**, **Requestor Phone**, **Requestor E-mail**, **Customer**, **Customer Type**, **Property**, **Building**, and**Floor/Unit**.

   - **An exact match to the search criteria is not located but several caller records that begin with the same criteria are located**
     The system displays the Callers popup. If you see the caller record you need in the list, select the caller record for which to create a service request, and then click **OK**. The system automatically populates the **Requestor Name**, **Requestor Phone**, **Requestor E-mail**, **Customer**, **Customer Type**, **Property**, **Building**, and**Floor/Unit** if available.

   - **No caller records that match the search criteria are located**
     Create a new caller record.

   Service Request
   Enter a description of the service request in the adjacent field.

   Service Code
   Specify the code identifying the requested service. **System**, **Priority**, **Std. Response Time**, **Act. Response Time**, **Act. Time Open**, **Estimated Cost**, and currency are entered, if available.

   System
   Specify the code identifying the system that needs repair.

   Priority
   Select the priority of the service request.

   Class
   Specify the class of the service request.

   Status
   Select the status of the service request.

Service Request Type
Select the type of the service request.

Requestor Name
Specify the name of the person requesting service.

Requestor Phone
Specify the phone number of the person requesting service.

Requestor E-mail
Specify the e-mail address of the person requesting service.

Reference Number
Specify the reference number for the service.

Contact Name
Specify the contact name of the person at the site needing service.

Contact Phone
Specify the contact person's phone number.

Contact E-mail
Specify the contact person's e-mail address.

Assigned To
Specify the name of the person responsible for completing the work.

Customer
Specify the requestor's customer name, e.g., the name of the company for whom the requestor works.

Property
Specify the name of the property needing service.

Building
Specify the name of the building needing service.

Floor/Unit
Specify the name of the floor/unit needing service.

Area
Specify the name of the area needing service.

4 Enter any additional comments about the service request.

5 Click **Save Record**.

The system automatically populates **Created By** with the **User ID** of the person who created the service request and populates **Created On** with the date and time the service request was created.

Note: The system verifies whether the service request being created is a duplicate or repeated service request. If the service request is a duplicate or repeated service request, the system displays a message with a list of possible matches and asks whether to mark the new service request as a

duplicate or a repeat. If you select to duplicate or repeat an existing service request, the system marks the service request as either a **Duplicate Parent** or **Repeated Parent**, respectively.

To view a list displaying all requests for the specified caller, right-click on the **Service Requests** form, and then choose **View Requests for Caller**.

To view a list displaying all requests for the specified customer, right-click on the **Service Requests** form, and then choose **View Requests for Customer**.

To create a work order for the service request, right-click on the **Service Requests** form, and then choose **Create WO**. Once you choose to create a work order, the system generates a work order for which you may assign one or multiple activities. The new work order number is the same as the service request number, but it also contains a prefix of "SR."

Creating new caller records

Create a new caller record if you cannot locate a caller record via the **Find Caller By** field.

See Creating Service Requests on page 915.

To create new caller records:

1. Select **Work > Service Requests**.
2. Click **New Record**.
3. Right-click on the form, and then choose **Add/Edit Caller**.
4. Specify this information:

   Org.
   Specify the organization to which the customer caller belongs if you use multi-organization security.

   Customer
   Specify the caller's customer name, e.g., the name of the company for whom the caller works.

   Name
   Specify the name of the caller.

   Phone
   Specify the primary phone number of the caller.

   E-mail
   Specify the primary e-mail address of the caller.

   Fax
   Specify the primary fax number of the caller.

   Allow Service Request Creation
   Select to indicate that the caller may create new service requests.

   Property
   Specify the default property of the caller.

   Building
   Specify the default property building of the caller.

Floor/Unit
Specify the default building floor or unit of the caller.

ID
Specify the user ID that the customer can use to log in to the customer service request system.

5 Click **Save as New**.

Note: Click **Cancel** to close the Create/Edit Caller popup without saving changes.

Click **Reset** to clear all data on the Create/Edit Caller popup.

Editing existing caller records

Edit existing caller records on the Add/Edit Caller popup. Then you may save the changes to the selected caller's record or as a new record.

Note: Editing an existing caller record permanently updates the caller's information in the system. If you only want to specify a different contact person for a specific service request, simply enter the contact's information on the **Service Request** form.

To edit existing caller records:

1 Select **Work > Service Requests**.
2 Click **New Record**.
3 Search for a caller by using the **Find Caller By** search bar.
4 Right-click on the form, and then choose **Add/Edit Caller**.
5 Choose one of the following options:

Save as New
Click after you edit existing caller details to save the changes as a new caller record.

Save Changes
Click after you edit existing caller details to save the changes to this caller record.

Note: If an **ID** is listed on the existing record, you must change the**ID** before clicking **Save as New**.

Click **Cancel** to close the **Add/Edit Caller** popup without saving changes.

Click **Reset** to clear all data on the **Add/Edit Caller** popup.

Assigning personnel to service requests

Assign personnel to complete work required for a particular service request. Once you choose to assign personnel, the system generates a work order for which you may assign one or multiple activities. The new work order number is the same as the service request number, but it also contains a prefix of "SR."

To assign personnel to service requests:

1 Select **Work > Service Requests**.

2 Select the service request for which to assign personnel, and then click the **Record View** tab.

3 Right-click on the form, and then choose **Assign Personnel**.

Note: **Trade Filter** defaults to the trade of the selected work order activity.

4 Specify this information:

Activity-Trade
Select the activity-trade to which to assign personnel. The system changes the value of **Trade Filter** to the trade of the selected activity and populates the People Available list with all personnel assigned to the trade.
Note: Select ALL TRADES from **Trade Filter** to display all available personnel associated with the property.

Select ALL PEOPLE from **Trade Filter** to display all available personnel.

Trade Filter
Select the name of the person to whom to assign the work in the People Available list, and then click **>**. The system assigns the person to the highlighted work order activity, removes their name from the People Available list, and displays their name in the People Assigned list.

Repeat this process to add as many people to the activity as necessary.

Note: To clear a person from the People Assigned list, select the name and then click **<**. The system moves their name from the People Assigned list to the People Available list.

5 Repeat the previous step to select additional activities and assign personnel as necessary.

6 Click **Submit**.

Note: Click **Cancel** to close the Assign Personnel to Service Request popup. Clicking **Cancel** does not cancel the personnel assignments already submitted on the popup.

Viewing work order details for service requests

To view work order details for service requests:

1 Select **Work > Service Requests**.

2 Select the service request for which to view work order details, and then click the **Work Order Details** tab.

3 View the work order details.

Closing service requests

To close a service request, the service request to close must be open and associated with an open work order to which personnel is assigned. Closing a service request will also close the work order to which it is associated. Additionally, you must have sufficient system privileges to close both the service request and work order. You may close service requests on the **Closing** page of the **Service Requests** form, or you may book employee time for service requests and close service requests concurrently on the Book & Close tab of the **Service Requests** form.

See Booking Hours and Closing Service Requests on page 925.

To close service requests:

1 Select **Work > Service Requests**.
2 Select the service request to close, and then click the **Closing** tab.
3 Specify this information:

Equipment
Modify the equipment on which the work was performed as necessary.
Note: A service request cannot be closed if the **Equipment** associated with it does not permit closure.

Status
Select **Closed**.

Billable
Select whether the service request is billable.

4 Click **Save Record**.

Note: Click **Add Comment** to enter completion comments as necessary.

See Entering Comments on page 324.

Booking hours for service requests

Book hours for service requests to track the number of hours spent performing work associated with the service request.

Note: All hours booked for a service request are recorded on the work order associated with the service request.

To book hours for service requests:

1 Select **Work > Service Requests**.
2 Select the request for which to book hours, and then click the **Book Hours** tab.
3 Click **Add Labor**.
4 Specify this information:

Person
Specify the person performing the work for the service request.

Department
Specify the department where the work for the service request was performed.

Trade
Specify the trade that performed the work.

Date Worked
Specify the date on which the work was performed for the service request.

Type of Hours
Select the type of hours worked (e.g., normal rate, overtime rate, etc.).

Hours Worked
Specify the number of hours spent performing the work for the service request.
Note: To quickly enter information when booking hours for a service request, click the row containing the personnel assignment for which to book hours. **Person**, **Date Worked**, and **Activity-Trade** are automatically populated. Modify the information as necessary.

Start Time/End Time
Specify the scheduled start time and end time of the work for the service request. If the end time will span beyond midnight, two booked labor records will be created.
Note: The **`WOBKMIDN`** organization option must be set to Yes to book labor across midnight. Contact your system administrator for more information.

Activity-Trade
Select the activity-trade performing the work for the service request.

Rate
Specify or modify the hourly pay rate for the employee or trade performing the work. If you defined a trade rate for the select employee or trade, **Rate** is automatically populated with the appropriate hourly rate.

If you defined a trade rate for the selected **Employee**, **Rate** is populated with the employee trade rate. However, if you did not define trade rates for the selected **Employee**, **Rate** is populated with the trade rate defined for the selected **Trade**.

5 Click **Submit**.
6 Repeat these steps as necessary to book any additional hours against the work order activity for the service request.

Issuing parts for service requests

Issue parts against service requests to record the parts that were used when performing the work associated with the service request.

Note: You may only issue parts to service requests for which a work order has been created.

To issue parts for service requests:

1 Select **Work > Service Requests**.
2 Select the request for which to issue parts, and then click the **Issue Parts** tab.
3 Click **Add Part**.
4 Specify this information:

Part
Specify the part to issue to the service request. The system automatically populates the part description, **UOM**, and **Part Org.** The system selects **Track By Asset** and/or **Track By Lot** if the part is tracked by asset and/or lot and they are protected.
Note: If you are updating a part to issue on the service request and you select a part from the Parts list, the system displays the quantity of the part planned to be used for the service request in **Planned Qty.** and the quantity of the part used to date for the service request in **Used**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Activity-Trade
Specify the activity-trade performing the work for the selected service request.

Store
Specify the store from which to issue parts. **Available** is automatically populated with the quantity of the part available in the selected store for the work order activity after you have entered **Part**, **Activity-Trade**, and **Store**.

Transaction Type
Select **Issue**. **Tool Hours** is protected because the **Transaction Type** is **Issue**.

Date
Specify the desired date of the transaction.

Quantity
Specify the number of parts to issue to the work order. The number must be greater than zero.
Note: If the part is tracked by asset, the **Quantity** must be equal to 1.

Failed Qty.
Specify the quantity of the part that failed.
Note: Part failures are not allowed on an Issue for parts tracked by asset or core tracked.

Date Failed
Specify the date the part failed.

Problem Code
Specify the code of the problem that required work.

Failure Code
Specify the reason that the part failed.

Action Code
Specify the action taken to correct the problem.

Cause Code
Specify the problem cause code, i.e., the root cause of the problem.

Failure Notes
Enter comments about the failure.

Asset ID
Specify the asset ID if the part is tracked by asset.

Bin
Specify the bin from which to issue the parts.

Lot
Specify the lot from which to issue the parts.

5 Click **Submit**.

Note: To record a stockout for a part, select the part, and then click **Record Stockouts**.

See Recording Stockouts for Parts on page 559.

Returning parts from service requests

Return unused parts issued to service requests back to stores.

To return parts from service requests:

1 Select **Work > Service Requests**.
2 Select the request for which to return parts, and then click the **Issue Parts** tab.

   The system automatically populates **Date** with the current system date and time.

3 Click **Add Part**.
4 Specify this information:

   Part
   Specify the part to return. The system automatically populates the part description, **UOM**, and **Part Org.** The system selects **Track By Asset** and/or **Track By Lot** if the part is tracked by asset and/or lot and they are protected.
   Note: If you are updating a part to return on the service request and you select a part from the Parts list, the system displays the quantity of the part planned to be used for the service request in **Planned Qty.** and the quantity of the part used to date for the service request in **Used**.

   Condition
   Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**. When returning a condition tracked part, the condition in which the part is being returned must be entered in the return condition field.

   Activity-Trade
   Specify the activity-trade performing the work for the selected service request. The system automatically populates **Available** with the quantity of the part available in the selected store for the work order activity.

   Store
   Specify the store to which to return parts.

   Transaction Type
   Select **Return**.
   Note: If you select **Return** as the **Transaction Type** for a core tracked part, the system automatically enables **Core Return**. You can select **Core Return** to indicate that the part needs repair. If **Core Return** is selected, the system adds the quantity of the part to return to the **Core Qty.** in the store to which the part is returned.

   If RTNANY is set to NO, you can only return the quantity of the part that was originally issued to that entity to the same store. When issuing a part, you issue to an entity (work order, equipment, etc.) from a store. When returning a part, you return from an entity (work order, equipment, etc.) to a store. Regardless of the setting of the RTNANY installation parameter, you cannot return a greater

quantity of a part tracked by lot than the quantity of the part that has been used to date for the work order.

Date
Specify the desired date of the transaction.

Quantity
Specify the number of parts to return to the work order. The number must be greater than 0 (zero).
Note: If the part is tracked by asset, the **Quantity** must be equal to 1.

Asset ID
Specify the asset ID if the part is tracked by asset.

Bin
Specify the bin to which to return the parts.

Lot
Specify the lot to which to return the parts.

Tool Hours
If the part you are returning is identified as a tool, specify the number of hours the tool was in use.

5 Click **Submit**.

Booking hours and closing service requests

Book employee time for service requests and close service requests concurrently on the Book & Close page of the **Service Requests** form. To close a service request, the service request to close must be open and associated with an open work order to which personnel is assigned. Closing a service request also closes the work order to which it is associated. You must have sufficient system privileges to close both the service request and work order.

Note: All hours booked for a service request are recorded on the work order associated with the service request.

To book hours and close service requests:

1 Select **Work > Service Requests**.
2 Select the service request for which to book hours and close, and then click the**Book & Close** tab.
3 Specify this information:

Equipment
Modify the equipment on which the work was performed as necessary.
Note: A service request cannot be closed if the **Equipment** associated with it does not permit closure.

Status
Select **Closed**.

Billable
Select whether the service request is billable.

Comments
Enter completion comments as necessary.

4 Click **Add Labor**.
5 Specify this information:

Activity-Trade
Select the activity-trade performing the work for the service request.

Person
Enter the person performing the work for the service request.

Date Worked
Enter the date on which the work was performed for the service request.

Hours Worked
Enter the number of hours spent performing the work for the service request.

6 Click **Submit**.
7 Repeat these steps as necessary to book any additional hours against the work order activity for the service request.
8 Click **Save Record**.

Creating service request log entries

Log entries detail changes that have been made to the service request since its creation. View a service request's log entries and then create additional log entries as necessary.

To create service request log entries:

1 Select **Work > Service Requests**.
2 Select the request for which to create a log, and then click the **Log Entries** tab.
3 Click **Add Log Entry**.
4 Specify this information:

Type
Select the type of log entry you are adding.
Note: If you select Time Correction for **Type**, the system makes **Time Correction** available as a required field. Enter the number of minutes to add or subtract from the response time. For example, to add 35 minutes to the response time, enter 35. To subtract 2 hours from the response time, enter –120. Click **Submit**. The system corrects the response time.

5 Enter log entry comments as necessary.
6 Click **Submit**.
The system automatically populates **Old Status**, **New Status**, **Entered By**, and **Date/Time Entered**.

Creating information requests

Create information requests whenever customers call in requesting additional information.

To create information requests:

1. Select **Work > Service Request > Information Requests**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the service request belongs if you use multi-organization security.

   Find Caller By
   Select the desired search criteria.

4. Specify a value for **that contains**, and then click **Search**. A caller record that matches the search criteria is searched for, and one of the following results is returned:

   - **One matching caller record is located**
     Requestor Name, **Requestor Phone**, **Requestor E-mail**, **Customer**, **Customer Type**, and **Property** are populated.

   - **An exact match to the search criteria is not located but several caller records that begin with the same criteria are located**
     If you see the caller record you need in the list, select the caller record for which to create an information request, and then click **OK**. **Requestor Name**, **Requestor Phone**, **Requestor E-mail**, **Customer**, **Customer Type**, and **Property** are populated if available.

   - **No caller records that match the search criteria are located**
     Create a new caller record.

5. Specify this information:

   Information Request
   Specify a description of the information request in the adjacent field.

   Customer
   Specify the name of the customer store requesting information.

   Property
   Specify the property for which to view information.

   Information Type
   Select the category of information to view.

   Requestor Name
   Specify the name of the person requesting service.

   Requestor Phone
   Specify the phone number of the person requesting service.

Requestor E-mail
Specify the e-mail address of the person requesting service.

6 Click **Save Record**.

Creating PM plans

Create and update PM plans to create PM schedules or add equipment to multiple PM schedules at once. A PM schedule is a predefined set of preventive maintenance details to be performed on a defined interval for equipment. PM plans enable you to quickly enter and update groups of PM schedules.

For example, you have three different PM schedules for car repairs that include: one for tire rotation, one for oil change, and another for brake adjustments. Create a PM plan and add the three car repair PM schedules to it. You then add 30 cars as equipment on the PM plan, which are then added to the three PM schedules in one click via the PM plan. PM plans and PM schedules are related to one another only by the list of equipment they share.

Note: You can view PM plans and schedules created on the **PM Plans** and the **PM Schedules** pages.

The PM plan functionality is not available when the PMRVCTRL installation parameter is set to **Yes**.

Creating PM plan headers

To create PM plan headers:

1 Select **Work > WO Planning > PM Plans**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the PM plan belongs if you use multi-organization security.
Note: If multi-organization security is activated, i.e., the MULTIORG installation parameter is set to YES, you can only attach PMs of the same organization to a PM plan. A PM plan and all PM schedules attached to the plan must share the same **Organization**.

PM Plan
Specify a unique code identifying the PM plan, and then enter a description in the adjacent field.

Class
Specify the class of the PM plan. The classes shown belong to the PM Plan entity.

Equipment Class
Specify the class of the equipment. If you select an equipment class, the system restricts attaching PM equipment associated with other classes to the PM plan.

4 Click **Save Record**.

Copying PM plans

Copy PM plans to quickly create a new PM plan by copying information from an existing PM plan to a new plan.

To copy PM plans:

1 Select **Work > WO Planning > PM Plans**.
2 Select the PM plan to copy, and then click the **Record View** tab.
3 Right-click on the form, and then select **Copy PM Plan**.
4 Specify this information:

   New PM Plan
   Specify a unique code identifying the new PM plan, and then enter a description of the PM plan in the adjacent field.

5 Select the related details to copy to the new PM plan:
   - **Custom Field Values**
   - **Comments**
   - **Activities**
   - **PM Schedules**
   - **Equipment**
   - **Documents**
6 Click **Submit**.

Associating PM schedules with PM plans

Associate PM schedules with PM plans to manage equipment for all of the PM schedules on the PM plan.

To associate PM schedules with PM plans:

1 Select **Work > WO Planning > PM Plans**.
2 Select the PM plan with which to associate PM schedules, and then click the **PM Schedules** tab.
3 Choose one of the following options:

   Associate an existing PM schedule
   Specify an existing **PM Schedule**. The system automatically populates the **PM Schedule** description. The system also populates the **WO Type**, **Duration**, **PM Type**, **Class**, **Priority**, **Work Package**, and **Perform Every** from the existing PM schedule.
   Note: You cannot add an existing PM schedule with equipment to a PM plan.

   If you select an existing PM schedule, the system only populates **PM Plan** on the existing PM schedule record. If you update any of the existing PM schedule data from the PM schedule on the PM plan, the system also displays the changes to the PM schedule record.

   If there are existing activities on the PM schedule, the system also copies the activities to the PM plan.

Create and associate a new PM
Click **Add PM Schedule**. Enter a unique code identifying the new **PM Schedule**, and then enter a description in the adjacent field.

4 Specify this information:

WO Type
Select the work order type for the PM schedule.

Duration
Specify the estimated number of days to complete the PM.

PM Type
Select the type of PM.

Class
Specify the class of the PM. The classes shown belong to the PPM entity.

Priority
Select the priority level of the PM.

Work Package
Select to indicate that this PM schedule can be associated with a work package.

Perform Every
Specify the length of the interval of time to pass before the system generates the next PM work order. You can enter any value between 0 and 99999, and then select the unit of measure in the adjacent field. The unit of measure for the PM period can be days, weeks, months, quarters, or years.

Perform On
Specify the week of the month and the day of the week on which to perform the work on the equipment, e.g., 2 and Tuesday of the month due. Select **Last** to handle scenarios in which there are five weeks in a month. The system sets the due date to the last week of the month.

5 Click **Submit**.

Note: If the PM schedule to delete has equipment, the system displays a message enabling you to indicate whether to remove all of the equipment from the PM schedule.

If you click **No**, the system does not remove the equipment from the PM schedule but deletes the PM schedule from the PM plan, clears the PM plan activities for the PM schedule, clears the PM plan on the PM schedule record, and deletes all work orders for the PM schedule with a status of Awaiting Release.

If you click **Yes**, the system removes the equipment from the PM schedule. If **Work Package** is not selected, the system removes the PM schedule from the PM plan, clears the PM plan activities for the PM schedule, clears the PM plan on the PM schedule record, deletes all work orders for the PM schedule with a status of Awaiting Release, and removes the equipment from the PM schedule if all of the PM work orders have a status of Complete or Awaiting Release. If any of the PM work orders for the PM schedule have a status other than Complete or Awaiting Release, the system populates **Date Deactivated** for the equipment on the **Equipment** page of the **PM Schedules** form

instead of removing the equipment from the PM. If the PM plan has only one PM schedule, the system removes the equipment from the PM plan.

If **Work Package** is selected, the system also removes the equipment from the work package associated with the PM schedule.

Creating activities for PM schedules on PM plans

Create activities for PM schedules on PM plans to conveniently add activities for PM schedules. The **Activities** page of the **PM Plans** form functions in the same manner as the **Activities** page of the **PM Schedules** form.

See Defining Activities of PM Work Orders on page 856.

The functionality of the **Activities** page of the **PM Plans** form is unlike the functionality of the **Equipment** page of the **PM Plans** form because additions/revisions made on the **Activities** page affect only the selected PM schedule and do not affect/update all of the PM schedules on the PM plan.

See Adding Equipment to PM Plans on page 932.

To create activities for PM schedules on PM plans:

1. Select **Work > WO Planning > PM Plans**.
2. Select the PM plan for which to create activities, and then click the **Activities** tab.
3. Click **Add PM Activity**.

   Note: To update an existing activity or PM schedule, select the activity to update. The system populates **PM Schedule**, **Activity**, **Trade**, **Task**, **Material List**, **Estimated Hours**, **People Required**, **Start**, and**Duration** from the selected activity record.
4. Specify this information:

   PM Schedule
   Specify the PM schedule. The system automatically populates **Activity** with the next consecutive number according to the INCRLINO installation parameter and populates **People Required**, **Start**, and **Duration** with "1".

   Trade
   Specify the trade required to perform the activity.

   Task
   Specify the task code for the activity.

   Material List
   Specify the code identifying the material list that contains the parts needed for the activity.

   Estimated Hours
   Specify the estimated number of hours required to complete the activity.

   People Required
   Modify the number of people required to perform the activity as necessary. When you enter a **Trade** and **Estimated Hours**, the system populates **People Required** based on the following equation:

```
People Required = (Estimated Hours / Duration x the value of the WORKDAY
installation parameter)
```

Start
Specify `1` if the activity is to start on the same day that the standard work order starts. Specify `2` if the activity should start on day 2 of the standard work order, etc.

Duration
Specify the estimated number of days to complete the PM.

5 Click **Submit**.

Note: To copy the activity, select the activity to copy, and then click **Copy PM Activity**. The system inserts a new PM Activity Details record and populates **Trade**, **Task**, **Material List**, **Estimated Hours**, **People Required**, **Start**, and **Duration** from the selected activity. Enter a **PM Schedule**, and then click **Submit**.

Moving activities to PM plans

Move activities from one PM to another or change the sequence of an activity within the same PM.

To move activities to PM plans:

1 Select **Work > WO Planning > PM Plans**.
2 Select the PM plan for which to move activities, and then click the **Activities** tab.
3 Select the activity to move, and then click **Move PM Activity**.
4 Specify this information:

New PM Schedule
Specify the PM Schedule to which to move the activity. The system automatically populates the **New PM Schedule** description and **New Activity** with the next available activity number.
Note: If the activity being moved has tools associated with it, the system also moves the tools to the new PM activity.

You can also renumber activities on the same PM by entering the same PM number for **New PM Schedule** and entering a **New Activity** number.

5 Click **Save**.

The system moves the activity and updates the PM schedule records on both the **PM Plans** and **PM Schedules**forms.

Adding equipment to PM plans

Add equipment for PM schedules to PM plans. Equipment added to a PM plan is automatically associated with every PM schedule on the PM plan.

Note: You can only add or delete equipment for a PM schedule on a PM plan on the **Equipment** page of the **PM Plans** form.

If **Work Package** is selected for a PM schedule on the PM plan, the system does not create an initial PM work order for the PM schedule when equipment is added to the PM plan.

To add equipment to PM plans:

1. Select **Work > WO Planning > PM Plans**.
2. Select the PM plan to which to add equipment, and then click the **Equipment** tab.
3. Specify this information:

   Equipment
   Specify the PM equipment to add to the PM plan.
   Note: Because the equipment details information for the PM plan is stored in the same database table with the equipment information for PM schedules, all of the additional equipment data that is available on the **Equipment** page of the **PM Schedules** form is also copied to this tab, although the data is not displayed. Likewise, all location information and handling of dormant periods/bypassing is also carried over from the PM schedule. If necessary, you can update the equipment details on the **Equipment** page of the **PM Schedules** form.

   See Creating Preventive Maintenance Work Orders on page 851.

4. Click **Submit**. **PM Plan** is populated on the **Equipment** page of the **PM Schedules** form.

   Add additional equipment to the PM plan as necessary.

   Note: If **Work Package** is selected for the PM schedule(s) on the PM plan and there are work orders with a status of Completed or Awaiting Execution, the PM work orders with Awaiting Execution status are deleted, no changes are made to completed work orders, the equipment from all of the associated PM schedules is deleted, and the PM schedule(s) are detached from the work package.

   If any of the PM work orders for the PM schedule have a status other than Complete or Awaiting Release, **Date Deactivated** is populated for the equipment on the **Equipment** page of the **PM Schedules** form instead of the equipment from the PM being removed.

Viewing the resource history for equipment and PM schedules

View and monitor the record activity for resources.

Note: The Resource History popup is available on the Resources page of the Assets, Positions, and Systems forms.

To view the resource history for equipment and PM schedules:

1. Select **Work > WO Planning > PM Schedules**.
2. Select the PM schedule for which to view the resource history, and then click the **Resources** tab.
3. Click **View Resource History**.
4. View the resource history.
5. Click **Close**.

Associating permits to PM schedules

You may associate permits with a PM schedule on the **Permits** tab. The permits will be copied to the work orders released against the specified PM schedule.

To associate permits to PM schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule to which to associate permits, and then click the **Permits** tab.
3 Click **Add Permit**.
4 Specify this information:

Permit
Select the permit to associate to the PM schedule. The permit description and **Permit Org.** are automatically populated.

Mandatory

Activity

Auto Create PTW

PTW Type

Type of Work

Priority

Risk

LOTO Required

Isolation Type

Delete Pending

5 Click **Submit**.

Breaking down work on linear equipment for PM schedules

Enter and view preventive maintenance work for linear equipment. If necessary break down that work into manageable, linear segments for easier planning and scheduling of the work. For more information on linear equipment, see

Defining linear equipment on page 364.

To break down work on linear equipment for PM schedules:

1 Select **Work > WO Planning > PM Schedules**.
2 Select the PM schedule for which to break down work on linear equipment, and then click the **Breakdown Linear Work** tab.
3 Specify this information:

Equipment
Specify the PM equipment for which to break down the work into linear segments. The system automatically populates the equipment description, **Equip. Org.**, **Equipment Length**, and the equipment length UOM.
Note: You must first define this equipment on the **Equipment** tab. Only one record may exist.

Precision
Select the precision in which the system calculates **From Point** and **To Point**. Default is 0.

Breakdown Into
Specify the number of segments into which to break down the linear work, e.g., enter 12 if you plan to break down the work into a one year (twelve month) cycle with work performed each month in that year.

Breakdown From/To
Specify the starting **From Point** and the ending **To Point** on the linear equipment record to determine where and how to break down or divide the work on the equipment.

Start Date
Specify the date to begin the work for the first segment.

Perform Every
Specify the intervals at which time to perform the work on the segments, e.g., enter 1 and then select **Years** if work should be performed on an annual basis or once every year.

4 Click **Create/Refresh Preview**. Adjust individual segments as necessary once the grid is populated.
5 See the linear overview section to view the breakdown records.
6 Click **Submit**.

Managing fuel

Manage fuel by tracking fuel issues and receipts. Associate fuel types to depots, tanks, and pumps. View fuel transactions.

Creating fuels

Enter the different types of fuel and fuel mixes to issue to vehicles or equipment.

To create fuel:

1 Select **Work > Fuel Management > Fuels**.
2 Click **New Record**.
3 Specify this information:

Fuel
Specify a unique code identifying the fuel.

Fuel Description
Specify a description of the fuel.

Fuel Type
Select the fuel type.

UOM
Specify the unit of measure in which to measure the fuel quantities.

Class
Specify the class to which the fuel will belong. The system automatically populates **Class Org.**

Emissions Commodity
Specify the commodity to associate with the fuel to track CO2e emissions.

Blended Grade
Select if this fuel is a blend of two or more grades.
Note: If you selected **Blended Grade**, complete steps 13-22.

Out of Service
Select to indicate the fuel is no longer in service. If you select **Out of Service** the system retains the fuel record, but it will no longer appear in the lookups for fuels on other forms.

Fuel 1
Specify fuel type 1.

Blend % 1
Specify the percentage of blended grade 1.

Fuel 2
Specify fuel type 2.

Blend % 2
Specify the percentage of blended grade 2.

Fuel 3
Specify fuel type 3.

Blend % 3
Specify the percentage of blended grade 3.

Fuel 4
Specify fuel type 4.

Blend % 4
Specify the percentage of blended grade 4.

Fuel 5
Specify fuel type 5.

Blend % 5
Specify the percentage of blended grade 5.

4 Click **Save Record**.

Creating depots

Create depots to specify storage areas for fuel.

To create depots:

1 Select **Work > Fuel Management > Depots**.
2 Click **New Record**.
3 Specify this information:

Depot
Specify a unique code identifying the depot.

Description
Enter a description of the depot.

Depot Organization
Specify the organization to which the depot belongs.

Class
Specify the class to which the depot belongs. The system automatically populates **Class Org.**

Location
Specify the location of the depot. The system automatically populates **Location Org.**

4 Choose one of the following options:

- **Markup %**
  Specify a markup percentage, to be added to the average price when fuel is issued.

- **Fixed Markup**
  Specify a fixed markup amount, to be added to the average price when fuel is issued.

- **External**
  Select to indicate that the depot is an external depot.

- **Out of Service**
  Select to indicate that the depot is out of service.

- **Allow Tank Volumes Greater than Capacity**
  Select to allow a tank record to indicate a greater volume than set capacity.

- **Allow Negative Tank Volumes**
  Select to allow a tank record with a negative volume.

5 Click **Save Record**.

Creating tanks for depots

Create tanks in which to store fuel at a specified depot.

To create tanks for depots:

1. Select **Work > Fuel Management > Depots**.
2. Select the depot for which to create a tank, and then click the **Tanks** tab.
3. Specify this information:

   Tank
   Specify a unique code identifying the tank, and then enter a description of the tank in the adjacent field.

   Fuel
   Specify the fuel to store in the tank at the depot. The system automatically populates **Fuel Type**, **Volume UOM**, and **Average Price**.

   Max. Tank Volume
   Specify the maximum allowable fuel volume. The system automatically populates **Current Tank Volume**.

4. Optionally, select the **Out of Service** check box if the fuel is out of service.
5. Click **Submit**.

Creating pumps for depots

Create pumps from which to issue fuel.

To create pumps for depots:

1. Select **Work > Fuel Management > Depots**.
2. Select the depot for which to add pumps, and then click the **Pumps** tab.
3. Click **Add Pump**.
4. Specify this information:

   Pump
   Specify a unique code identifying the pump, and then enter a description of the pump in the adjacent field.

5. Optionally, select the **Out of Service** check box if the pump is out of service.
6. Click **Submit**.

Associating pumps to tanks and fuel for depots

Associate pumps with the tanks and fuel the pump will issue.

To associate pumps to tanks and fuel for depots:

1. Select **Work > Fuel Management > Depots**.
2. Select the depot for which to associate pumps to tanks, and then click the **Tank/Pump** tab.
3. Click **Add Record**.

4 Specify this information:

Tank
Specify the tank to associate to the pump for the selected depot. The system automatically populates the tank description and **Fuel**.

Pump
Specify the pump to associate to the tank for the selected depot. The system automatically populates the pump description.

5 Optionally, select the **Active** check box to designate the pump as active on the selected tank.
6 Click **Submit**.

Issuing fuel

Issue fuel to vehicles or equipment, and then track the quantity and price of fuel issued.

To issue fuel:

1 Select **Work > Fuel Management > Fuel Issues**.
2 Specify this information:

Depot
Specify the depot at which the fuel is located.

Date
Enter the date of the fuel issue.
Note: If you are entering multiple transactions for one date, entering **Date** above will automatically populate **Date** below.

3 Click **Add Fuel**.
4 Specify this information:

Fuel
Specify the fuel to be issued to the vehicle or equipment.

Pump
Specify the pump from which the fuel was issued.

Vehicle
Specify the vehicle to which the fuel was issued.

Qty. Issued
Specify the quantity in gallons of fuel issued.

Date
Specify the date of the fuel issue transaction.

5 Click **Add to List**.
6 Click **Submit Transaction**.

Receiving fuel into tanks

Receive fuel into tanks from selected depots.

To receive fuel into tanks:

1 Select **Work > Fuel Management > Fuel Receipts**.
2 Specify this information:

   Depot
   Specify the depot from which to issue the fuel. The system automatically populates the depot description and **Organization**.

   Date
   Specify the date and time for which the fuel issue will occur.

3 Click **Add Tank**.
4 Specify this information:

   Tank
   Specify the tank to receive the fuel issue. The system automatically populates the tank description, **Fuel**, fuel description, fuel UOM, and **Fuel Type**.

   Qty. Received
   Specify the fuel quantity to receive to the tank. The system automatically populates the quantity received unit of measure.

   Date
   Specify the date and time for which the fuel issue will occur.

   Price
   Specify the price for the fuel issue.

   Supplier
   Specify the fuel supplier.

5 Click **Add to List**.
6 Click **Submit Transaction**.

Recording tank volumes for fuel physical inventories

Record actual quantities of tanks on a fuel physical inventory record.

To record tank volumes for fuel physical inventories:

1 Select **Work > Fuel Management > Fuel Physical Inventory**.
2 Select or create the fuel physical inventory for which to record tank volumes, and then click the **Tanks** tab.

   The system automatically populates **Line**, **Tank**, **Description**, **Fuel**, **Expected Volume**, **Expected Volume UOM**, and **Physical Volume UOM**.

3 Specify this information:

Physical Volume
Specify the actual volume of the tank for the selected fuel physical inventory record.

4 Click **Submit**.

Viewing associated depots and tanks for fuels

View a list of associated tanks and depots for selected fuels.

To view associated depots and tanks for fuels:

1 Select **Work > Fuel Management > Fuels**.
2 Select the fuel for which to view associated depots and tanks, and then click the **Depot/Tank** tab.
3 View the list of associated depots and tanks for the selected fuel.

Viewing fuel transactions

View the history of issues and receipts associated with fuels.

To view fuel transactions:

1 Select **Work > Fuel Management > Fuels**.
2 Select the fuel for which to view fuel transactions, and then click the **Transactions** tab.
3 View the transaction history for the selected fuel.

Understanding deferred maintenance

Deferred maintenance is a work order activity for a specific piece of equipment that will be performed at a future date. For example, a work order for vehicle maintenance might include several critical and non-critical activities. To save time, a supervisor might decide to defer one or more non-critical activities to a later date.

Create deferred maintenance from an existing work order or manually create deferred maintenance on the **Deferred Maintenance** form.

Creating deferred maintenance

Create deferred maintenance when a maintenance activity you want to defer has not been added to a work order. The deferred maintenance can be assigned to a work order when there is adequate availability on the equipment for the deferred activity to be completed.

To create deferred maintenance:

1 Select **Work > WO Planning > Deferred Maintenance**.
2 Click **New Record**.

The system automatically populates **Deferred Maintenance No.**, **Status**, **Deferred By**, **People Required**, **Duration (Days)** and **Task Qty.**

3 Specify this information:

Organization
Specify the organization to which the work order belongs if you use multi-organization security.

Activity Note
Specify a description of the maintenance activity to defer.

Equipment
Specify the equipment for which to defer maintenance. The system automatically populates the adjacent field with the equipment's description, **Equipment Type**, and **Equipment Org.**

Status
Choose one of the following options:

Unassigned
Select to create the deferred maintenance.

Assigned
Select to assign the deferred maintenance to a specific work order.

Cancelled
Select to cancel the deferred maintenance.

4 Specify this Deferred Maintenance details information:

Task Plan
Specify the task code for the deferred maintenance. The system automatically populates **Task Plan Revision**, **UOM** (field adjacent to **Task Plan Qty.**) and **Trade** for the task, as well as **People Required**, **Reason for Repair**, **Work Accomplished**, **Technician Part Failure**, **Manufacturer**, **System Level**, **Assembly Level**, and **Component Level** if you use the American Trucking Association's Vehicle Maintenance Reporting System (VRMS).

Task Plan Qty.
Specify the required number of units of the task plan to associate with the deferred maintenance, and then select the unit of measure for the **Task Plan Qty.** in the adjacent field. For example, a work order activity to pave 100 miles of highway today will indicate a **Task Plan Qty.** of "100" and a unit of measure of "Miles", whereas the same task on another day might indicate only 80 miles due to the steep inclines of the stretch of highway being paved on that day.

Material List
Specify the code identifying the material list that contains the parts needed for the deferred maintenance. The system automatically populates **Material List Revision**.

Trade
Specify the trade required to perform the deferred maintenance.

People Required
Specify the number of people required to perform the deferred maintenance.

Duration (Days)
Specify the estimated number of days needed to complete the deferred maintenance.

Estimated Hours
Specify the estimated number of hours needed to complete the deferred maintenance.
Note: Estimated Hours must be less than or equal to **People Required** times 24 times **Duration (Days)**.

Specify this information only if you use the American Trucking Association's Vehicle Maintenance Reporting System (VMRS):

Note: The system will copy the VMRS-related information you enter on this form to the work order to which the deferred maintenance is assigned.

Reason For Repair
Specify the reason the vehicle needs repair (Code Key 14).

Work Accomplished
Specify the work performed on the vehicle (Code Key 15).

Technician Part Failure
Specify the reason the technician or supplier thinks the vehicle failed (Code Key 18).

Manufacturer
Specify the Manufacturer/Supplier Code (Code Key 34) to associate with the vehicle.

System Level
Specify the VMRS code identifying the system, e.g., brakes, frame, suspension, needing repair (Code Key 31).

Assembly Level
Specify the VMRS code identifying the subsystem needing repair (Code Key 32). The values available are based on the system-level code.

Component Level
Specify the VMRS code identifying the specific component or part needing repair (Code Key 33). The values available are based on a combination of the system-level code and the assembly-level code.

Hired Labor
Select to indicate that the deferred maintenance will be completed by an external source.

Labor Type
Select the type of labor needed if you selected **Hired Labor**.

Supplier
Specify the supplier for the deferred maintenance. The system automatically populates **Supplier Org.**

5 Specify this information:

Activity Comments
Enter comments or instructions for the deferred maintenance.

Work Order
Specify when ready to assign the deferred maintenance to a new work order.

6 Click **Save Record**.

Adding parts to deferred maintenance

Add, delete, change or view parts for deferred maintenance.

To add parts to deferred maintenance:

1 Select **Work > WO Planning > Deferred Maintenance**.
2 Select the deferred maintenance for which to add parts, and then click the **Parts** tab.
3 Click **Add Part**.
4 Specify this information:

Part
Specify the part to add to deferred maintenance. The system automatically populates the part description in the adjacent field, **Part Source**, **Part Org.**, **UOM**, **Track by Asset**, **Track by Lot**, and **Planned Source**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Planned Source
Specify the planned source for the part, e.g., **Direct Purchase** for a part ordered from an external source, or **Stock** for a part ordered from internal stock.

Planned Qty.
Specify the quantity of the part planned for the deferred maintenance.

5 Click **Submit**. The system automatically populates **Material List**.

Creating maintenance patterns

A maintenance pattern is a schedule of predefined jobs used to perform a preventive maintenance cycle. A maintenance pattern tells how the system should generate work orders for the maintenance pattern, and whether the resulting PM work order generation is based primarily on a time interval (weekly, monthly, annually), or on a meter interval (ex. 3000 miles) or both.

To create maintenance patterns:

1 Select **Work > WO Planning > Maintenance Pattern**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization of the maintenance pattern.

Maintenance Pattern
Specify a unique code identifying the maintenance pattern, and then enter a description of the maintenance pattern in the adjacent field.

Type
Select the maintenance pattern type.

Class
Specify the maintenance pattern class. The system automatically populates **Class Org.**

Meter #1 UOM
Specify the unit of measure for meter #1 for the maintenance pattern.

Meter #1 Releases Use
Select the release method for which Meter #1 uses to trigger the release of work orders.

Meter #2 UOM
Specify the unit of measure for meter #2 for the maintenance pattern.

Meter #2 Releases Use
Select the release method for which Meter #2 uses to trigger the release of work orders.

Pattern Start Date
Specify the start date for the maintenance pattern.

Supervisor
Specify the supervisor for the maintenance pattern.

4 Click **Save Record**.

The system automatically populates **Created By** and **Date Created**.

Note: To copy the maintenance pattern, right-click and click **Copy Maintenance Pattern**.

Adding sequences to maintenance patterns

A sequence defines the work to be completed on a maintenance pattern job as well as the relative chronology in which the work will be performed within the maintenance pattern, and the interval (time or meter) for a work order to be generated.

To add sequences to maintenance patterns:

1 Select **Work > WO Planning > Maintenance Patterns**.
2 Select the maintenance pattern for which to add a sequence, and then click the **Sequence** tab.
3 Click **Add Sequence**.
4 Specify this information:

Sequence
Specify the sequence number for which the work will be performed.

Standard WO
Specify the standard work order to associate to the sequence in the maintenance pattern.

WO Description
Specify a description for the work order sequence.

Calculate from Basis
Select to copy the sequences of the maintenance pattern to the new maintenance pattern.
Note:

Actual Close Date
When generating a WO, the work order due date will be the actual closing date of the previous work order, plus the defined interval for the selected sequence.

Due Date
When generating a WO, the WO due date will be the due date of the previous work order plus the defined interval for the selected sequence.

Scheduled Start Date
When generating a WO, the WO due date will be the schedule start date of the previous work order plus the defined interval for the selected sequence.

Perform After
Specify a numerical value for the period interval, and then select a value for the perform after UOM to flag the system to schedule work orders based on dates. For example, enter 5 for Perform After and Months for perform after UOM, which flags the system to perform the work (or release work orders associated to the maintenance pattern) after a 5 month interval.
Note: You may select to flag the system to schedule work orders based on an interval time period or a meter reading interval. If you selected a value in **Perform After** you chose to flag the system to perform the work on an interval time period. If you prefer to flag the system to perform the work on a meter reading interval, leave **Perform After** blank and enter a value for **Meter #1 Interval**.

Meter #1 Interval
Select to flag the system to schedule the work orders, or to release the work orders associated to the maintenance pattern, based on meter readings.

Meter #2 Interval
Select to flag the system to schedule the work orders (or release work orders associated to the maintenance Meter #2 Interval pattern) based on meter readings. The system automatically populates **Meter #2 UOM**.

Ok Window
Specify the value to use for the Ok window.

Near Window
Specify the value to use for the near window.

Release Window
Specify the value to use for the release window.

5 Click **Submit**.

Managing equipment for maintenance patterns

Manage equipment for maintenance patterns by creating or deleting equipment associations. The system performs work on equipment associated to the maintenance pattern in the sequential order designated on the **Sequences** page of the **Maintenance Patterns** form.

Associate equipment to a maintenance pattern so that the system may create a work order for the associated equipment. Activate maintenance patterns with initial sequences and associated equipment to start the process of creating maintenance pattern work orders. Deactivate maintenance patterns to stop a maintenance pattern for the selected pieces of equipment.

Adding equipment to maintenance patterns

To add equipment to maintenance patterns:

1. Select **Work > WO Planning > Maintenance Patterns**.
2. Select the maintenance pattern for which to add equipment, and then click the **Equipment** tab.
3. Click **Add Equipment**.
4. Specify this information:

   Equipment
   Specify the equipment to add to the maintenance pattern.
   Note: Equipment with logical meters flagged as **Up/Down Meter** on the **Meters** page of the equipment record will not be displayed.

   Due Nonconformities Only
   Select to include only new observations created for nonconformities that are due for inspection.
   Note: The inspector will not see nonconformities on the work order that are present but not due for inspection. The inspector may be confused if he finds nonconformities during the inspection that were not on the list, which may lead to duplicate nonconformities

   Include Nonconformities
   Select to include new observations for re-inspection for existing nonconformities.

   Test Point Set
   Specify the test point set for calibration of the equipment.

   Dormant Start
   Specify the date on which the dormant period for the PM begins.

   Dormant End
   Specify the date on which the dormant period for the PM ends.

   Reuse Dormant Period
   Select to use the same specified dormant period for the PM on a yearly basis.

   Date Deactivated
   Specify the date after which work order generation stops.

   WO Department
   Specify the department of the work order.

WO Location
Specify the location of the work order.

WO Cost Code
Specify the cost code of the work order.

WO Assigned To
Specify the person responsible for the work.

WO Assigned By
Specify the person assigning the work.

Work Order Org.
Specify the organization of the work order.

Due Date
Specify the due date of the first work order.

Meter #1 Due
Specify the reading due value for the first meter.

Meter #2 Due
Specify the reading due value for the second meter.

5 Click **Submit**.

Note: If you populate any of the replacement values (e.g., **WO Department**, **WO Location**, **WO Cost Code**, **WO Assigned To** or **WO Assigned By**), the default values from the equipment record are replaced when a maintenance pattern work order is created with these replacement values.

To activate a maintenance pattern for equipment, click **Activate MP**.

To deactivate a maintenance pattern for equipment, click **Deactivate MP**.

Activating maintenance patterns for equipment

Start the maintenance pattern for selected equipment, which will generate the first work order for all selected equipment.

To activate maintenance patterns for equipment:

1 Select **Work > WO Planning > Maintenance Patterns**.
2 Select the maintenance pattern to activate for equipment, and then click the **Equipment** tab.
3 Click **Activate MP**.
4 Specify this information:

Initial Sequence
Specify the sequence number that the pattern will use to create the first maintenance pattern work order.
Note: A maintenance pattern does not to necessarily start with the first sequence in the list of Sequences on the **Sequence** tab.

Due Date
Specify the due date of the initial work order.

Meter #1 Due
Specify the reading due value for the first meter. The system automatically populates **Meter #1 UOM**.

Meter #2 Due
Specify the reading due value for the second meter. The system automatically populates **Meter #2 UOM**.

5 Select one or more equipment records, and then click **Submit**.

Deactivating maintenance patterns for equipment

Stop the maintenance pattern for selected equipment, which will delete the work order for equipment.

Note: The system deletes only work orders with **Status** of **Awaiting Release**.
The system deactivates the maintenance pattern and flags the selected equipment **Inactive**.

To deactivate maintenance patterns for equipment:

1 Select **Work > WO Planning > Maintenance Patterns**.
2 Select the maintenance pattern to deactivate for equipment, and then click the **Equipment** tab.
3 Click **Deactivate MP**.
4 Select one or more records, and then click **Submit**.

Viewing work orders for maintenance patterns

View and select work orders associated with maintenance patterns.

To view work orders for maintenance patterns:

1 Select **Work > WO Planning > Maintenance Patterns**.
2 Select the maintenance pattern for which to view work orders, and then click the **Work Orders** tab.
3 View the list of work orders.
Note: To select a work order in the list, click on the work order.

Copying maintenance patterns

Copy existing child records and header records from an existing maintenance pattern to a new maintenance pattern.

To copy maintenance patterns:

1 Select **Work > WO Planning > Maintenance Patterns**.
2 Select the maintenance pattern for which to copy records, and then click the **Record View** tab.

3 Right-click on the form, and then select **Copy Maintenance Pattern**.

4 Specify this information:

New Maintenance Pattern
Specify a unique identifying name for the new maintenance pattern, and then enter a description of the maintenance pattern in the adjacent field.

5 Select the related details to copy to the new maintenance pattern:

- **Custom Field Values**
- **User Defined Fields**
- **Sequences**
- **Equipment**
- **Discounts**
- **Comments**
- **Documents**

6 Click **Submit**.

7 Click **Submit**.

Scheduling work orders daily

Schedule work orders on a daily basis on the **WO Daily Scheduling** form.

To schedule work orders daily, first define the selection criteria for the following four classifications:

1 Equipment selection parameters
2 Work order selection parameters
3 Activity selection parameters
4 Employee selection parameters

Defining parameters for work order daily scheduling

Create and update selection parameters for scheduling daily work orders on the **WO Daily Scheduling** page.

On the **Parameters** page, define the selection criteria for locating work orders, activities, employees, and equipment to display on the **Equipment**, **WO Activity**, and **Employee Preview** tabs.

To define parameters for work order daily scheduling:

1 Select **Work > WO Planning > WO Daily Scheduling**.

2 Select the saved selection parameters if applicable.

3 Specify this information to define work order selection parameters:

Session ID
Enter the ID for the session.
Note: Enter **Session ID** if you are working on an existing session. If you are creating a new session, the system automatically populates **Session ID** after you click **Create/Refresh Previews**.

Work Order Org.
Specify the work order organization.

Work Order
Specify the work order.

WO Department
Specify the department of the work order.

WO PM Schedule
Specify the PM schedule for the work order.

WO Project
Specify the project of the work order.

WO Project Budget
Specify the project budget of the work order.

WO Equipment
Specify the equipment of the work order.

WO Equipment Org.
Specify the equipment organization of the work order.

WO Location
Specify the location of the work order.

WO Location Org.
Specify the location organization of the work order.

WO Type
Specify the work order type.

WO Priority
Specify the work order priority.

WO Status
Specify the status of the work order.

WO Reported By
Specify the employee requesting the work.

WO Assigned To
Specify the employee responsible for the work order.

WO Assigned By
Specify the supervisor who assigned the work order.

WO Class
Specify the class of the work order.

WO Class Org.
Specify the class organization of the work order.

WO Criticality
Specify the criticality code to indicate the relevant importance of the work order to the overall production of goods or services for your organization.

WO Shift
Specify the shift during which the work is requested to be performed.

WO Maintenance Pattern
Specify the maintenance pattern to which the work order belongs.

WO MP Org.
Specify the maintenance pattern organization to which the work order belongs.

Sequence
Specify the sequence for which the work order will be performed on the maintenance pattern.

Campaign
Specify the campaign to which the work order belongs.

Campaign Event
Specify the campaign event to which the work order belongs.

Maximum Calculated Priority
Specify the maximum calculated priority of the work order. Work orders with a value equal or less than the value entered here will be selected.

4 Specify this information to define equipment selection parameters:

Equipment
Specify the equipment to use for daily work order scheduling.

Equipment Org.
Specify the organization of the equipment.

Equipment Type
Specify the type of equipment.

Equipment Status
Specify the status of the equipment.

Equipment Class
Specify the class of the equipment.

Equipment Class Org.
Specify the class organization of the equipment.

Equipment Category
Specify the category of the equipment.

Equipment Cost Code
Specify the cost code of the equipment.

Equipment Department
Specify the department of the equipment.

Equipment Parent Equipment
Specify the parent equipment of the equipment. Select more than one parent equipment if applicable.

Equipment Parent Equipment Org.
Specify the parent equipment organization of the equipment.

Equipment Location
Specify the location of the equipment.

Equipment Location Org.
Specify the location organization of the equipment.

Operational Status
Specify the operational status of the equipment to indicate if the equipment is in working order, ready for use, and available for scheduling.

Consist
Specify the consist to which the equipment belongs.

Skip Equipment Selection Process
Select this check box to skip the process of previewing and selecting equipment. If this check box is selected, the system will not populate the **Equipment** tab.

5 Specify this information to define work order activity selection parameters:

Trade
Specify the activity trade.

Activity Task Plan
Specify the activity task plan.

Beginning Activity Start Date
Specify the beginning start date for the activity.

Ending Activity Start Date
Specify the ending start date for the activity.

Allow Activities on Different Sessions
Select this check box to allow the activity to be selected on more than one scheduling session.

6 Specify this information to define employee selection parameters:

Employee Department
Specify the department of the employee.

Employee Class
Specify the class of the employee.

Employee Class Org.
Specify the class organization for the employee.

Employee Trade
Specify the employee's trade or craft.

Shift
Specify the shift on which the employee works.

Crew
Specify the crew of the employee.

Crew Org.
Specify the crew organization of the employee.

7 Specify this information to define a date range for the scheduled work order:

Start Date
Specify the start date for the scheduled work order.

End Date
Specify the end date for the scheduled work order.

8 Specify this information to define the scheduling options for the work order:

Threshold Percent Between Lightly/Moderately Scheduled
Specify the percentage of daily employee available hours to designate the point at which the calendar switches between lightly scheduled and moderately scheduled.

Unscheduled (% Scheduled=0) Color
Specify the color to designate the unscheduled days on the calendar view.

Lightly Scheduled (% Scheduled < Threshold) Color
Specify the color to designate the lightly scheduled days on the calendar view.

Moderately Scheduled (% Scheduled >= Threshold) Color
Specify the color to designate the moderately scheduled days on the calendar view.

Fully Scheduled (% Scheduled = 100) Color
Specify the color to designate the fully scheduled days on the calendar view.

Over Scheduled (% Scheduled > 100) Color
Specify the color to designate the over scheduled days on the calendar view.

Generate Availability Through
Specify the date through which to generate scheduling availability.

Exclude Duration from Scheduled Hours Calculation
Select the check box to exclude the duration time from the calculations of the scheduled hours.

Exclude People Required from Scheduled Hours Calculation
Exclude the number of people required from the calculations of hours scheduled.

Shift Scheduling
Select this check box to schedule labor for one shift. If selected the session becomes a shift scheduling session and you can still add or remove equipment, work orders, and employees to or from the session.

Shift Start
Specify the date and time the shift should start.

Shift Duration
Specify the duration of the shift in hours.

9 Click **Create/Refresh Previews**.
The system automatically populates **Session ID** for new sessions.

Selecting equipment for work order daily scheduling

Preview the equipment before selecting equipment to use for work order daily scheduling.

Once equipment selections have been made, proceed to the **WO Activity Preview** page, the **Employee Preview** page, or to the **Scheduling** page.

To select equipment for work order daily scheduling:

1 Select **Work > WO Planning > WO Daily Scheduling**.
2 Select the saved selection parameters to open an existing session.
3 Click the **Equipment Preview** tab.
Note: Click **Create Refresh Preview** to display the results on the **Preview** tab without entering a parameter list.
4 Select the equipment for which to perform work order daily scheduling, and then choose one of the following options:

WO Activity Preview
Click the tab to preview and select work order activities for work order daily scheduling.

Start Labor Scheduling
Click to start labor scheduling.

Selecting work order activities for work order daily scheduling

Preview the work order activities before selecting the activities to use for work order daily scheduling.

Once the activity selections have been made, proceed to the **Employee Preview** page, or to the **Scheduling** page.

To select work order activities for work order daily scheduling:

1 Select **Work > WO Planning > WO Daily Scheduling**.

2 Select the saved selection parameters to open an existing session.

3 Click the **WO Activity Preview** tab.

Note: Click **Create Refresh Preview** to display the results on the **Preview** tab without entering a parameter list.

4 Select the work order and activities for which to perform work order daily scheduling, and then choose one of the following options:

Employee Preview
Click to preview and select employees for work order daily scheduling.

Equipment Preview
Click to preview and select equipment for work order daily scheduling.

Start Labor Scheduling
Click to start labor scheduling.

Selecting employees for work order daily scheduling

Preview and select employees for work order daily scheduling based on employee selection parameters specified on the **Parameters** page. Once employees have been selected, proceed to the **Scheduling** page to schedule the daily work orders.

To select employees for work order daily scheduling:

1 Select **Work > WO Planning > WO Daily Scheduling**.

2 Select the saved selection parameters from the **Parameter List**.

Note: Click **Create Refresh Preview** to display the results on the **Preview** tab without entering a parameter list.

3 Click the **Employee Preview** tab.

4 Select the employees for which to perform work order daily scheduling, and then click **Start Labor Scheduling**.

Scheduling labor for work order daily scheduling sessions

Review and modify employee schedule information, work order details, activity schedules, planned parts availability, and booked labor for an activity.

To schedule employees for work order daily scheduling sessions:

1 Select **Work > WO Planning > WO Daily Scheduling**.

2 Select the saved selection parameters for an existing scheduling session.

3 Click the **Scheduling** tab.

4 To filter employees, click **Filter Employee**.

5 Choose one of the following options:

Match Department
Select to display employees in the same department.

Match Trade
Select to display employees in the same trade.

Match Shift
Select to display employees on the same shift.

Qualified Employees
Select to display qualified employees for the highlighted work order activity(s).

6 Drag and drop work order activities to selected employee calendar days. The system creates the appropriate labor schedule record.

Note: Drag more than one work order activity at a time to an employee calendar day. The system creates a labor schedule record for each work order activity for the employee calendar day.

Drag one employee calendar day to another calendar day for same employee, e.g., drag Wednesday to Friday. The system updates the scheduled date for each labor schedule record(s) on the dragged employee calendar day.

Drag one employee calendar day to another employee calendar day. The system deletes the labor schedule record(s) on the dragged employee calendar day and creates the necessary labor schedule records on the dropped employee calendar day.

See the following table for more options on work order daily scheduling sessions:

Icon Hover Text	Description	Results
WO Details	View and modify work order and activity details for the selected work order activity	The system opens the WO Details popup.
Activity Schedule	View and modify labor schedules for the selected work order activity	The system opens the Labor Schedules popup.
View Planned Part Availability	View planned part availability for the selected work order activity	The system opens the Planned Part Availability popup.
Part Availability Overlay	View available dates for selected materials to schedule work order activities	The system protects or shades the calendar grid cell dates if all work order activity material list parts are unavailable. If a calendar grid cell is protected due to part overlay (unavailability), then the system cannot schedule the work order activity for that particular date.

Icon Hover Text	Description	Results
View Activity Booked Labor	View booked labor for work order activity for the selected work order activity	The system opens the Booked Labor popup.
Previous Week	View the previous week	The system advances the calendar gird to the previous week.
Go To Week	View a specific week	The system opens a calendar popup. Select the Start Date.
Next Week	View the following week	The system advances the calendar grid forward one week.
Filter Employees	Filter Employees	The system displays employee filter options.
Employee Schedules	View and modify labor schedules for selected employees	The system opens the Labor Schedules popup.
View Employee Booked Labor	View booked labor for the selected employee	The system opens the Booked Labor popup.
Close Session and Update Work Orders	Close the session and update work orders	The system closes the session, updates and creates activity labor schedules outside the session, and returns to the Parameters page.
Cancel Session	Cancel the session	The system cancels the session.

Modifying work order details

View and modify work order and activity details on the **Scheduling** page of the **WO Daily Scheduling** form.

Note: A work order activity must be highlighted in the grid prior to performing this action.

To modify work order details:

1. Select **Work > WO Planning > WO Daily Scheduling > Daily Scheduling**.
2. Select a work order activity for which to modify details, and then click **WO Details**.
3. Specify this information:

   New Work Order Status
   Select the new work order status.

   Hours Remaining to be Worked
   Specify or modify the hours remaining to be worked for the activity.

Completed
Select if the work for the activity has been completed.

4 Click **Submit**.

Modifying labor schedules for work order activities

View and modify labor schedules for selected work order activities on the **Daily Scheduling** page of the **WO Daily Scheduling** form.

Note: A work order activity must be highlighted in the grid prior to performing this action.

To create or modify labor schedules for work order activities:

1 Select **Work > WO Planning > WO Daily Scheduling**.
2 Select the work order activity for which to modify labor schedules, and then click **Activity Schedule**.
3 Choose one of the following options:

Add Employee to Session
Click to add employees **Not in Session** to a selected labor schedule.

Add Schedule
Click to add a labor schedule to the work order activity.

Enter the **Employee**, **Scheduled Date**, and then enter **Start Time** and **End Time**, or enter the **Scheduled Hours** for the selected work order activity. Enter the **Department** and **Shift** of the employee. Click **Submit**.

Add WO to Session
Click to add activities from a work order **Not in Session**.

Viewing planned part availability for work order activities

View planned part availability for work order activities to display in a list of parts that have been planned for a work order activity.

To view planned part availability for work order activities:

1 Select a work order activity, and then click **View Planned Part Availability**.
2 Specify this information:

Store
Enter a different store for which to view part availability information as necessary. The system displays availability in the default **Store** for the work order **Department** when the popup opens.

3 Click **Close**.

Modifying labor schedules for employees

View and modify labor schedules for selected employees on the **Scheduling** page of the **WO Daily Scheduling** form.

To modify labor schedules for employees:

1 Select an employee, and then click **Employee Schedule**.
2 Click **Add Schedule**.
3 Specify this information:

WO
Enter the work order for which to add an employee schedule. The system automatically populates the work order description, **Tools**, **Frozen**, **Not in Session**, **Act. Est. Hours**, **Act. Sched. Hours**, and **Act. Actual Hours**.

Activity-Trade
Select the activity and trade for the employee labor schedule.

Scheduled Date
Select the scheduled start date of the work order activity.

Scheduled Hours
Specify the number of hours to schedule for the work order.

Start Time
Specify the time the scheduled work order should begin.

End Time
Specify the time the scheduled work order should end.

Department
Specify the department of the employee.

Shift
Specify the employee's shift on the work order.

4 Click **Submit**.
5 Click **Close**.

Note: To add activity labor schedules to the session, click **Add WO to Session**.

Viewing booked labor for work order activities

View the booked labor of employees for work order activities.

To view booked labor for work order activities:

1 Select a work order activity, and then click **View Activity Booked Labor**.
2 View the information.
3 Click **Close**.

Viewing booked labor for employees

View all booked labor for selected employees.

To view booked labor for employees:

1 Select an employee, and then click **View Employee Booked Labor**.
2 View the information.
3 Click **Close**.

Scheduling employees on shifts for work order daily scheduling

Schedule work for employees to a selected shift on the **WO Daily Scheduling** form.

Drag and drop employees on work order activities to schedule them to shifts for the work order activity or selected equipment on the work order activity.

Note: This tab cannot be used for daily scheduling.

To schedule employees on shifts for work order daily scheduling:

1 Select **Work > WO Planning > WO Daily Scheduling**.
2 Select the saved selection parameters from the **Parameter List** to open an existing session for which to schedule employees on shifts.
3 Click the **Shift Scheduling** tab.

   Work order activity cards are displayed on the left-side of the page while associated trades and employees are displayed on the right-side of the page.

4 Choose one of the following options to display work order activity cards on the screen:

   Equipment
   Select the equipment associated with the work order activities you want to display so that you can schedule employees.

   Show Scheduled
   Select this check box to display all work order activities of the session. Work order activities with a completed or already scheduled status will be displayed.

5 Click **Filter Trades** to filter the available employees by specific trade or to show available employees for all trades. Select **Show All** to display all of the employees and work order activities of the open session.
6 Drag and drop available employees to the work order activity cards for which to schedule the employee.

Viewing employee schedules for work order daily scheduling

View the employee schedules for work order daily scheduling, and then update the scheduled hours for the employee or for a work order activity as necessary.

To view employee schedules for work order daily scheduling:

1 Select **Work > WO Planning > WO Daily Scheduling**.
2 Click the **Shift Scheduling** tab.
3 Optionally, select the **Show Scheduled** check box to display the existing labor scheduled for the work order/activities and employee/trade combinations.
4 Select an employee in the Trades/Employees section of the form, right-click on the employee, and then click the **View Employee Schedule**.

5 Specify this information in the View Employee Schedule popup:

Main Resource
Select to indicate the employee is the main resource for the specified work order-activity.

Scheduled Hours
Specify the hours to schedule the employee for the specified work order-activity.

6 Click **Submit** to close the View Employee Schedule popup and return to the **Shift Scheduling** tab.

7 Drag and drop employees to work order/activity cards as necessary to schedule the employee to work order-activity, and to create a scheduled labor record for the employee on the **Schedule Labor** tab.

Note: Hover over the work order cards with an assigned employee to view the hours scheduled for that work order.

8 Click **Submit**.

9 Click **Close**.

Viewing employee schedules for work order daily scheduling

View the employee schedules for work order daily scheduling, and then update the scheduled hours for the employee or for a work order activity as necessary.

To view employee schedules for work order daily scheduling:

1 Select **Work > WO Planning > WO Daily Scheduling**.

2 Click the **Shift Scheduling** tab.

3 Optionally, select the **Show Scheduled** check box to display the existing labor scheduled for the work order/activities and employee/trade combinations.

4 Select an employee in the Trades/Employees section of the form, right-click on the employee, and then click the **View Employee Schedule**.

5 Specify this information in the View Employee Schedule popup:

Main Resource
Select to indicate the employee is the main resource for the specified work order-activity.

Scheduled Hours
Specify the hours to schedule the employee for the specified work order-activity.

6 Click **Submit** to close the View Employee Schedule popup and return to the **Shift Scheduling** tab.

7 Drag and drop employees to work order/activity cards as necessary to schedule the employee to work order-activity, and to create a scheduled labor record for the employee on the **Schedule Labor** tab.

Note: Hover over the work order cards with an assigned employee to view the hours scheduled for that work order.

8 Click **Submit**.

9 Click **Close**.

Viewing employee schedules for work order daily scheduling

View the employee schedules for work order daily scheduling, and then update the scheduled hours for the employee or for a work order activity as necessary.

To view employee schedules for work order daily scheduling:

1. Select **Work > WO Planning > WO Daily Scheduling**.
2. Click the **Shift Scheduling** tab.
3. Optionally, select the **Show Scheduled** check box to display the existing labor scheduled for the work order/activities and employee/trade combinations.
4. Select an employee in the Trades/Employees section of the form, right-click on the employee, and then click the **View Employee Schedule**.
5. Specify this information in the View Employee Schedule popup:

   Main Resource
   Select to indicate the employee is the main resource for the specified work order-activity.

   Scheduled Hours
   Specify the hours to schedule the employee for the specified work order-activity.

6. Click **Submit** to close the View Employee Schedule popup and return to the **Shift Scheduling** tab.
7. Drag and drop employees to work order/activity cards as necessary to schedule the employee to work order-activity, and to create a scheduled labor record for the employee on the **Schedule Labor** tab.

   Note: Hover over the work order cards with an assigned employee to view the hours scheduled for that work order.

8. Click **Submit**.
9. Click **Close**.

Managing work order activities and jobs on the mechanic's workbench

The **Mechanic's Workbench** screen allows mechanics to view all work order activities and jobs that have been assigned to the mechanic for selected shift sessions for a particular day on the **Shift Scheduling** form. Use this form to start and stop work order activities and/or jobs, update their status to completed, or view equipment and work order details.

To manage work order activities and jobs on the mechanic's workbench:

1. Select **Work > Mechanic's Workbench**.
2. Specify this employee information:

   Employee
   Enter your employee code if it was not automatically populated based on your logged on user ID and password. The system automatically populates **Employee Name**.

Shift
Specify the shift for which you are managing work. The system automatically populates **Shift Scheduling Session**, **Shift Start**, and **Shift Duration** if the session already exists and you were scheduled for the work order activity/job on the **Shift Scheduling** form.
Note: The system defaults shifts in eight hour increments of time. If more than one shift scheduling session is found for you, the session with the earliest start time is selected.

If more than one shift scheduling session is found for you with the same start time, the previous shift scheduling session is selected so that you may finish the previous session.

You cannot work on more than one work order at the same time. If you start to perform work on an additional work order, performance on the first work order is stopped.

Type of Hours
Specify hour occupation type for this work, e.g., select **N** for normal hours or **O** for overtime hours.

Password
Enter your employee password for the current session.

3 Select the work order activity or job for which to manage work. The system automatically populates the associated **Work Order** and **Equipment**. The work order and equipment become hyperlinks.
4 Choose one of the following options:

Start Job
Click **Start Job** to start work on the selected activity or job. The system automatically populates **Started** to indicate the work was started and sets the **Timer** to zero.
Note: The system creates a selected scheduled labor record ID to differentiate between multiple scheduled labor records for the same activity and employee combination.

The timer calculates how much time has passed since the work was started.

Stop Job
Click **Stop Job** to stop work on the selected activity or job.

Complete Job
Click **Complete Job** if the work on the selected activity or job has been completed.

Managing customer contracts

Manage contracts with customers by creating contract templates to specify work order criteria, associate clauses, charges, discounts, and sales prices with specific customers.

Define customer rental contracts and contracts to create customer invoices.

Defining adjustments

Define adjustments to apply to customer contracts and reservations to quickly identify extra charges or discounts for the contract. An adjustment could be an extra charge for damaged equipment or a late return of a rented vehicle.

Similarly you may also define discounts or credits on the **Adjustments** form by entering a negative rate for the adjustment.

When defining adjustments on this form, associate a standard work order to the adjustment to enable users to create a work order from an adjustment for the customer contract or reservation, if required.

To define adjustments:

1. Select **Work > Contract Management > Adjustments**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization of the adjustment.

   Adjustment
   Specify a unique code identifying the adjustment, and then enter a description of the adjustment in the adjacent field.

   Rate
   Specify the rate for the adjustment, e.g., enter 100 for an extra charge of $100, or enter -100 for a $100 credit.

   Standard WO
   Specify the standard work order to associate with the adjustment. When a work order is created from the adjustment on the customer contract, this standard work order is applied.

   Out of Service
   Select to exclude the adjustment in lookups.

4. Click **Save Record**.

Defining contract templates

Create a template to define an actual contract with a customer. Include high level contract details, charge definitions, contract clauses, and comments. After creating a template, use the template to quickly create a contract or modify a contract.

To define contract templates:

1. Select **Work > Contract Management > Contract Templates**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization of the contract template.

Contract Template
Specify a unique code identifying the contract template, and then a description of the contract template in the adjacent field.

Class
Specify the class of the contract template. The system copies the class to the contract along with any custom fields defined on the template.

Contract Class
Specify the class of the contract. This value is copied to the contract along with any custom fields defined on the template.

Default Invoice Status
Select the default status for the invoice after the automatic invoice generation process is complete.

Where Used
Select **Customer Contract** or **Rental Contract** to specify where the template will be used.

Rounding Hours
Select the method by which to round the hours for the invoice.

Rounding Days
Select the method by which to round the days for the invoice.

Hourly Invoicing Start Time
Specify the daily time in hours and minutes to begin invoicing the customer for the contract.

Hourly Invoicing End Time
Specify the daily time in hours and minutes to stop invoicing the customer for the contract.

Invoice Every
Specify the number, and then select the interval by which to invoice customers on the contract. For example, enter 2 and then select Week to invoice the customer every 2 weeks.

4 Optionally, select the **Out of Service** check box to exclude the contract template in the list of values on the Customer Contract and Rental forms.
5 Click **Save Record**.

Defining work order criteria for contract templates

Specify which work orders to include on the invoice. Work order selection criteria includes department, work order class, and work order type.

To define work order criteria for contract templates:

1 Select **Work > Contract Management > Contract Templates**.
2 Select the contract template for which to define work order criteria, and then click the **WO Criteria** tab.
3 Click **Add WO Criteria**.
4 Specify this information:

Department
Enter the department of the work orders to include on the invoice. The system automatically populates the department description in the adjacent field.

WO Class
Enter the class of the work orders to include on the invoice. The system automatically populates **WO Class Org.** and the work order class description in the adjacent field.

WO Type
Enter the type of the work orders to include on the invoice. Select to include **Breakdown**, **Preventive Maintenance**, **Default work order type**, **Calibration**, **Direct Issue**, **Repairable Spare**, **Standard WO**, or **Scheduled** work order types on the invoice.

Grouping
Enter a unique name to identify the grouping of selected work order types. The system references the group on the invoice for easy identification.
Note: The system allows more than one grouping for the same work order type. If more than one grouping is found for the same work order type, the system selects the first grouping for reference on the invoice.

5 Click **Submit**.

Associating clauses with contract templates

Associate clauses with contract templates to define agreements for the customer contracts.

To associate clauses with contract templates:

1 Select **Work > Contract Management > Contract Templates**.
2 Select the contract template for which to associate clauses, and then click the **Clauses** tab.
3 Click **Add Clause**.
4 Specify this information:

Contract Clause
Specify a predefined ISO clause or a user-defined clause. You can associate multiple clauses with a contract template. The system automatically populates **Organization** and the contract clause description.

Sequence
Specify the sequence number for the clause.

5 Click **Submit**.

Associating discounts with contract templates

Add, update, and delete discount charges for contract templates.

To associate discounts for contract templates:

1 Select **Work > Contract Management > Contract Templates**.
2 Select the contract template for which to associate discounts, and then click the **Discounts** tab.

3 Click **Add Discount**.

4 Specify this information:

Minimum Value
Specify the minimum charge value for which the discount should apply, and then enter the currency in the adjacent field.

Discount %
Specify the discount percentage to apply once the minimum value threshold is met.

5 Optionally, select the **Apply to Each Invoice** check box to apply the discount to each individual invoice. If unselected the discount is associated to the contract level and takes all invoices for the contract into consideration.

6 Optionally, select the **Apply to Full Amount** check box to apply the discount to the full amount of the invoice or the contract. If unselected the system applies the discount to the difference between the invoice or contract total amount and **Minimum Value**.

7 Click **Submit**.

Associating sales prices with contract templates

Associate sales prices for entities (parts, tasks, PM schedules, standard work orders, and service problem codes) to create invoice lines using a fixed sales price rather than the actual work order costs (part issues, time sheets, tool costs) tracked by the system.

Sales prices defined on the contract template level will be copied to the contract when the template is referenced on that contract. These sales prices will take precedence over any sales prices directly associated to any of the entities. So a sales price for a bearing can be overwritten on contract level if desired and this price will then be invoiced, otherwise the standard sales price of the bearing defined on the **Parts** form is used.

To associate sales prices with contract templates:

1 Select **Work > Contract Management > Contract Templates**.

2 Select the contract template for which to associate sales prices, and then click the **Sales Prices** tab.

3 Click **Add Sales Price**.

4 Specify this information:

Entity
Select the entity for which to associate sales prices.

Date Effective
Specify the date this sales price will go into effect.

Code
Specify the system code associated with the entity.

Organization
Specify the organization to associate to the sales prices. This **Organization** will use these sales prices.

Sales Price
Specify the sales price to associate with the entity for the customer contract created from this template. The currency is automatically populated based on the selected **Organization**.

Store
Specify the store to associate with the sales price when parts entities are selected. If no **Store** is entered, the system applies the sales price to all stores in the selected **Organization** that are not specifically mentioned.

Condition
Specify the condition if the entity is a part that is a condition tracked parent part. If the selected entity for the part is a condition tracked child part, **Condition** is automatically populated.

5 Click **Submit**.

Defining charges for contract templates

Specify the charges to invoice to customers, including work order, fuel, and lease charges. These charges defined on the template form the basis for the charges used on the customer contract and customer rental.

To define charges for contract templates:

1 Select **Work > Contract Management > Contract Templates**.
2 Select the contract template for which to define charges, and then click the **Charge Definitions** tab.
3 Click **Add Record**.
4 Specify this information:

Invoicing Org.
Specify the organization responsible for the invoicing.

Charge Category
Select the category of the charges for this template. Select from **Sales Transactions**, **WO Charges**, **Fuel Charges**, **Energy Charges**, **Usage Charges**, or **One Time Charges**.
Note: You can combine different charges on a template or a contract.

Charge Level
Select the level for the charges. Select **Subcategory Adjustment** or **Charge Category Adjustment**.

Charge Subcategory
Select the subcategory of the charges for this template based on the **Charge Category** previously selected. For example, for **Fuel Charges**, select from **Diesel**, **Premium**, any other fuels you defined, or **All Fuels**.
Note: For **Fuel Charges** define fuels in the fuel management area; for **Energy Charges** define commodities on the Commodities form; for **Usage Charges** define subcategories on system codes entity CCOC; and for one **One Time Charges** define subcategories on the system entity CCOC.

Invoicing Description
Specify a description of the charge to include on the invoice.

Invoice
Select to invoice the customer for the charges defined here.

Invoice Conditional
Select if there are conditions associated with the invoice for these charges.
Note: If **Invoice Conditional** is selected on this **Charge Level**, if the lower Charge levels add up to zero dollars no additional charges are determined on this level.

If **Invoice Conditional** is not selected, charges on this level may be applied although lower level charges add up to zero.

Rate
Specify the rate for the charges defined here.
Note: **Rate** is required for usage and one-time charges, and can also be used optionally on energy charges.

Adjustment Unit Price
Specify the adjustment to apply to the transaction price.

Adjustment Transaction
Specify the adjustment to apply to the transaction.

Adjustment % Before
Specify the percent with which to adjust the transaction amount prior to price or transaction adjustments are applied.

Adjustment % After
Specify the percent with which to adjust the transaction amount after, Before %, price or transaction adjustments are applied.

Minimum Quantity
Specify the minimum quantity to invoice.

Minimum Charge
Specify the minimum amount to invoice.

Maximum Charge
Specify the maximum amount to invoice.

Free Up To
Specify a monetary amount to designate the amount by which the invoice will be reduced, or the amount that is free of cost. E.g., the first $250 of work order charges are free.

Taxable
Select to indicate this transaction line is taxable on the invoice.

Usage UOM
Specify the unit of measure, e.g., miles, kilometers that the system will apply to the usage-based rate.

Charge Estimated Usage
Select to add estimates for the usage and energy consumption of the equipment to the periodic invoices.

Rollover
Select to roll over the difference between the actual usage and **Minimum Quantity** invoiced when actual usage is less than **Minimum Quantity**.

Trade
Specify the trade for the charge definition. **Trade** is only relevant for work order charges.

Type of Hours
Specify the type of hours for the charge category on the invoice.

Part Class
Specify the part class for the charge definition. **Part Class** is only relevant for work order charges.

5 Click **Submit**.

Associating sales prices with contract templates

Associate sales prices for entities (parts, tasks, PM schedules, standard work orders, and service problem codes) to create invoice lines using a fixed sales price rather than the actual work order costs (part issues, time sheets, tool costs) tracked by the system.

Sales prices defined on the contract template level will be copied to the contract when the template is referenced on that contract. These sales prices will take precedence over any sales prices directly associated to any of the entities. So a sales price for a bearing can be overwritten on contract level if desired and this price will then be invoiced, otherwise the standard sales price of the bearing defined on the **Parts** form is used.

To associate sales prices with contract templates:

1 Select **Work > Contract Management > Contract Templates**.
2 Select the contract template for which to associate sales prices, and then click the **Sales Prices** tab.
3 Click **Add Sales Price**.
4 Specify this information:

Entity
Select the entity for which to associate sales prices.

Date Effective
Specify the date this sales price will go into effect.

Code
Specify the system code associated with the entity.

Organization
Specify the organization to associate to the sales prices. This **Organization** will use these sales prices.

Sales Price
Specify the sales price to associate with the entity for the customer contract created from this template. The currency is automatically populated based on the selected **Organization**.

Store
Specify the store to associate with the sales price when parts entities are selected. If no **Store** is entered, the system applies the sales price to all stores in the selected **Organization** that are not specifically mentioned.

Condition
Specify the condition if the entity is a part that is a condition tracked parent part. If the selected entity for the part is a condition tracked child part, **Condition** is automatically populated.

5 Click **Submit**.

Copying contract templates

Copy the header details and child records of customer contract templates to quickly create a new template.

To copy contract templates:

1 Select **Work > Contract Management > Contract Templates**.
2 Select the contract template to copy, and then click the **Record View** tab.
3 Right-click on the form, and then select **Copy Contract Template**.
4 Specify this information:

New Template Code
Specify a unique code identifying the new contract template, and then enter a description of the contract template in the adjacent field.

5 Select the related details to copy to the new contract template:
- **Custom Field Values**
- **Clauses**
- **WO Criteria**
- **Sales Prices**
- **Discounts**
- **Charge Definitions**
- **Commodities**
- **Comments**
- **Documents**

6 Click **Submit**.

Defining customer contracts

Define new contracts for customers. The customer contract details information such as charges, clauses, comments, and invoice details.

To define customer contracts:

1 Select **Work > Contract Management > Customer Contracts**.
2 Click **New Record**.

3 Specify this information:

Organization
Specify the organization to which the customer contract belongs.

Customer Contract
Specify a unique code identifying the customer contract, and then enter a description of the customer contract in the adjacent field.

Customer
Specify the customer for which to create the contract. The system automatically populates **Customer Org.**

Status
Select the status of the customer contract.

Contract Template
Specify the template with which to create the customer contract. The template selected defines the high level details of this contract. The system automatically populates **Contract Template Org.**

Class
Specify the class of the customer contract. The system automatically populates **Class Org.**

Tax Code
Specify the tax code to associate with the customer contract.

Start Date
Specify the date the customer contract becomes available.

End Date
Specify the date the customer contract is no longer available.

Revisit Date
Specify the date for which to revisit the customer contract.

Customer Contact
Specify the person to contact about the contract.

Specify the customer's **Phone Number** and **Email Address**.

Email Invoice
Select to email the customer contact the invoice for the contract.

Invoice Every
Specify the time period for which to invoice the customer by entering an integer, and then selecting the time period unit of measure. For example: Enter 2 and then select **Weeks** to invoice the customer every 2 Weeks.

Next Invoice Date
Specify the next date for which to generate an invoice for the customer.

Offset Invoice Generation
Specify the number of days for which to offset or delay the generation of the next invoice. Example: Enter 15 to offset generation of the next invoice by 15 days.

Default Invoice Status
Select the default status to define for all invoices generated for the customer.

Default Invoicing Organization
Specify the default organization to define for all invoices generated for the customer.

Invoicing Currency
Specify the currency of the invoices for the customer.

Use Fixed Exchange Rates
Select to use fixed exchange rates for the customer when **Invoicing Currency** and **Invoicing Org.** differ. The system defaults the exchange rate with the current active exchange rate where the base currency is the **Invoicing Org.**'s currency and the foreign currency is the **Invoicing Currency**.

Sync Fixed Exchange Rates
Select to sync fixed exchange rates when more than one exchange rate is found for the **Invoicing Currency** and **Invoicing Org.**, or no exchange rate can be found. The system applies the current active exchange rate to the contract items.

Closed WO Only
Select to display only the work orders with a Closed status on the invoice.

Rounding Hours
Select hourly rounding options for the contract. Round the hours of the contract up 15 minutes, down 15 minutes, up 30 minutes, down 30 minutes, or elect not to round the contract hours.

Rounding Days
Select daily rounding options for the contract. Round the days of the contract up, down, or elect not to round the contract days.

Hourly Invoicing Start Time
Specify the time in hours and minutes (ex. 3:00) that the system will begin to invoice the customer for the contract work.

Hourly Invoicing End Time
Specify the time in hours and minutes (ex. 23:00) that the system will stop invoicing the customer for the contract work.

4 Click **Save Record**.

The system automatically populates **Last Invoice Date**, **Last Invoice**, **Amount Invoiced**, **Revision**, **Requested By**, **Date Requested**, **Approved By**, **Date Approved**, and **Revision Reason**.

Note: Click **Create New Revision** to create a new revision of the contract from any previous revision of the contract when the previous revision has a system status other than **Unfinished** or **Request Approval**.

Click **Copy Contract** to copy the header details and child records of the customer contract.

See Copying customer contracts on page 985.

Click **Reset Contract Charge Definitions** to reset manual changes applied to the charge definitions for this contract.

Defining contract items for customer contracts

Define contract items and details for customer contracts. Contract items consist of equipment, projects, or work orders to include on the customer contract. A contract may have many items associated.

To define contract items for customer contracts:

1. Select **Work > Contract Management > Customer Contracts**.
2. Select the customer contract for which to define contract items, and then click the **Contract Items** tab.
3. Click **Add Contract Item**.
4. Specify this information:

   Equipment
   Specify the equipment to include on the customer contract. The system automatically populates **Equipment Org.**

   Project
   Specify the project to include on the customer contract.

   Project Budget
   Specify the project budget to include on the customer contract.

   Work Order
   Specify the work order to include on the customer contract.

   Customer
   Specify the customer. This can be the customer associated to the contract on the header or any of the children of that customer. The system automatically populates **Customer Org.**

   Invoicing Org.
   Specify the invoicing organization that will collect the charges for this contract item.

   Tax Code
   Specify the tax rate to be applied to the cost of the contract item.

   Contract Template
   Specify the contract template for the selected project, project budget, work order, or equipment. The system automatically populates **Contract Template Org.**
   Note: Use this feature to define charge definitions specifically for this contract item if they are different from the other contract items.

   Invoicing Description
   Specify a description that will be printed on the invoice.

   Use Fixed Exchange Rate
   Select to use fixed exchange rates for the contract item when **Invoicing Currency** and the currency of the **Invoicing Org.** differ. The system defaults the exchange rate with the current active exchange rate where the base currency is the **Invoicing Org.**'s currency and the foreign currency is the **Invoicing Currency**.

Exchange Rate
Specify the exchange rate for the currency. The system will use this rate if the invoicing currency is different from the invoicing organization currency.

Usage Quantity
Specify the usage quantity of the contract item to be used on the customer contract invoice.

UOM
Specify the unit of measure of the usage quantity of the contract item.

Sales Price
Specify the sales price of the equipment.

Exercise Option
Select to exercise the equipment sales options specified on this form.

Exercise Date
Specify the date for which to exercise the equipment sales options.

Sales Tax Code
Specify the sales tax code of the equipment.

Equipment Status After Sale
Select the status of the equipment after the automatic invoice generation process is complete and the equipment is sold.

5 Click **Submit**.

Note: To translate the invoicing description, select a record, and then click **Translate Invoicing Description**. View and edit the translated descriptions.

To reset all charge definitions referenced with the contract items for the current contract revision, click **Reset All Charge Definitions**.

To reset the charge definitions for a particular contract item for this contract revision only, select the contract item record for which to reset charge definitions, and then click **Reset Charge Definitions**.

To refresh all tax codes for all contract items for the current contract revision, click **Reset All Tax Codes**.

To refresh all contract templates for all contract items for the current contract revision, click **Reset All Contract Templates**.

To reset the selected contract item for this contract revision only, click **Reset Contract Template**.

Associating discounts with customer contracts

Add, update, or delete discounts on customer contracts.

To associate discounts with customer contracts:

1 Select **Work > Contract Management > Customer Contracts**.
2 Select the customer contract with which to associate discounts, and then click the **Discounts** tab.
3 Click **Add Discount**.
4 Specify this information:

Minimum Value
Specify the minimum charge value for which the discount should apply, and then enter the currency in the adjacent field.

Discount %
Specify the discount percentage to apply once the minimum value threshold is met.

5 Optionally, select the **Apply to Each Invoice** check box to apply the discount to all invoices regardless of whether the contract invoice reaches the minimum value threshold.
6 Optionally, select the **Apply to Full Amount** check box to apply the discount to the full amount of the invoice or contract. If unselected, the discount is applied to the difference between the net amount plus adjustments and **Minimum Value**.
7 Click **Submit**.

Defining work order criteria for customer contracts

Specify which work orders to include on an invoice by defining work order criteria and associating to any customer contract. Work order selection criteria includes department, work order class, and work order type.

If you do not define work order criteria for a contract, the system includes all work orders for selection on the invoice.

To define work order criteria for customer contracts:

1 Select **Work > Contract Management > Customer Contracts**.
2 Select the customer contract for which to define work order criteria, and then click the **WO Criteria** tab.
3 Click **Add WO Criteria**.

Note: If * is entered for any of the work order criteria specified below, the system includes all values for that selection on the invoice.

4 Specify this information:

Department
Enter the department of the work orders to include on the invoice. The system automatically populates the department description in the adjacent field.

WO Class
Enter the class of the work orders to include on the invoice. The system automatically populates **WO Class Org.** and the work order class description in the adjacent field.

WO Type
Enter the type of the work orders to include on the invoice. Select to include **Breakdown**, **Preventive Maintenance**, or **Scheduled** work order types on the invoice.

Grouping
Enter a unique name to identify the grouping of selected work order types. The system references the group on the invoice for easy identification.

Note: The system allows more than one grouping for the same work order type. If more than one grouping is found for the same work order type, the system selects the first grouping for reference on the invoice.

5 Click **Submit**.

Associating commodities with customer contracts

Associate an energy-related commodity with a customer contract to invoice energy costs to customers. Associating energy-related commodities to a customer contract simplifies energy-related setup of charge definitions.

To associate commodities with customer contracts:

1 Select **Work > Contract Management > Customer Contracts**.
2 Select the customer contract with which to associate commodities, and then click the Commodities tab.
3 Click **Add Commodity**.
4 Specify this information:

Commodity
Specify the commodity to associate with the selected customer contract. The system automatically populates the description of the commodity and **Commodity Org.**

5 Click **Submit**.

Note: Adding energy commodities to a customer contract may automatically generate energy-related charge definitions for equipment associated to the contract.

Defining sales prices for customer contracts

Define sales prices for specific entities on a customer contract. Use the sales prices defined here for sales transactions on the customer contract. Sales prices can be defined for specific entities Parts, Tasks, PM Schedules, Standard Work Orders and Service Problem Codes to create invoice lines using a fixed sales price rather than use the actual work order costs tracked by the system, like part issues, time sheets, tool costs, etc.

To define sales prices for customer contracts:

1 Select **Work > Contract Management > Customer Contracts**.
2 Select the customer contract for which to define sales prices, and then click the **Sales Prices** tab.
3 Click **Add Sales Price**.
4 Specify this information:

Entity
Select the entity for which to define sales prices. Choose from the following list of entities:

- **Parts**
- **Tasks**
- **PM Schedules**
- **Standard work order**
- **Service problem codes**

Code
Specify the code for the entity.

Organization
Specify the organization of the selected code.

Sales Price
Specify the sales price to specify for the selected entity.

Store
Select the store of the entity.

Condition
Specify the condition if the entity is a part that is a condition tracked parent part. If the selected entity for the part is a condition tracked child part, **Condition** is automatically populated.

5 Click **Submit**.

Associating clauses with customer contracts

Include clauses in customer contracts. For example, state that for each day the contract finished ahead of schedule, he or she receives a bonus. Set up contract clauses prior to associating them with customer contracts.

To associate clauses with customer contracts:

1 Select **Work > Contract Management > Customer Contracts**.
2 Select the customer contract with which to associate clauses, and then click the **Clauses** tab.
3 Click **Add Clause**.

Note: You can only access the **Clauses** tab and add or delete a clause if the customer contract has a status of **Unfinished**.

4 Specify this information:

Contract Clause
Specify a predefined ISO clause or a user-defined clause. You can associate multiple clauses with a customer contract. The system automatically populates the description in the adjacent field, and **Organization**.

Sequence
Specify a valid number to indicate the order of the contract clause in relation to other associated clauses, if applicable.

5 Click **Submit**.

Defining charges for customer contracts

Define charge definitions for a customer contract to determine what the system invoices on the contract and how the system generates the invoice. Charge definitions are invoiced per contract item (e.g., a piece of equipment, project, or work order).

Defining charge definitions involves specifying adjustments for invoicing transactions for several charge categories, subcategories, and levels which all help to determine when and how costs are invoiced to customers during the invoice generations process.

See the following table for details on charge definitions categories and subcategories available for selection:

Charge Category	Description	Charge Subcategory
WO Charges	select to associate charge definition records with invoices for work order costs	• Labor • Hired Labor • Services • Stock Items • Direct Purchase • Tool Costs • All Cost Types
Sales Transactions	select to associate charge definition records with invoices for work order related costs against a fixed sales price	• Service Problem Codes • PM Schedules • Standard WO • Tasks • Parts • All Sales Entities
Fuel Charges	select to associate charge definition records with invoices for fuel issues from the fuel management system	• Diesel • All Fuels
Energy Charges	select to associate charge definition records with invoices for energy usage like electricity or gas	• Commodity • All Energy Commodities
Usage Charges	select to associate charge definition records with invoices for usage per period (e.g., monthly rent) or per usage (e.g., miles driven)	Period • Hourly • Daily • Weekly • Monthly • Quarterly • Yearly Usage • miles
One Time Charges	select to associate charge definition records with invoices for one-time costs like contract initiation fees, attorney fees, fuel (rental contract) etc. **Note:** Subcategories here are at contract start and contract end.	

To define charges for customer contracts:

1. Select **Work > Contract Management > Customer Contracts**.
2. Select the contract for which to define charges, and then click the **Charge Definitions** tab.
3. Click **Add Record**.
4. Specify this information:

Contract Item
Specify the contract item for which to define charges. Contract items consist of equipment, projects, or work orders. The system automatically populates the contract item description, and applicable **Work Order**, **Project**, or **Equipment**, and **Contract Item Org.**
Note: Leave **Contract Item** unpopulated to define these charges for all contract items on the header level of the customer contract.

Invoicing Org.
Specify the invoicing organization on the customer contract header. The system automatically populates **Source Code** with details of where the record originated.

Invoicing Description
Specify a description of the invoice transaction for the charge defined here. This description is listed on the invoice when it is generated.

Invoice
Select to include this line of charges defined on the invoice.
Note: Use **Invoice** to make exceptions, e.g., invoice all work order charges but not tool costs.

Invoice Conditional
Specific to charge levels, charge category adjustments and subcategory adjustments. Select to invoice this line if the lower charge level costs add up to more than zero.

Charge Category
Select the category of the charges defined above in the table for the customer contract to determine the type of charges that will be invoiced.

Charge Level
Select the level of invoicing for the charges defined here for the customer contract. Select one of the charge levels to invoice as follows:

- **Transaction Adjustment**
Select to invoice the customer for the charges defined here on the transaction level, e.g., stocking items or issuing fuel.

- **Subcategory Adjustment**
Select to invoice the customer for the charges defined here on a group level, e.g., select **Subcategory Adjustment** to add a $50 administration fee when materials are issued from the warehouse, or select **Subcategory Adjustment** to add a 2% tax on all fuel issues.

- **Charge Category Adjustment**
Select to invoice the customer for the charges defined here on the charge category level, e.g., select **Charge Category Adjustment** to specify that the first $250 of work order costs is included in the rental fee of the space and is therefore free of charge.

Charge Subcategory
Select the subcategory level of invoicing for the charges defined here for the customer contract. This selection depends on the selection you made for **Charge Category**.

Rate
Specify the price to use on the invoice for **Energy Charges**, **Usage Charges**, and **One Time Charges**.

Adjustment % Before
Specify the percentage by which to adjust the transaction amount prior to price or transaction adjustments are applied.

Adjustment Unit Price
Specify the adjustment that should be applied to the transaction price.

Adjustment Transaction
Specify the adjustment that should be applied to the transaction.

Adjustment % After
Specify the percentage by which to adjust the transaction amount after the **Adjustment % Before**, price, or transaction adjustments are applied.

Minimum Quantity
Specify the minimum quantity to invoice.
Note: The system compares the transaction quantity with **Minimum Quantity** and if the transaction quantity is less, the system invoices the minimum quantity.

Minimum Charge
Specify the minimum charge value to invoice.

Maximum Charge
Specify the maximum charge value to invoice.

Free Up To
Specify a monetary amount to designate the amount by which the invoice will be reduced, or the amount that is free of cost. E.g., the first $100 of work order charges are free.

Taxable
Select to indicate this transaction line is taxable on the invoice.

Tax Code
Specify the tax rate to be applied to the cost of the contract item.

Usage UOM
Specify the unit of measure, e.g., miles, kilometers, to which the usage-based rate will be applied.

Charge Estimated Usage
Select to add estimates for the usage and energy consumption of the equipment or charge definitions to the periodic invoices.

The system invoices the customer for actual usage entered via meter readings but when meter readings are not up to date, the system also invoices the estimated usage entered below in **Estimated Daily Usage**.

Rollover
Select to roll over the difference between the actual usage and **Minimum Quantity** invoiced when actual usage is less than **Minimum Quantity**.
Note: The difference is used in future invoices to compensate for over usage. E.g., A customer has a **Minimum Quantity** of 2000 miles per month. The customer is charged for 2000 miles each month, but perhaps one month the customer uses only 1800 miles. The customer would lose 200 miles because the system uses the **Minimum Quantity** when generating the customer's invoice.

Rollover allows the system to roll over the 200 miles into a buffer that can be used in the next invoicing periods if the customer uses more than the 2000 miles in a month.

Starting Meter Value
Specify the value of the meter at the beginning of the contract. This is the starting value of the meter for the first invoice.

Estimated Daily Usage
Specify the estimated daily usage to charge to the invoice if **Charge Estimated Usage** was previously selected. The system invoices the customer for estimated daily usage or energy consumption during the invoice generation process when actual usage via meter readings is not known or incomplete.

Trade
Specify the trade of the charge definition. This is only relevant for work order charges and if you want to make exceptions for certain trades.

Occupation Type
Specify the Occupation Type of the charge definition. This is only relevant for work order charges and if you want to make exceptions for certain occupation types.

Part Class
Specify the part class of the charge definition. This is only relevant for work order charges and if you want to make exceptions for certain part classes.

Submetered
Select if the equipment or contract item has its own meter (water meter, gas meter, or electric meter) from which to measure energy consumption.

Use Floor Area
Select if the equipment or contract item does not have it own meter and you would like to measure and track energy consumption based on the building utility bill, i.e. **Utility Bill Source**.
Note: If you select to use the floor area in the calculations, the system calculates the invoicing percentage based on the floor area of the contract item and that of the utility bill source, e.g., typically the building in which the contract item resides.

Invoicing Percentage
Specify the percentage of the utility bill or actual submetered consumption to invoice.

Utility Bill Source
Specify the utility bill source, usually a piece of equipment, to associate with the contract item. The system automatically populates the utility bill source description and **Utility Bill Source Org.**
Note: The utility bill source determines the consumption of energy and the rate, if **Rate** was left blank for this charge definition record.

5 Click **Submit**.

Note: Click **Reset Tax Codes** to reset tax codes based on the selected values for the associated contract items.

Click **Associate Missing Meters** for all contract items where a usage-based charge definition references a meter UOM that does not exist on the equipment, the system add this meter to the equipment.

Click **Update Energy Preferences** to save the energy settings of all commodities and all equipment referenced on the contract.

Associating adjustments with customer contracts

Associate adjustments to customer contracts when an adjustment to the invoice is necessary after the setup of the initial contract charge definitions. Adjustments may be necessary after a customer complaint, equipment was damaged prior to return, or extra charges are needed.

To associate adjustments with customer contracts:

1 Select **Work > Contract Management > Customer Contracts**.
2 Select the customer contract to which to associate adjustments, and then click the **Adjustments** tab.
3 Click **Add Adjustment**.
4 Specify this information:

Contract Item
Specify a contract item to which to associate the adjustment. The system automatically populates the contract item description, **Contract Item Org.**, **Invoice Amount**, and **Invoice Tax Amount**. The system also automatically populates **Equipment**, **Project**, or **Work Order** depending on which is associated to the selected contract item.
Note: If **Contract Item** is populated, the system invoices the , adjustment as part of the contract item costs. If left unpopulated, the system invoices the adjustment on the customer contract header level.

Adjustment
Specify the adjustment which to associate with the customer contract or the contract item. Adjustments are defined on the **Adjustments** form. The system automatically populates **Adjustment Org.**

Quantity
Specify the number of adjustments to apply to the invoice.

Tax Code
Specify the tax code to specify for the adjustment, the system calculates the tax amount on the invoice.

Adjustment Type
Select to categorize the adjustment.
Note: **Invoice Discount** or **Contract Discount** are system types and cannot be manually selected.

Date
Select the date to invoice the adjustment.

Status
Select the status of the adjustment.
Note: The system selects only Approved adjustments during the invoicing process. Once invoiced the system changes the status to Invoiced and adds the invoice number on the adjustment record for future reference.

Comments
Enter any comments applicable to the adjustment.

Rate
Specify the rate for the adjustment. The system automatically populates **Total Amount**.
Note: `Total Amount=Quantity * Rate`

It is not necessary to enter any values. If **Rate** is blank the **Total Amount** is automatically set to 0 (zero). If **Quantity** is blank the **Total Amount** is automatically set equal to the entered **Rate**.

Exchange Rate
Specify the exchange rate the system will use for the adjustment when a foreign currency is specified on the invoice of the customer.
Note: The system will try and find the exchange rate for you. If the adjustment date is in the past it will try and find the exchange rate for that day. If it is in the future it will use today's date. If a contract item is selected and **Use Fixed Exchange Rate** is selected for the contract item the system will default the exchange rate from the contract item.

5 Click **Submit**.

To create a work order for the selected adjustment, click **Create WO**. Select the **WO Organization**, and then click **Submit**.

Copying customer contracts

Copy the header details and child records of customer contracts to quickly create a new customer contract.

To copy customer contracts.

1 Select **Work > Contract Management > Customer Contracts**.
2 Select the customer contract to copy, and then click the **Record View** tab.
3 Right-click on the form, and then select **Copy Contract**.
4 Specify this information:

New Contract Code
Enter a unique code identifying the new customer contract, and then enter a description of the contract in the adjacent field.

5 Select the related details to copy to the new customer contract:
- **Custom Field Values**
- **Clauses**
- **WO Criteria**
- **Sales Prices**
- **Discounts**

- **Contract Items**
- **Charge Definitions**
- **Commodities**
- **Comments**
- **Documents**

6 Click **Submit**.

Defining reservations

Define a reservation for a customer to record the rental of equipment for short periods of time, and the charges based on usage fees for a period of time (hours, days, and weeks) and/or for the usage measured in a specific unit of measures (miles, kilometers, and engine hours). The reservation can also include fixed charges such as fuel charge or a repair charge to handle any damage that occurs during the reservation period.

To define reservations:

1 Select **Work > Contract Management > Reservations**.

2 Click **New Record**.

3 Specify this information:

Organization
Specify the organization for which the reservation is created, if you use multi-organization security.

Reservation
Specify a unique code identifying the reservation, and then a description in the adjacent field. A reservation number is assigned after you save the record.

Status
Select a status for the reservation. Select one of the following statuses:

Status	Description
Unfinished	The reservation is editable and has not been approved. **Note:** When status is **Unfinished**, all the fields are editable except the following: • **Customer Rental** • **Organization** • **Created By** • **Date Created** • **Completed**
Issued	Status must be changed to **Issued** when the reservation equipment is issued to the customer.

Status	Description
Returned	Status must be changed from **Issued** to **Returned** when the customer returns the reservation equipment.
Completed	Status must be changed from **Returned** to **Completed** when the reservation is completed. **Note:** System automatically updates the status from **Completed** to **Finished** based on the rental **Completed** date and **CCFIDAYS** install parameter defined on Options tab of Organization.
Cancelled	Select if the contract no longer impacts reservations.

Reservation Type
Specify the rental type for the reservation.
Note: If the user selects **Loaner** option, **Received Equipment** is enabled. If the user selects **Pool**, **Received Equipment** is protected.

Equipment
Specify the equipment for which the reservation is applicable.

Received Equipment
Specify details of the equipment received.
Note: The equipment selected for the **Rental Type** is the equipment being loaned while the received equipment is under repair. This field is enabled only when the **Rental Type** is set to **Loaner**.

Rental Template
Specify the template to apply to the customer reservation.

Class
Specify the class of the reservation.

Issue To
Specify customer receiving the equipment for the reservation.

Customer
Specify the unique code identifying the customer.

Customer Contact
Specify the customer contact name.

Specify the customer **Work Phone Number** and **Email Address**.

Email Invoice
Select to e-mail the customer reservation invoice to the customer.

Specify the **Driver's License No.**, **Cost Code**, and **Tax Code**.

Specify **Issue Date/Time**, **Issue Location**, **Issue Reading**, and **Issue Fuel Level** details of the rental equipment.

Specify **Return Date/Time**, **Return Location**, **Return Reading**, and **Return Fuel Level** details of the rental equipment.

Specify **Corrected Hours**, **Corrected Days**, **Corrected Usage**, and **Corrected Fuel Usage**, if the calculated values must be overwritten.

Note: The system populates the values for the invoicing details such as **Calculated Hours**, **Calculated Fuel Usage**, **Net Amount**, **Tax Amount**, and**Gross Amount**.

4 Click **Save Record**. The Reservation number is generated.

Note: To generate an invoice, right-click on the screen, and then select **Generate Invoice**.

Associating adjustments with reservations

Associate adjustments with reservations. An adjustment can be an extra charge or a discount such as extra charges for a damaged vehicle or a late return fee on the equipment.

Create a work order for an adjustment on this screen.

To associate adjustments with reservations:

1 Select **Work > Contract Management > Reservations**.
2 Select the reservation for which to create an adjustment, and then click the **Adjustments** tab.
3 Click **Add Adjustment**.
4 Specify this information:

Adjustment
Specify the adjustment with which to associate to the reservation.

Tax Code
Specify the tax code for the adjustment.

Date
Specify the date to invoice the adjustment.

Quantity
Specify the quantity of adjustments to invoice.

Adjustment Type
Select the type of adjustment, e.g., enter an extra charge for damage if the equipment was returned damaged or a discount because it was returned early. You cannot select **Invoice Discount** or select **Contract Discount** because they are reserved by the system.

Status
Select the status of the adjustment. Select one of the following statuses:

Unfinished
Adjustments can be changed.

Approved
Adjustment is ready for invoicing.

Invoiced
Adjustment is invoiced.

Cancelled
Adjustment is cancelled.

Rate
Specify the rate for the adjustment. **Total Amount** and **Tax Amount** are automatically populated. **Tax Amount** is applied to the invoice when the adjustment is due, based on the adjustment date selected.

5 Click **Submit**.

Invoice and **Invoice Org.** are automatically assigned when the invoice process is completed. **Created Work Order** is automatically populated when a work order is created for the adjustment.

Note: To create a work order for the adjustment, click **Create WO**.

See Creating regular work orders on page 775.

Viewing charge definitions for reservations

View charge definitions for the reserved equipment.

To view charge definitions for reservations:

1 Select **Work > Contract Management > Reservations**.
2 Enter the customer rental for which to view charges, and then click the **Charge Definitions** tab.
3 View the charge definitions details.

Creating reservation requests

Create, update, and approve reservation requests.

To create reservation requests:

1 Select **Work > Contract Management > Reservation Requests**.
2 Click **New Record**.
3 Enter a description of the reservation request.
4 Specify this information:

Organization
Specify your organization.

Vehicle
Select the vehicle you are renting.

Vehicle Type
Select the type of vehicle you are renting.

Class
Specify the class of the reservation request.

Status
Specify the current status of the reservation request.

Start Date/Time
Specify the date and time you intend to rent the vehicle.

End Date/Time
Specify the date and time you intend to return the vehicle.

5 Specify these reservation request details:

Reference
Specify a number or unique code to identify the reservation request.

Issue To
Specify the employee name of the person to which the vehicle will be issued.

Customer
Specify the customer name associated with the employee to which you are issuing the vehicle.

Phone Number
Specify your phone number if you are renting the vehicle, or the phone number of the employee renting the vehicle if you are approving the request.

Work Phone No.
Specify your work phone number if you are renting the vehicle, or the work phone number of the employee renting the vehicle if you are approving the request.

Email Address
Specify your email address if you are renting the vehicle, or the email address of the employee renting the vehicle if you are approving the request.

Driver's License No.
Specify your driver's license number if you are renting the vehicle, or the driver's license number of the employee renting the vehicle if you are approving the request.

Cost Code
Specify the cost code of the employee to track any vehicle maintenance costs.

6 Click **Save Record**.

Reviewing reservation requests

View a list of reservation requests ready for approval and then either accept or reject the reservation request.

Note: Only the reservation requests for which you are authorized to review are displayed.

To review reservation requests:

1 Select **Work > Contract Management > Review Reservation Requests**.
2 Select the reservation request(s) to review.
3 Choose one of the following options:

   Accept
   Click the **Accept** button to accept the reservation request(s). The selected record is deleted from the list once it is accepted and the status of the record is updated.

   Reject
   Click the **Reject** button to reject the reservation requests, specify a reason for the rejection in the popup, and then click **OK**. Optionally, select the **Use Reason for All** check box in the popup to use the same rejection reason for all of the selected reservation requests if you selected more than one record.

4 Double-click on a record in the grid to hyperlink to the record on the **Reservations** screen.

Viewing customer invoices

View and modify customer invoices on this screen. The **Customer Invoices** page displays details of the invoices created for customer contracts and customer rentals.

Note: Customer invoices can only be generated by the system. You cannot manually insert or delete invoices on this screen, but you can modify customer invoices.

To view and modify customer invoices:

1 Select **Work > Contract Management > Customer Invoices**.
2 Select the customer invoice for which to modify or view, and then click the **Record View** tab.
3 Specify this information:

   Description
   Specify the description of the invoice.

   Status
   Select the status of the invoice. To approve the invoice, select **Approved**.

4 Click **Save**. The system automatically populates **Approval Date**.

Viewing contract items for customer invoices

View details of the equipment, projects, or work orders linked to the customer invoice. View contract items details such as the invoicing organization, applicable exchange rate, and customer data.

To view the contract items:

1 Select **Work > Contract Management > Customer Invoices**.
2 Select the invoice for which to view contract items, and then click the **Contract Items** tab.
3 Specify this information:

   Adjusted Net
   If required, modify the net amount. The adjusted net amount is displayed on the Invoice header.

Viewing and modifying customer invoice details

View details of a customer invoice by charge categories, charge subcategories and charge levels.

To view and modify customer invoices:

1. Select **Work > Contract Management > Customer Invoices**.
2. Select the customer invoice for which to view or modify details, and then click the **Invoice Details** tab.
3. View details of the customer invoice.

   Note: Only **Adjusted Quantity**, **Adjusted Periods**, **Adjusted Price** and **Adjusted Rollup** can be modified. The adjustments are displayed on the Contract Items tab and the Invoice header.

Viewing invoice generation errors

View the error details generated during the customer invoicing process.

To view invoice generation errors:

1. Select **Work > Contract Management > Customer Invoices**.
2. Select the customer invoice for which to view generation errors, and then click the **Generation Errors** tab.
3. View the errors.

Updating work order activities via the contractor portal

Contractors use this screen to browse assigned work order activities and update the activities, work order comments, and documents as necessary. View task plan instructions and documents.

To update work order activities via the contractor portal:

1. Select **Work > Contractor Portal**.
2. Select an open work order, and then click the **Record View** tab.
3. Update the details of the work order.
4. Click **Save Record**.

Managing permits to work

Create and promote a safe work environment for your employees by defining permits to work. The permit to work details the hazards and precautions required to remove or prevent a potential hazard to your employee's safety.

An efficient permit to work includes:

- Details of potential hazards
- Details of the precautions to take to prevent potential hazards
- Any required lockout/tagout operations

Defining permit to work setup

Define permit to work setup options to format the maximum initial duration, maximum number of extensions, and the maximum extension duration of a permit to work.

To define permit to work setup:

1 Select **Work > Permit to Work > Permit to Work Setup**.

2 Specify this information:

Organization
Specify the organization of the permit to work. The system automatically populates the description of the organization.

Risk
Select the color indicating the potential risk the work poses to your operation, e.g., select **Red** if the hazard poses a significant risk to your operation.
Note: The selection of colors is contingent upon your organization's preferences or the value your organization assigns for each color. The system does not assign value to the colors available.

Maximum Initial Duration (Hrs.)
Specify the maximum number in hours to indicate the initial duration period expected for the permit to work.

Maximum Extensions
Specify the maximum number of extensions to allow for the permit to work in the event the work to be performed is not completed by the **Maximum Initial Duration (Hrs.)**.

Maximum Extension Duration (Hrs.)
Specify the maximum number of hours to allow per extension for the duration of the permit to work in the event the work to be performed is not completed by the **Maximum Initial Duration (Hrs.)**.

Maximum Total Duration (Hrs.)
Specify the maximum number in hours to indicate the total duration allowed for the permit to work.

3 Click **Save Record**.

Defining hazards

A hazard is a situation that poses a level of threat to life, health, property, or the employee's environment such as working with fire and flammable equipment, lifting heavy objects, handling sharp objects, working near roadsides, working at heights, or working in confined spaces. Define these situations as hazards to notify your employees of potential dangers in the workplace as they perform maintenance.

After defining hazards, define precautionary measures for each hazard on the **Precautions** form.

To update or revise hazard records once created, right-click on a hazard record, and then select **Create New Revision**.

To define hazards:

1 Select **Work > Permit to Work > Hazards**.

2 Specify this information:

Organization
Specify the organization of the hazard.

Hazard
Specify a unique code identifying the hazard, and then enter a description in the adjacent field. Alternately, you may opt to allow the system to automatically generate **Hazard**.

Specify the **Status** and **Class** of the hazard. The system automatically populates **Class Org.**

Hazard Type
Select the type to classify the hazard. For example, select **Biological Hazards**, **Chemical Hazards**, **Physical Hazards**, or **Radiological Hazards**.

Date Review Required
Specify the date by which to review the hazard.

3 Optionally, select the **Out of Service** check box to indicate that the hazard should not display in lookups on the **Safety** pages.

4 Click **Save Record**. The system automatically populates **Created By** and **Date Created**.

Note: After updates to the hazard record are saved, the system automatically populates **Updated By**, **Date Updated**, and **Revision**.

Associating precautions with hazards

Associate precautions with hazards to prevent hazardous situations in the workplace that can potentially cause bodily harm or injury to your employees. For example, workers completing a job on the roof of a building are at risk of falling off the roof. Wearing a safety harness is a precaution the workers can take to protect them from a potential fall off the roof.

To associate precautions with hazards:

1 Select **Work > Permit to Work > Hazards**.

2 Select the hazard for which to associate precautions, and then click the **Precautions** tab.

3 Click **Add Precaution**.

4 Specify this information:

Precaution
Specify the safety measure to protect the workers from the hazard. The system automatically populates the precaution description and the **Precaution Org.**

Sequence
Specify the sequence in the workflow process at which the precaution should be taken to prevent the hazard if more than one precaution is in effect and you want to prioritize.

5 Click **Submit**.

Viewing hazard usage

The **Where Used** page of the **Hazards** form lists the screens on which hazards are being used throughout the system. Hazards can be attached to PM schedules, work orders, parts, equipment, categories, permits to work, and standard work orders on the **Safety** tab.

To view hazard usage:

1. Select **Work > Permit to Work > Hazards**.
2. Select the hazard for which to view usage, and then click the **Where Used** tab.
3. View the hazard usage information.

Defining precautions

Define precautions to safeguard workers from potential hazards in the workplace such as working with fire and flammable equipment, lifting heavy objects, handling sharp objects, working near roadsides, or working at heights.

Precautions for these potential hazards include wearing harnesses or using scaffolds to prevent falls, wearing gloves for handling sharp objects, or working during low traffic volume times when working on or near roadsides.

After creating precautions, associate the precautions with hazards on the **Precautions** tab of the **Hazards** form or immediately associate hazards and precautions on the **Safety** tabs.

To update or revise precaution records once created, right-click and then select **Create New Revision**.

To define precautions:

1. Select **Work > Permit to Work > Precautions**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Enter the organization of the precaution.

   Precaution
   Enter a unique code identifying the precaution, and then enter a description in the adjacent field. Alternately, you may opt to allow the system to automatically generate **Precaution**.

   Enter the **Status** and **Class** of the precaution. The system automatically populates **Class Org.**

   Timing
   Select the best time to observe the precaution to prevent the hazard. For example, select **Pre Work** if workers should observe the precaution prior to performing work.

   Date Review Required
   Enter the date on which the precaution should be reviewed.

4. Optionally, select the **Out of Service** check box to indicate the precaution should not display in the Precautions lookup on the **Safety** page.
5. Click **Save Record**. The system automatically populates **Created By** and **Date Created**.

Note: After updates to the precaution record are saved, the system automatically populates **Updated By** and **Dated Updated**.

Defining isolation points for equipment

Define isolation points for equipment to later isolate the equipment from its energy sources during a lockout/tagout procedure as part of a permit to work process. Isolating equipment from its energy sources helps to prevent further injury that may occur if the equipment or machinery is unexpectedly energized or starts up while maintenance or service work is being performed on the equipment by employees.

For example, if crews are performing maintenance on a machine, lockout/tagout safety procedures are observed which may involve isolating the machine from its power source by shutting off the power and placing a lock on the circuit breakers.

By defining isolation points, you indicate at which areas the equipment can be isolated from its energy sources to prevent injury from unexpected startup.

To define isolation points for equipment:

1. Select **Work > Permit to Work > Isolation Points**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization of the isolation points.

   Isolation Point
   Specify a unique code identifying the isolation point, and then enter a description in the adjacent field.
   Note: If you leave **Isolation Point** blank, the system generates a code for you.

   Equipment
   Specify the equipment if the isolation point is equipment that you already maintain, e.g., a valve. The system automatically populates the description and **Equipment Org.**

   Class
   Specify the class of the isolation point, e.g. **VALVE**, **SWITCH**. The system automatically populates **Class Org.**

   Status
   Specify the status of the isolation point. The system automatically populates **Unfinished**.

   Location
   Specify the location of the isolation point. The system automatically populates **Location Org.**

   Location Note
   Specify any additional notes on the location of the isolation as necessary.

   Energy Source
   Select the equipment's source of energy, e.g., electrical power.

Residual Energy
Select the secondary source of residual energy to the equipment if any.

Secondary Residual Energy
Select the secondary source of residual energy to the equipment.

Date Review Required
Specify the date review of the isolation point is required.

4 Optionally, select the **Out of Service** check box to indicate the isolation point should not display in the isolation point lookups on the **LOTO** tab of the **Assets**, **Positions**, **Locations**, and **Permit to Work** form.
5 Click **Save Record**. The system automatically populates **Created By** and **Date Created**.

Viewing permits to work for isolation points

This screen displays the permit to work data attached to specific isolation points.

To view permits to work for isolation points:

1 Select **Work > Permit to Work > Isolation Points**.
2 Select the isolation point for which to view permits to work, and then click the **Permit to Work** tab.
3 View the information.

Defining lockout boxes for lockout/tagout procedures

Define lockout boxes for employees to safely store all the keys used for a lockout/tagout procedure. Lockout/tagout procedures are observed during the maintenance required for a permit to work.

Tagging and locking out (e.g., securing that mechanical equipment is disconnected from to electricity) while employees are performing required maintenance and work orders, prevents bodily injury and death by employees who might otherwise startup equipment while maintenance is being performed.

To define lockout boxes for permits:

1 Select **Work > Permit to Work > Lockout Boxes**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization of the lockout box.

Lockout Box
Specify a unique code identifying the lockout box, and then enter a description in the adjacent field.

Class
Specify the class of the lockout box for the permit. The system automatically populates **Class Org.**

Location Note
Enter a note detailing where the lockout box is located.

In Use
Select if the lockout box is currently in use.

4 Optionally, select the **Out of Service** check box if the lockout box is currently out of service or not being used.
5 Click **Save Record**.

Note: Current PTW and **In Use** are automatically populated if the lockout box is used on a permit to work that is currently isolated.

Defining permits to work

To define permits to work:

1 Select **Work > Permit to Work > Permit to Work**.
2 Enter the **Organization**.
3 Enter a description of the permit to work.
4 Specify this information:

Equipment
Specify the equipment associated with the permit to work. The system automatically populates the description of the equipment and **Equipment Org.**

PTW Type
Select the type of work to be performed on the permit, e.g., **Confined space entry** if the work to be performed must be completed in an enclosed space.

Department
Specify the department of the equipment.

Status
Specify the status of the permit to work.

Location
Specify the location of the equipment. The system automatically populates **Location Org.**

Location Note
Enter a note on the location of the equipment.

Class
Specify the class for the permit to work. The system automatically populates **Class Org.**

Type of Work
Select the type of work to be performed on the permit to work.

Priority
Select the priority of the work to be performed on the permit to work.

Risk
Select the risk the permit to work poses to your organization.

Lockout Box
Specify the lockout box that will be used if a lockout is required.

Un-assessed Conflicts
Select to indicate if the potential conflicts with other permits to work have been un-assessed..

Requested By
Specify the person who requested the permit to work.

Date Requested
Specify the date the permit to work was requested.

Isolated
Select to indicate that the equipment has been isolated or disconnected from its energy source in order that work can be performed without risk or injury.

Date Required
Specify the date the permit to work will go in effect.

Duration (Hrs.)
Specify the duration in hours required for the permit to work.

Extension (Hrs.)
Specify the number of hours to extend the permit to work if maximum duration hours are exceeded. The system automatically populates **Duration Total**. The system automatically populates **Valid Until** and **Extension Count** when the permit to work **Status** is **Active**.

Suspension Reason
Specify the reason to suspend the permit to work.

5 Click **Save Record**.

Note: The system automatically populates **Permit to Work**, **Created By**, **Date Created**, **Updated By**, and **Date Updated**. To extend the amount of time that the permit to work is valid, click **Extend**. Enter your electronic signature information, and a new **Extension Count**, **Duration Total**, and **Valid Until** will be determined.

To indicate that the equipment is isolated from its energy source so that work can be performed without risk or injury to employees performing the work, click **Isolated**. This will also flag the associated isolation points.

To indicate the equipment is on-line and reattached to its energy source after work has been performed, click **De-Isolated**. This will also reset the isolation flag for the associated isolation points.

To sign off on the permit to work, click **Sign-Off**.

To assign an employee to perform the work indicated, click **Assigned To**.

To make a copy of an existing permit to work or to replace a permit to work if it can no longer be used, click **Copy/Replace**.

See Copying and replacing permits to work on page 1004.

To view all differences between the current data of the permit to work and the archived data from the last electronic signature, click **Unsigned PTW Differences**. View the differences.

Adding safety hazards and precautions to permits to work

Add hazards to permits to work to alert your employees to of all the dangers (bodily harm, environmental issues like spills) they face when performing required maintenance and working with equipment. Attach precautions to these hazards so they can safeguard themselves and their surroundings from these potential dangers. For example, if you must maintain electrical equipment, electrocution is a hazard. Add a precaution to turn that equipment off and remove it from the power outlet before performing repairs on that electrical equipment.

To add safety hazards and precautions to permits to work:

1. Select **Work > Permit to Work > Permit to Work**.
2. Select the permit to work for which to add safety precautions and hazards, and then click the **Safety** tab.
3. Click **Add Safety Record**.
4. Specify this information:

   Hazard
   Specify the hazard to add to the permit to work. The system automatically populates the hazard description, **Hazard Org.**, **Hazard Revision**, and **Hazard Type**.

   Precaution
   Specify the safety measure to protect your employees from the hazard. The system automatically populates the precaution description, **Precaution Org.**, and **Precaution Revision**. Add one or more precautions to a hazard as needed.

   Timing
   Select the timing which is used to identify when the precaution should be taken. For example, if your employee is working with fire, you can enter the timing of "during" to alert the employee that they should wear fire-resistant clothing during the task.

   Sequence
   Specify the sequence number which is used to identify the order in which your employee should be made aware of the precaution. All precautions are important regardless of the sequence number entered.

   Health Hazard
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates the degree to which the materials used poses a hazard to the health of the employee.

   Flammability
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates the degree to which the materials used are flammable.

   Instability
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates the degree to which the materials used can detonate or explode.

   Special Hazards
   Specify the code based on the Hazardous Materials Code (400) of the NFPA that indicates any special hazards related to the materials used.

5 Click **Submit**. The system automatically populates **Created By** and **Date Created**.

Implementing lockout/tagout procedures for permits to work

Define the steps that must be taken on the permit to work to isolate equipment from its energy sources to prevent startup of a piece of equipment or machine once maintenance on that equipment is in progress. This is to prevent dangers to the workers.

To implement lockout/tagout procedures for permits to work:

1 Select **Work > Permit to Work > Permit to Work**.
2 Select the permit to work for which to implement lockout/tagout procedures, and then click the **LOTO** tab.
3 Click **Add LOTO Record**.
4 Specify this information:

Sequence
Specify the sequence in which to implement lockout/tagout procedures.

Isolation Point
Specify the point at which to isolate the equipment from its energy source. The system automatically populates the description, **Isolation Point Org.**, **Isolation Point Revision**, **Equipment** and **Equipment Org.**

Isolation Method
Specify the method by which to isolate the equipment from its energy source. The system automatically populates **Method Revision**, **Location**, and **Location Org.**

Location Note
Specify any additional notes on the location of the equipment as necessary.

Number of Tags
Specify the number of tags required to properly lock and tag the equipment so that startup of the equipment is prevented.

Energy Source
Select the equipment's source of energy, e.g., electrical power.

Residual Energy
Select the secondary source of residual energy to the equipment if any.

Secondary Residual Energy
Select the secondary source that stores residual energy for the equipment. This source supplies energy to the equipment when the equipment is disconnected from its primary energy and secondary energy sources.

Isolation Step
Select to indicate this procedure is an isolation step and not a de-isolation step.

Note
Specify any notes regarding the lockout/tagout step for this permit to work.

Key References
Specify any references to keys used during the lockout.

5 Specify this Permit to Work Tags information to define your unique tags:

Tag Header
Specify a unique name for the tag.

Tag Line 1
Specify a unique tag for line 1.

Tag Line 2
Specify a unique tag for line 2.

Tag Line 3
Specify a unique tag for line 3.

Tag Line 4
Specify a unique tag for line 4.

6 Click **Submit**.

Viewing and entering checklist items for permits to work

View a checklist for a permit to work LOTO sequence to verify the progress or completion of the checklist. Alternately you may enter results for a checklist of a permit to work LOTO sequence. To enter results for checklist items associated to the permit to work, the permit to work must not have a status equal to **Closed** or **Cancelled**.

To view and enter checklist items for permits to work:

1 Select **Work > Permit to Work > Permit to Work**.
2 Select the permit to work for which to enter checklist items, and then click the **Checklist** tab.
3 Specify this information:

LOTO Sequence
Select the sequence of the step of the lockout/tagout procedure during which to enter the checklist answers. The system automatically populates the isolation method description.

4 Enter results of the checklist based on the checklist item.
- Select **Completed** if **Type** is **Checklist Item**.

  Select **Yes** or **No** if **Type** is **Question**.

  Enter **Finding** if **Type** is **Qualitative**.

  Enter **Value** and **UOM** if **Type** is **Quantitative**.

Notes
Enter any relevant notes for the checklist item results.

Final Occ.
Select if the results entered represent the final occurrence of the specific checklist item. This applies only to repeating checklist items, e.g., a gas measurement you must perform more than once.

5 Click **Submit**.

Resolving conflicts with permits to work

Conflicts with permits to work can occur when multiple permits to work are attached to the same equipment or have the same isolation points or location. Identify potential conflicts and choose the method by which to resolve the conflicts.

To resolve conflicts with permits to work:

1 Select **Work > Permit to Work > Permit to Work**.
2 Select the permit to work for which to resolve conflicts, and then click the **Conflicts** tab.
3 Click **Add Record**.
4 Specify this information

Conflicting PTW
Specify the permit to work with the conflict. The system automatically populates the description, **Organization**, **Status**, **PTW Type**, **Risk**, **Equipment**, **Equipment Org.**, equipment description, **Location**, **Location Org.**, **Responsible**,**Holder**, **Un-Assessed Conflicts**, **Date Required**, **Valid Until**, **Created By**, **Date Created**, **Updated By**, and **Date Updated**.

Resolution
Select the method for resolving the conflict with the conflicting permit to work.

5 Click **Submit**.

Viewing event logs for permits to work

View status changes, extensions, isolation, de-isolation and sign-off events that occurred during the life cycle of the permit to work. Alternately you may manually add events or remarks.

To view event logs for permits to work:

1 Select **Work > Permit to Work > Permit to Work**.
2 Select the permit to work for which to view event logs, and then click the **Event Log** tab.
3 Specify this information:

Event Type
Select the events type to view for the permit to work. For example, select **Status Change** to view the events in which the status for the permit to work was changed. The system automatically populates **User**, and **User Name**.
Note: To manually add an event to the log, click **Add Event**. Select the **Event Type**, and then enter **Date/Time** the event occurred.

Date/Time
Specify the date and time the event occurred.

4 Enter notes as necessary.
5 Click **Submit**. The system automatically populates **Created By** and **Date Created**.

Note: The system automatically populates **Updated By** and **Date Updated** if updates were made the event log.

Copying and replacing permits to work

Replace an existing permit to work with a new permit to work, or copy an existing permit to work to save planning time for a new permit to work.

To copy and replace permits to work:

1 Select **Work > Permit to Work > Permit to Work**.
2 Select the permit to work to copy or replace.
3 Right-click on the form, and then select **Copy/Replace PTW**.
4 Specify this information:

   Description
   Specify a description of the new permit to work.

   Equipment
   Specify the equipment to associate to the new permit to work. The system automatically populates a description of the equipment and **Equipment Org.**.

   Location
   Specify the location of the equipment associated to the new permit to work. The system automatically populates a description of the location, and **Location Org.**

5 Select to copy the following associated details to the new permit to work:
   - **Custom Field Values**
   - **Comments**
   - **Documents**
   - **LOTO**
   - **Safety**
   - **Add Equipment Safety**
   - **Add Location Safety**
6 Click **Copy** or **Replace**.

Creating healthcare work orders

Create new work orders for one or more pieces of healthcare equipment.

Note: The form contains collapsible sections.

To create healthcare work orders:

1 Select **Work > Verticals > Healthcare > Work Orders Healthcare**.
2 Click **New Record**.
3 Specify this information:

   Organization
   Specify the organization to which the work order belongs if you use multi-organization security.

Work Order
Specify a description of the work needed in the adjacent field. A work order number is assigned after you save the record.

Equipment
Specify the healthcare equipment on which to perform the work. The following fields are automatically populated based on the selected **Equipment** if available: equipment description, **Manufacturer**, **Model**, **Serial Number**, **Equipment Org.**, **Department**, **Cost Code**, **OEM Site/System ID**, **Vendor**, **Coverage Type**, **Warranty**, **Equipment Type**, and **Assigned By**.
Note: Multiple Equipment is automatically selected if you add additional equipment to the work order and it is protected.

Type
Choose one of the following options:

- **Breakdown**
  Select to create a work order in response to an equipment breakdown or failure.

- **Calibration**
  Select to create a calibration work order.

- **PM**
  Select to create a preventive maintenance work order.

- **Repairable Spare**
  Select to create a work order for repairable spare parts. If you are creating a work order for repairable spare parts, you must also add the parts to repair on the **Repair Parts** tab.

- **Standard WO**
  Select to create a standard work order.
  Note: The previously listed work order types are standard types in the system. You can also create user-defined work order types.

Status
Select one of the following options:

- **Released**
  Select to create a work order.

- **Work request**
  Select to create a work request.

  Note: If you select a **Status** of **Work request**, the work request must be approved and assigned a status of **Released** before defining activities, scheduling labor, booking labor, etc.

Priority
Specify the priority of the work order.

4 Specify this Equipment Details information:

Cost Code
Specify the cost code of the work order.

Warranty
Select if the equipment is under manufacturer warranty.

5 Specify this Work Order Details information:

Standard WO
Specify the standard work order if it has been stored in the system library. The system automatically populates the work order description, **Type**, **Class**, **Scheduling Session**, **Scheduling Session Type**, **Maintenance Pattern-Sequence**, **Problem Code**,**Priority**, **Scheduled End Date**, **Campaign-Campaign Event** and **Campaign Status** if available. The system also copies the standard work order activities to the current work order. If the standard work order is a template, the system creates child work orders as defined on the standard work order.

Class
Specify the class of the work order.

Assigned By
Specify the supervisor who assigned the work order.

Assigned To
Specify the person responsible for the work order.

Sched. Start Date
Sched. End Date
Specify the starting and ending dates for the work order.

Start Date
Specify the actual date on which the work order is started.

Date Completed
Specify the actual date on which the work order is completed.

Problem Code
Specify the code to identify the type of problem.
Note: If the selected **Equipment** is linked with a **Criticality** code, the system populates **Problem Code** based on the **Criticality** code.

Cause Code
Specify the cause code identifying the cause of the problem. The system automatically populates the following fields:

Route identifies the inspection route of which the equipment is a part.

Inspection Status indicates the current status of the inspection route of which the equipment is a part.

Failure Code
Specify the cause of failure for the equipment.

Action Code
Specify the action taken to resolve the problem.

Project - Budget
Specify the project and the project budget to associate with the work order.
Note: You cannot select a frozen project/budget.

Safety
Select if this work requires special safety precautions.

Parent Work Order
Specify the code identifying the parent work order for the work order.

Downtime Cost
Specify the cost that resulted from the equipment being out of operation due to failure.

Downtime Hours
Specify the number of hours that the equipment was out of operation due to failure. The system automatically populates the following fields:

The system populates **Last Meter Reading** with the value of the last meter reading and the unit of measure of the reading in the adjacent field.

Trigger Event indicates the MS Project planning session associated with the equipment on the work order.

Print
Select to print the work order when work orders are batch printed.
Note: Once the work order is printed, **Printed** is automatically slected, and **Print** is automatically unselected.

Dependent
Select to keep the work order open until all child work orders are completed.

6 Specify this Requestor Details information:

Reported By
Specify the employee requesting the work.

Phone
E-mail
Specify the phone number and e-mail address of the employee requesting the work.

Req. Start Date
Req. End Date
Specify the requested starting and ending dates for the work order.

Shift
Specify the shift during which the work is requested to be performed.

7 Specify this Activity information:

Activity
Specify a value if you want to create a new activity to associate with the work order.

Trade
Specify the trade required to perform the activity.

Note: If you enter a **Trade**,**Estimated Hours**, or **People Required** in the Activity section of the page, an activity will automatically be created for this work order.

An activity record can be deleted when you remove the **Trade** value.

Task
Specify the task code for the activity.

Material List
Specify the material list code for the material list containing the parts needed for the work order.

Activity Start Date
Activity End Date
Specify the starting and ending dates for the activity associated with the work order.

Estimated Hours
Specify the estimated number of hours required to complete the activity. The system automatically populates **Hours Remaining** with the estimated number of hours remaining for the activity. You may update this field at any time during the life cycle of the work order.

People Required
Specify the number of people required to perform the activity.

8 Specify this Incident Tracking information:

Patient/Visitor Injury
Select if the work order involved a patient or visitor injury.

Staff Injury/Illness
Select if the work order involved a staff injury or illness.

Security Incident
Select if the work order involved a security incident.

Property Damage
Select if the work order involved damage to property.

Hazardous Materials Incident
Select if the work order involved a hazardous materials incident.

Fire Safety Incident
Select if the work order involved an incident regarding fire safety.

Medical Equipment Incident
Select if the work order involved an incident with medical equipment.

Utility System Incident
Select if the work order involved an incident with a utility system.

9 Specify this Compliance Details information:

Above Ceiling Permit
Select if the work to be performed requires an above ceiling permit.

Interim Life Safety
Select if the work to be performed requires interim life safety procedures and techniques be put in place.

Interim Infection Control
Select if the work to be performed requires interim infection control procedures be put in place.

Preconstruction Risk Assessment (PCRA)
Select if the work to be performed relates to a preconstruction risk assessment plan.

Plan for Improvement (PFI)
Select if the work to be performed relates to a plan for improvement.

Statement of Conditions
Select if the equipment on which the work to be performed relates to the Statement of Conditions as required by The Joint Commission.

Building Maintenance Program (BMP)
Select if the work to be performed is on a piece of equipment inventoried in the building maintenance program.

Personal Protective Equipment (PPE)
Select if the work to be performed requires personal protective equipment.

Lockout/Tagout
Select if the work to be performed is on a piece of equipment which must comply with OSHA regulations on lockout/tagout.

Hot Work/Burn Permit
Select if the work to be performed requires a hot work/burn permit.

Confined Space
Select if the work to be performed is on a piece of equipment located in an area defined as a confined space as per OSHA regulations.

Patient Safety
Select if the work to be performed interferes with patient safety and requires patient safety measures.

Recall Notice
Select if the work to be performed requires a recall notice or is on a piece of equipment with a recall notice.

SMDA
Select if the work to be performed is on a piece of equipment covered by the Safe Medical Devices Act of 1990.

HIPAA Confidentiality
Select if the work to be performed is on a piece of equipment containing confidential patient health information.

10 Click **Save Record**.

Note: To create a standard work order from any general work order for easy duplication, right-click on any existing work order, and then click **Create Standard WO**. Enter **New Standard WO**, and then enter a description for the new standard work order. Enter **Organization**, and then click **Submit**.

To view the progress of a work order, right-click on the form, and then choose **Event Log**.

To create a warranty claim for the work order, right-click, and then select **Create Warranty Claim**.

Creating hospitality work orders

Create and update hospitality-based work orders.

To create hospitality work orders:

1. Select **Verticals > Hospitality > Work Orders Hospitality**.
2. Click **New Record**.
3. Specify this information:

Property
Specify the property to which the work order belongs. **Created By** is automatically populated with the **User ID** of the logged in user.

Work Order
Specify a description of the work needed in the adjacent field. A work order number is assigned after you save the record.

Equipment
Specify the hospitality equipment on which to perform the work. The following fields are automatically populated based on the selected **Equipment** if available: equipment description, **Reliability Ranking**, **Reliability Ranking Index**, **Reliability Ranking Score**, **System Status**, **Equipment Type**, **Equipment Property**, **Facility**, **Facility Parent**, **Building**, **Wing**, **Floor**, **Exposure**, **Equipment Alias**, **Serial Number**, **Model**, and the guest details.

Type
Choose one of the following options:

Breakdown
Select to create a work order in response to an equipment breakdown or failure.

Calibration
Select to create a calibration work order.

PM
Select to create a preventive maintenance work order.

Repairable Spare
Select to create a work order for repairable spare parts. If you are creating a work order for repairable spare parts, you must also add the parts to repair on the **Repair Parts** tab.

Standard WO
Select to create a standard work order.

Note: The previously listed work order types are standard types in the system. You can also create user-defined work order types.

Status
Select one of the following options:

Released
Select to create a work order.

Work request
Select to create a work request.
Note: If you select a **Status** of **Work request**, the work request must be approved and assigned a status of **Released** before defining activities, scheduling labor, booking labor, etc.

Facility
Specify the facility at which the work is to be performed.

4 Specify this WO Details information:

Priority
Specify the priority of the work order.

Standard WO
Specify the standard work order if it has been stored in the system library. The system automatically populates the work order description, **Type**, **Maintenance Pattern-Sequence**, **Problem Code**, **Action Code**, **Priority**, and **Scheduled End Date**.

Route
Specify the inspection route of which the equipment is a part.

Action Code
Specify the action taken to resolve the problem.

5 Specify this Scheduling information:

Date/Time Reported
Specify the date and time the work to be performed was reported.

Assigned To
Specify the person responsible for the work order.

Sched. Start Date
Sched. End Date
Specify the starting and ending dates for the work order.

Sched. Start Time
Sched. End Time
Specify the starting and ending times for the work order.

Date Completed
Specify the actual date on which the work order is completed.

Reservation No.
Specify the reservation number for the work being performed.

6 Optionally, specify this Structure information:

Facility
Specify the facility where the work will be performed.

7 Optionally, specify **Additional Information** in the appropriate section.

8 Specify this Activity information:

Profession
Specify the profession required to perform the activity.
Note: If you enter a **Profession**,**Estimated Hours**, or **People Required** in the Activity section of the page, an activity will automatically be created for this work order.

An activity record can be deleted when you remove the **Profession** value.

Task Plan
Specify the task plan code for the activity.

Activity Start Date
Activity End Date
Specify the starting and ending dates for the activity associated with the work order.

Estimated Hours
Specify the estimated number of hours required to complete the activity. **Hours Remaining** is automatically populated with the estimated number of hours remaining for the activity. You may update this field at any time during the life cycle of the work order.

People Required
Specify the number of people required to perform the activity.

9 Click **Save Record**.

Creating production requests

Create and edit production requests based on open work orders in Infor EAM. When production requests are approved, the system sends the request to Infor ERP so that a corresponding production order can be created.

Once Infor EAM receives the production order the system updates the request with the production order details.

To create production requests:

1 Select **Work > Production Requests**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization for the production request. The system automatically populates **Revision**, **Production Order**, **Production Start Date**, **Production End Date**, **Enterprise Location**, **Accounting Entity**, and **Created By**.

Production Request
Specify a unique identifying code for the production request, and then enter a description of the production request in the adjacent field.
Note: If **Production Request** is left blank, the system will automatically populate **Production Request**.

Work Order
Specify the work order with which to associate to the production request.

Status
Select the status of the production request.

Production Priority
Specify the priority in which the production request should be generated.

Earliest Start Date
Specify the earliest date for which production can begin.

Latest End Date
Specify the latest date for which production can end.

Class
Specify the class for which the production request should be generated.

Revision Reason
Specify a reason for the revision of the production request.

Priority
Specify the priority of the production request.

4 Click **Save Record**.

The system automatically populates **Date Created**.

Note: To revise the production request, click **Create New Revision**. The system updates **Revision**. New revisions can only be created when the production request **Status** is Approved. The system does not copy **Revision Reason** to the copy.

Defining parameters for generating production requests

Define a list of parameters to select work orders for which to generate production requests.

To define parameters for production requests:

1 Select **Work > Generate Production Requests**.
2 Select the saved selection parameters.
3 Specify this information:

Organization
Specify the organization for which the to generate production requests if you use multi-organizational security.

Department
Specify the department for which production requests should be generated.

Equipment
Specify the equipment for which production requests should be generated.

Type
Specify the type for which production requests should be generated.

Class
Specify the class for which production requests should be generated.

Priority
Specify the priority for which production requests should be generated.

Production Priority
Specify the priority in which the production request should be generated.

Requested Start Date Range
Specify a start date and an end date for the generation of the production request.

Supervisor
Specify the supervisor for the production request.

Location
Specify the location for which production requests should be generated.

Assigned To
Specify the employee assigned to the production request.

Cost Code
Specify the cost code for the production request.

PM
Specify the PM schedule for which production requests should be generated.

PM Class
Specify the PM class for which production requests should be generated.

Resource
Specify the resource for which production requests should be generated.

4 Choose one of the following options:

Use Widest Range for Requested Dates
Select to use the widest range for the requested dates for the generation of the production request.

Use Narrowest Range for Requested Dates
Select to use the narrowest range for the requested dates for the generation of the production request.

5 Choose one of the following options:

Use Sum of Values for Downtime
Select to use the sum of values to calculate downtime for the production request.

Use Maximum Value for Downtime
Select to use the maximum value to calculate downtime for the production request.

6 Specify this information:

Generated Production Request Status
Specify the status to assign to generated production requests.

7 Optionally, select the **Include Work Orders Without Resources** check box to include work orders with no resources.

8 Click **Process**.

The system displays the **WO Preview** page listing all of the work orders for which to generate production requests.

Associating ERP resources to production requests

Associate ERP resources to selected production requests.

Note: The system will only associate ERP resources to production requests with an Unfinished **Status**.

A resource is a line of products, equipment, or materials used to complete a job.

To associate ERP resources to production requests:

1 Select **Work > Production Requests**.

2 Select the production request with which to associate ERP resources, and then click the **Resources** tab.

3 Click **Add Resource**.

4 Specify this information:

Resource
Specify the resource to associate to the selected production request. The system automatically populates **Accounting Entity** and **Name**.

Operation Sequence
Specify the order in which this resource will be impacted when work is performed on the equipment.

Cool-down Time (Hours)
Specify the time it takes in hours for the resource line to cool down before performing production requests.

Warm-up Time (Hours)
Specify the time it takes in hours for the resource line to warm up before normal use.

Downtime (Hours)
Specify the expected downtime in hours for the selected production request.

Offset
Select to designate this resource line as offset, or that the resource impacted by down equipment will overlap with the previous resource.

Offset Value
Specify the amount of time in hours in which the resource impacted by down equipment, overlaps the previous resource.

5 Click **Submit**.

Note: The system deletes a resource association only if the production request **Status** is Unfinished.

To associate resources to the production request not associated with the selected equipment, click **All Resources**. Select a resource, and then click **Submit**.

To refresh resources associated, select the resource record to refresh, and then click **Refresh Resources**.

Viewing work orders associated to production requests

View a list of work orders associated to production requests. For production requests that have been flagged as bundles, the system displays multiple work orders.

To view work orders associated to production requests:

1 Select **Work > Advanced Maintenance Planning > Production Requests**.
2 Select the production request with which to view associated work orders, and then click the **Work Orders** tab.
3 View the information.

Note: Click on the work order hyperlink to navigate to the **Work Orders** page for the selected work order.

Identifying work order status changes for production requests

Identify work order status changes which will trigger production requests to be automatically generated for work orders matching the specified type.

Note: If the status change trigger is not defined here for the work order type then a production request will not be automatically created. The production request will need to be created using the **Generate Production Request** screen.

To identify work order status changes:

1 Select **Work > Advanced Maintenance Planning Configuration**.
2 Click **Add Trigger**.
3 Specify this information:

Old WO Status
Select the old work order status.

New WO Status
Select the new work order status.

WO Type
Select the work order type for which to automatically generate production requests once the work order status changes.

Generated Production Request Status
Select the status for the generated production request.

4 Click **Submit**.

Selecting work orders for generating production requests

Select one or more work orders and preview the resulting list of potential production requests.

To select work orders for generating production requests:

1 Select **Work > Process > Generate Production Requests**.
2 Select the saved selection parameters to open an existing session.
3 Click the **WO Preview** tab.
4 Select the work orders for which to generate production requests, and then click **Preview Production Requests**.
5 Select the work order resources for which to generate production requests, and then click **Create Production Requests**.

Previewing production requests

Select one or more work order resources from which to generate production requests.

To preview production requests:

1 Select **Work > Generate Production Requests**.
2 Select the saved selection parameters.
See Defining parameters for generating production requests on page 1013.
3 Click the **WO Preview** tab.
4 Select the work orders from which to generate production requests, and then click **Preview Production Requests**.
5 Select the work order resources from which to generate production requests. The system automatically populates **Single Resource WO**.
6 Specify this information:

Earliest Start Date
Specify the earliest date to generate production requests.

Latest End Date
Specify the latest date to generate production requests. The system automatically populates **Bundle**.

Operation Sequence
Specify the order in which this resource will be impacted when work is performed on the equipment.

Cool-down Time (Hours)
Specify the time it takes in hours for the work order resource to cool down before use.

Warm-up Time (Hours)
Specify the time it takes in hours for the work order resource to warm up before use.

Downtime (Hours)
Specify the number of hours the work order resources will be down.

Offset
Select to offset this work order resource.

Offset Value (Hours)
Specify the number of hours to offset this work order resource.

7 Click **Create Production Requests**.

The system automatically populates **Error Message**.

Note: To bundle work orders, click **Bundle Work Orders**.

To display bundled work orders, click **Display Bundled Work Orders**. Select one or more work orders to remove from the bundle, and then click **Remove Work Order(s) from Bundle**. Click **Close**.

To clear any errors, select the record, and then click **Clear Error(s)**. The system clears **Error Message**.

Viewing archived work order events

To view archived work order events:

1 Select **Administration > Archived Events**.
2 View the archived events.

Viewing activities for archived work order events

To view activities for archived work order events:

1 Select **Administration > Archived Events**.
2 Select the archived work order for which to view activities, and then click the **Activities** tab.
3 View the activities.

Viewing booked labor for archived work order events

To view booked labor for archived work order events:

1 Select **Administration > Archived Events**.

2 Select the archived work order event for which to view booked labor, and then click the **Book Labor** tab.
3 View the booked labor.

Viewing qualifications for archived work order events

To view qualifications for archived work order events:

1 Select **Administration > Archived Events**.
2 Select the archived work order event for which to view qualifications, and then click the **Qualifications** tab.
3 View the qualifications.

Viewing scheduled labor for archived work order events

To view scheduled labor for archived work order events:

1 Select **Administration > Archived Events**.
2 Select the archived work order event for which to view scheduled labor, and then click the **Schedule Labor** tab.
3 View the scheduled labor.

Viewing transactions for archived work order events

To view transactions for archived work order events:

1 Select **Administration > Archived Events**.
2 Select the archived work order event for which to view transactions, and then click the **Transactions** tab.
3 View the transactions.

Viewing additional costs for archived work order events

To view additional costs for archived work order events:

1 Select **Administration > Archived Events**.
2 Select the archived work order for which to view additional costs, and then click the Additional Costs tab.
3 View the additional costs.

Viewing booked vendor hours for archived work order events

To view booked vendor hours for archived work order events:

1 Select **Administration > Archived Events**.
2 Select the archived work order events for which to view booked vendor hours, and then click the **Book Vendor Hours** tab.
3 View the booked vendor hours.

Viewing comments for archived work order events

To view comments for archived work order events:

1 Select **Administration > Setup > Archived Events**.
2 Select the archived work order for which to view comments, and click the **Comments** tab.
3 View the comments.

Inspection management

Inspection management terms

The following terms will help you become familiar with the inspection management module's unique attributes:

Term	Definition
Inspection Point	The physical location on the piece of equipment to inspect Example: Examine the tires on a van every three months for tread wear. The inspection points are the front left tire, the front right tire, the rear left tire, and the rear right tire. Also, define inspection points at the category level so that the points apply to all equipment within the specified category. Example: Define inspection points for all vans rather than for a specific van.
Inspection Point Type	Groups of similar inspection points Example: Inspection point types for a vehicle are tires, brakes, headlights, etc. For a pipe, the point type could be a tee or weld.

Term	Definition
Inspection Aspect	The item(s) measured during an inspection. An inspection point can have multiple inspection aspects. Example: To check the oil aspect, measure the available oil against the dipstick. Another example is wall thickness.
Time Dependence	Indication of the trend for the inspection aspect over a period of time. The dependence can be either linearly increasing or linearly decreasing. Example: Tire tread decreases linearly over time. The mineral deposits in water pipes increase linearly over time, restricting water flow.
Inspection Point Conditions	Restrictions on inspecting a piece of equipment Example: When inspecting tire tread, the tires cannot be in motion, and they should be relatively clean from dirt and debris. Define general conditions, which apply to all aspects, or define conditions that are aspect specific.
Inspection Unit	The unit of measure for the inspection Example: Tire tread measurements may be in centimeters or fractional inches.
Inspection Method	The detailed description of how to carry out the inspection Example: The inspection method for checking tire tread is simple: insert the tire gauge between the tire treads and note the amount of tread on the tire.
Nominal Value	A standard against which to measure aspects Example: When a snow tire is new, its tread is 9/32 of an inch. The dealership recommends replacing the tire when the tread reaches 2/32. The nominal value would be 9/32 of an inch.
Extreme Value	Either a minimum or maximum value that defines the range of acceptable inspection readings Example: The minimum extreme value for tire tread is 1/32. The maximum value is 9/32. Tire tread measurements between these two values are acceptable.

Term	Definition
Critical Value	The value that indicates when to take action for an aspect Example: When tire tread reaches 2/32 of an inch, replace the tire.
Tolerance	The percentage amount above or below the critical value. The tolerance defines the safety limits, which are the values that signal the need for a new inspection. Example: A tolerance of 5 percent is set for tire tread. If a measurement is 5 percent above or below 2/32 of an inch (the critical value), initiate a new inspection.
Inspection Route Template	A sorted list of inspection points defined for a category (not a specific piece of equipment), outlining both the sequence and the content of an inspection Apply the template to any piece of equipment in a category. The system stores the template in the database library and attaches it to a work order when you need it. Example: Set up a route template for 12,000, 36,000, and 60,000-mile tune-ups for vehicles. When it is time to perform the tune-up, attach the tune-up template to a work order for a 1991 Ford Passenger Van.
Inspection Route for Work Order	An aspect-specific subset of an inspection route template that can associate a route with a specific work order

Term	Definition
Route Status	The status of an inspection route changes as the inspection moves through its lifecycle. This list describes the status codes. **Blank (no status)** Add or remove inspection aspects and points. **Unfinished** Enter the results of the inspection. **Ready** All results are entered in the system, and you can process the results. At this point, you cannot make any changes to the results. **Request Approval** Update the inspection point result type only. **Approved/Processed** The results are frozen, and you can update the inspection point result type only. **Canceled** User cannot make any changes, and the route is considered "dead.
Finding Code	Defines observations or measurements that you can only report qualitatively Example: It is difficult to gauge water color (clear, hazy, swampy). In this situation, set up finding codes for clear, hazy, and swampy.
Result Type	Indicates the validity of an inspection reading or result Example: When a finding is "Valid," include the value in system calculations. When a finding is "Invalid," do not include the value in calculations. When a finding indicates discontinuity, take a new reading.

Defining inspection codes

Define inspection codes before defining inspection parameters.

Defining inspection aspects

Define codes to represent specific aspects to measure. Measure one or multiple aspects against standards or gauges.

Although you can define additional time dependence codes on the **Installation Parameters** form, the system only uses the linearly increasing or decreasing codes for internal calculations.

You cannot delete inspection aspect codes after associating them with inspection points.

To define inspection aspects:

1. Select **Work > Inspections > Aspects**.
2. Click **New Record**.
3. Specify this information:

   Aspect
   Specify a unique code identifying the inspection aspect, and then enter a description of the aspect in the adjacent field.

   Time Dependency
   Select Linearly Increasing or Linearly Decreasing. The time dependence parameter is used to calculate when equipment will exceed safety margins.

   Class
   Specify the class of the aspect.

   Out of Service
   Select to indicate that the system does not use this aspect.

   Random Result
   Select to permit entry of measurements without requiring an associated inspection point.

4. Click **Save Record**.

Defining prompts for inspection aspects

To define prompts for inspection aspects:

1. Select **Work > Inspections > Aspects**.
2. Select the aspect for which to define prompts, and then click the **Prompts** tab.
3. Click **Add Prompt**.
4. Specify this information:

   Property
   Specify the code identifying the property, and then enter a description of the property in the adjacent field.
   Note: You can define property codes and descriptions by creating custom fields.

   Upload Column
   Specify the database column where the system stores prompt data.

Sequence
Enter a number indicating the order in which the prompt appears on the **Results** page of the **Monitored Data** form.

Default
Specify the default value that will automatically display on the **Monitored Data** form.

Validate
Specify the code identifying the formula the system uses for validation for the prompt.

Insert
Update
Specify the code identifying the formula the system uses to calculate values when you insert or update a record on the **Monitored Data** form. The system automatically populates the **Length** of the upload column.

Length
Specify the maximum number of characters allowed for prompt values.

Display
Select to indicate whether the system displays the prompt on the **Monitored Data** form.

Mandatory
Select to indicate whether the prompt is a required field on the **Monitored Data** form.
Note: If you select **Mandatory**, you must also select **Display**.

Print
Select to indicate whether the system prints the prompt on the reports. These reports are user-defined.

Uppercase
Select to indicate whether values for the prompt should be uppercase only.

Out of Service
Select to indicate that the system does not use this prompt on this aspect.

5 Click **Submit**.

Defining inspection point types

Inspection point types are groups of similar inspection points. Associating inspection points with point types simplifies data entry and analysis by standardizing descriptions.

Note: You cannot delete inspection point type codes after associating them with inspection points.

To define inspection point types:

1 Select **Work > Inspections > Point Types**.
2 Click **New Record**.
3 Specify this information:

Point Type
Specify a unique code identifying the inspection point type, and then enter a description of the point type in the adjacent field.

Class
Specify the class of the inspection point type.

4 Click **Save Record**.

Defining inspection methods

Inspections involve procedures or methods. With this feature, define the method of inspecting a particular aspect of a piece of equipment.

Note: You cannot delete inspection method codes after associating them with inspection points or inspection aspects.

To define inspection methods:

1 Select **Work > Inspections > Methods**.
2 Click **New Record**.
3 Specify this information:

Method
Specify a unique code identifying the inspection method, and then enter a description of the method in the adjacent field.

Class
Specify the class of the inspection method.

4 Click **Save Record**.

Defining inspection conditions

Inspection conditions are restrictions on inspections. The conditions differ with different equipment. For example, check the brake system of a vehicle only when it is stationary with the wheels removed. For other equipment, the weather or the temperature might restrict an inspection.

The system includes, on the work order printout, any conditions that must be met prior to the inspection.

To define inspection conditions:

1 Select **Work > Inspections > Conditions**.
2 Click **New Record**.
3 Specify this information:

Condition
Specify a unique code identifying the inspection condition, and then enter a description of the condition in the adjacent field.

Class
Specify the class of the inspection condition.

4 Click **Save Record**.

Defining inspection findings

Define codes that represent the results of an inspection. All of the codes defined on this form represent qualitative findings, not quantitative results. For example, a qualitative finding of a pipe inspection is "The pipe is leaking."

Associate one or more equipment classes with a specific inspection finding. For example, associate tire tread wear results with vehicle classes (four door sedans, two door sedans, vans, etc.).

Note: You cannot delete inspection findings codes after associating them with classes or inspection results.

To define inspection findings:

1 Select **Work > Inspections > Findings**.
2 Click **New Record**.
3 Specify this information:

Finding
Specify a unique code identifying the inspection finding, and then enter a description of the finding in the adjacent field.

General
Select to associate the finding with all equipment inspections. Unselect to associate specific equipment classes with the finding on the **Classes** page of the **Findings** form. In this situation, the finding is displayed in the list of values for the relevant equipment.
Note: You cannot select **General** if the finding is associated with one or more equipment classes.

4 Click **Save Record**.

Assigning equipment classes to findings

Assign equipment classes to a finding on the **Classes** page. The **Classes** page displays a list of equipment classes assigned to a particular finding. A finding may have multiple equipment class assignments, if it is not a **General** finding, which by default applies to all equipment classes.

For example, equipment with a class of HVAC may have different findings than equipment with a class of MOTOR. When you enter inspection results for a piece of equipment with a class of HVAC, only the **General** findings and those assigned specifically to the HVAC class will appear in **Finding** on any inspection result entry form.

Note: You cannot assign classes to a **General** finding.

To assign equipment classes to findings:

1 Select **Work > Inspections > Findings**.
2 Select the finding to which to assign an equipment class, and then click the **Classes** tab.

3 Click **Add Class**.
4 Specify this information:

   Class
   Specify the equipment class to which to assign the finding.

5 Click **Submit**.

Viewing monitored data

View equipment, locations, categories, and profiles for inspection-related details.

To view monitored data:

1 Select **Work > Inspections > Monitored Data**.
2 View the monitored data information.

Defining points

Define equipment inspection points, equipment inspection aspects, equipment inspection aspect points, and equipment inspection conditions. Finally, enter additional equipment inspection information and record equipment inspection results.

Defining equipment inspection points

Associate inspection points with specific equipment or categories. For example, when examining the tread wear on tires of a van, the equipment is the van, and the inspection points are the four tires. You can also associate inspection points with categories.

To define equipment inspection points:

1 Select **Work > Inspections > Monitored Data**.
2 Select the equipment, profile, or equipment category for which to define inspection points, and then click the **Points** tab.
3 Click **Add Point**.
4 Specify this information:

   Point Type
   Specify the inspection type to associate with the equipment or equipment category.

   Point
   Specify the inspection point number.

5 Click **Submit**.

   Note: You cannot remove point records that are indirectly associated with the monitored data object.

Defining equipment inspection aspects

Associate aspects with equipment or categories. For example, specify a category of vans or a particular van, and then associate it with the inspection aspect of measuring tire tread.

To define equipment inspection aspects:

1. Select **Work > Inspections > Monitored Data**.
2. Select the equipment, equipment class, or equipment category for which to enter inspection aspect information, and then click the **Aspects** tab.
3. Click **Add Aspect**. **Origin** is automatically populated.
4. Specify this information:

   Aspect
   Specify the inspection aspect with which to associate the monitored data object.

   Method
   Specify the inspection method for the aspect as necessary.

   Nominal Value
   Specify the starting value or normal value and unit of measure for measurements on this aspect. For example, if a new pipe's wall thickness is 3 mm, the nominal value is 3 and the unit of measure is mm.

   Min. Extreme
   Specify the minimum extreme value beyond the operating specifications for the aspect.

   Min. Critical
   Specify the lowest possible value for the aspect.

   Min. Tolerance
   Specify the minimum percentage of critical value for the aspect.

   Min. Std. WO
   Specify a standard work order to restore normal operating conditions when the minimum critical value is reached.

   Min. PM
   Specify a preventive maintenance work order to restore normal operating conditions when the minimum critical value is reached.

   Max. Extreme
   Specify the maximum extreme value beyond the operating specifications for the aspect.

   Max. Critical
   Specify the highest possible value for the aspect.

   Max. Tolerance
   Specify the maximum percentage of critical value for the aspect.

   Max. Std. WO
   Specify a standard work order to restore normal operating conditions when the maximum critical value is reached.

Max. PM
Specify a preventive maintenance work order to restore normal operating conditions when the maximum critical value is reached.

5 Click **Submit**.

Note: You cannot remove aspect records that are indirectly associated with the monitored data object.

Defining equipment inspection aspect points

Define minimum and maximum measurement values for the equipment. When inspection aspect measurements exceed acceptable values, the system automatically generates work orders to correct the problems. Inspection aspect point information is similar to the information on the **Aspect** page but is specific for an aspect/point combination.

To define equipment inspection aspect points:

1 Select **Work > Inspections > Monitored Data**.
2 Select the equipment, equipment class, or equipment category for which to enter aspect point information, and then click the **Aspect Points** tab.
3 Click **Add Aspect Point**.
4 Specify this information:

Aspect
Specify the inspection aspect with which to associate the aspect point.

Point
Specify the point with which to associate the aspect point. **Point Type** and the point type description are automatically populated.

Point Type
Specify the point type with which to associate the aspect point.

Method
Specify the inspection method for the aspect as necessary.

Nominal Value
Specify the starting value or normal value and unit of measure for measurements on this aspect point. For example, if a new pipe's wall thickness is 3 mm, the nominal value is 3 and the unit of measure is mm.

Min. Extreme
Specify the minimum extreme value beyond the operating specifications for the aspect point.
Note: Min. Extreme must be less than **Min. Critical**.

Min. Critical
Specify the lowest possible value for the aspect point.
Note: Min. Critical must be less than the **Nominal Value**.

Min. Tolerance
Specify the minimum percentage of critical value for the aspect point.

Min. Std. WO
Specify a standard work order to restore normal operating conditions when the minimum critical value is reached.

Min. PM
Specify a preventive maintenance work order to restore normal operating conditions when the minimum critical value is reached.

Max. Extreme
Specify the maximum extreme value beyond the operating specifications for the aspect point.
Note: **Max. Extreme** must be greater than or equal to the **Min. Extreme** and **Max. Critical**.

Max. Critical
Specify the highest possible value for the aspect point.
Note: **Max. Critical** must be greater than the **Nominal Value** and greater than or equal to **Min. Critical**.

Max. Tolerance
Specify the maximum percentage of critical value for the aspect point.

Max. Std. WO
Specify a standard work order to restore normal operating conditions when the maximum critical value is reached.

Max. PM
Specify a preventive maintenance work order to restore normal operating conditions when the maximum critical value is reached.

5 Click **Submit**.

Note: You cannot remove aspect point records that are indirectly associated with the monitored data object.

Copying aspect points

Copy existing aspect points associated with a source monitored data object to a selected destination monitored data object.

Note: You cannot copy aspect points if you do not have the proper permissions to access the **Aspect Points** page.

To copy aspect points:

1 Select **Work > Inspections > Monitored Data**.
2 Select the monitored data object to which to copy aspect points, and then click the **Aspect Points** tab.
3 Click **Copy Aspect Points**. **Destination** and the destination description are automatically populated.
4 Specify this information:

Source
Specify the source object. The source description and the list of aspect points directly associated with the source object are automatically populated.

5 Select each aspect point to be copied from the source object to the destination object.

Note: You must select at least one aspect point that is associated with the source object.

To select all the aspect points at once, select the **Select** check box. To unselect all the aspect points at once, clear the **Select** check box.

6 Click **Copy**.

Note: You cannot copy aspect points that are already associated with the destination object from the source object to the destination object.

Defining equipment inspection conditions

Specify conditions to meet before inspecting a piece of equipment. For example, conditions for a boiler inspection might include blocking all inlet and outlet valves, cutting the fires from the burners approximately 8 hours prior to the inspection, and cooling the inside of the boiler for 24 hours.

To define equipment inspection conditions:

1 Select **Work > Inspections > Monitored Data**.
2 Select the equipment, profile, or equipment category for which to define equipment inspection conditions, and then click the **Point Conditions** tab.
3 Click **Add Point Condition**. **Origin** is automatically populated.
4 Specify this information:

Point
Specify the point with which to associate the inspection condition and **Point Type**.

Condition
Specify the inspection condition.

Aspect
Specify the aspect with which to associate the inspection condition as necessary.
Note: Do not enter an **Aspect** when the **Condition** applies to the **Point**, regardless of what aspect is being measured.

5 Click **Submit**.

Note: You cannot remove point conditions records that are indirectly associated with the monitored data object.

You cannot create a new point condition with the same combination of **Point**, **Point Type**, and **Aspect** as an existing point condition.

Entering additional equipment inspection information

To enter additional equipment inspection information:

1 Select **Work > Inspections > Monitored Data**.

2 Select the equipment, profile, or equipment category for which to enter additional equipment inspection information, and then click the **Equipment Details** tab.

3 Specify this information:

Piping Class
Specify the piping class of the equipment as necessary.

Material Standard
Specify the material standard of the equipment as necessary.

Nominal OD
Specify a numeric value for the pipe's nominal outer diameter. Then, specify the unit of measure for the diameter by selecting **Inch** or **mm** (millimeters).

MAOP
Lining/Coating
Specify the relevant values according to the design specifications listed by the manufacturer or international standards organizations.

Variable 1
Text 5
Specify any additional information about the object.

4 Click **Save Record**.

Note: You cannot delete equipment details records that are indirectly associated via the equipment's category with the monitored data object. If the existing equipment details record is not directly associated with the monitored data object, click **Copy Category Data to Equipment** to directly associate the equipment details record from the details of the indirectly associated equipment details record.

Recording equipment inspection results

To record equipment inspection results:

Note: The fields below are fixed. Variable fields are displayed based on the selected aspect. Once you select the **Aspect** in the header, the prompts related to the aspect that were defined on the **Prompts** page of the **Aspects** form are displayed. Specify information for the prompts accordingly. The prompts with formulas as read-only attached at record insert or update are displayed.

1 Select **Work > Inspections > Monitored Data**.

2 Select the equipment, equipment class, or equipment category for which to record inspection results, and then click the **Results** tab.

3 Click **Add Result**.

4 Specify this information:

Aspect
Specify the aspect associated with the equipment.

Point
Specify the inspection point for which to record results.

Point Type
Specify the inspection point type for which to enter results.

Date
Specify the date of the inspection.

Confidence Rating
Select the confidence rating of the results.

Result
Select one of the following options:

- **Valid**
  Select to indicate that the system uses the result in trend analysis.

- **Invalid**
  Select to indicate that the system does not use the result in trend analysis.

- **Discontinuity**
  Select to indicate that the system restarts the trend analysis.

Work Order
Specify a work order with which to associate the results.

Completed
Select to indicate that all results are recorded and verified for this record. Information for this record is frozen.
Note: You cannot modify **Completed** results.

5 Click **Submit**.

Defining and associating inspection routes

Define inspection routes and then associate the routes with specific PM work orders.

Defining inspection routes

Follow a prescribed inspection route when performing an inspection. Define inspection routes for a category or for specific pieces of equipment.

Defining inspection route inspection points

Associate inspection routes with a particular sequence of inspection points. The options shown depend on whether you are defining an inspection route for equipment or a route template.

To define inspection route inspection points:

1 Select **Work > WO Planning > Routes**.
2 Select the inspection route for which to define inspection points, and then click the **Inspection Points** tab. **Sequence Number** is automatically populated with the next available integer based on the setting of the installation parameter INCRLINO.
3 Click **Add Point**.
4 Specify this information:

Equipment
Category
Specify the equipment or category that is first in the inspection route sequence.
Note: For regular inspection routes, you associate equipment inspection points. For route templates, you associate category inspection points.

Point Type
Specify the point type.

Level
Specify a level value when associating category inspection points. This value tells where the inspection point is found in the equipment structure. The equipment specified on the work order is a level 1. Any child equipment items (of the same type) are a level 2 or higher. If you leave this field blank, the existing equipment hierarchy are automatially searched (as defined on the **Equipment** form). Inspection points for all child equipment that match the specified class and category are associated independent of the level.

Point
Specify the point that is first in the inspection route sequence.

Sequence Number
Specify the sequence number of the inspection point.

5 Click **Submit**.

Associating inspection routes to work orders

Associate inspection routes with specific PM work orders after defining inspection routes and corresponding inspection points. Work order inspection points will also be created for the work order if at least one inspection route inspection point exists for the inspection route.

Note: In order to associate an inspection route with a work order, the work order must have a system status of Released.

Depending on your system configuration, **Route** and **Inspection Status** may not be displayed. Contact your system administrator for additional information.

To associate inspection routes with work orders:

1 Select **Work > Work Orders**.
2 Click **New Record**.
3 Enter the information necessary to define a work order.
4 Specify this information:

Route
Enter the inspection route to associate with the work order. If **Route** is a template route, you must also enter **Equipment**.

5 Click **Save Record**. **Inspection Status** is automatically populated with **`Unfinished`**.

Associating inspection points with work orders

Associate inspection points with a particular work order. Use this feature only when the work order has a system status of Released or Completed and when the inspection route has a status of Unfinished. Finally, enter the results of the inspection into the system after the employee performs the inspection.

To associate inspection points with work orders:

1 Select **Work > Work Orders**.
2 Select the work order with which to associate inspection points, and then click the **Inspections** tab.
3 Click **Add Point**.
4 Specify this Point Details information:

Point
Specify the point to associate with the work order.

Sequence Number
Specify the sequence number of the inspection point.

Method
Specify the inspection method.

Comments
Specify any additional comments.

Note: New WO Required is automatically selected if **Value** exceeds the upper or lower critical value specified for the aspect point.

5 Specify this Result Details information:

Date
Specify the date of the inspection.

Result
Specify the reliability code for the inspection (this code is also used in regression analysis). Choose one of the following options:

Option	Description
The measurement is acceptable	Select **Valid**.
The measurement is wrong	Select **Invalid**.
The inspection point has been changed so drastically that all previous inspection results for this point must be deactivated	Select **Discontinuity**.

Note: If you are entering result details for the work order, you must enter both **Date** and **Result**.

Value
Specify the value and unit of measure of the inspection.

Finding
Specify the inspection finding.

Inspected By
Specify the employee that performed the inspection.

Location
Specify the location of the inspection.

Standard WO
Specify the standard work order associated with the inspection.

New WO Required
Select to generate a work order based on the inspection results.

Class
Specify the class of the inspection.

Note
Enter any additional notes.

6 Specify this Linear Reference Details information:

From Point
Specify the starting or from point on the linear equipment record where the issue was found during the inspection.

Ref. Description
Specify a description for the **From Point**.

Geographical Ref.
Specify the geographical reference for the **From Point**.

To Point
Specify the ending or to point on the linear equipment record where the issue was found during the inspection.

Ref. Description
Specify a description for the **To Point**.

Geographical Ref.
Specify the geographical reference for the **To Point**.

7 If necessary, click **Create New WO** to generate the work order immediately. However, if the system status of the route is Approved, you cannot create a new work order. You must also select **New WO Required** to create new work orders. A new work order is created based on the details of the work order inspection point and inserts the work order number for **Work Order**.

Note: If you do not create a new work order by clicking **Create New WO**, a work order is automatically created after the inspection results are approved.

8 Optionally, click **Linear Location Details** to adjust detailed location information of linear equipment on inspections, using linear references associated to the equipment.

   See Identifying detailed location information for equipment on checklists on page 808.

9 Click **Save Record**.

Changing inspection statuses

After defining routes and corresponding inspection points and associating routes with specific work orders, change the statuses of selected work order inspections during different phases of the inspection process.

Note: In order to change the status of an inspection, the work order must have a system status of Released or Completed; have inspection points defined; have **Inspection Status** defined (usually with a Work Order Inspection Status of Unfinished); and not be part of an MS Project scheduling session.

To change inspection statuses:

1 Select **Work > Work Orders**.
2 Select the work order for which to change the inspection status, and then click the **Inspections** tab.
3 Select the inspection point for which to change the inspection status, and then click **Change Inspection Status**. **Work Order**, work order description, Route, route description, and **Current Status** are automatically populated.
4 Specify this information:

   New Status
   Specify the new status of the inspection.

5 Click **Submit**.

Adding inspection point comments

Add comments for work order inspection points.

To add inspection point comments:

1 Select **Work > Work Orders**.
2 Select the work order to associate with inspection points, and then click the **Inspections** tab.
3 Click **Inspection Comments**.
4 Click **Add Comment**.
5 Specify this information:

   Language
   Select the language in which to write the comment.

   Comments
   Enter the inspection point comments.

6 Optionally, select the **Print with Document** check box to print the comments with the work order.
7 Click **Save**.
8 Click **Close**.

Adding inspection custom fields

Add custom fields to work order inspections to further define inspections.

Note: Custom fields associated with a class defined for the inspection result entity (INRH) are displayed only when **Class** and **Class Org.** on the work order are equal to **Class** and **Class Org.** on a class record that is associated with INRH.

To add inspection custom fields:

1. Select **Work > Work Orders**.
2. Select the work order to associate with inspection points, and then click the **Inspections** tab.
3. Click **Inspection Custom Fields**.
4. Specify inspection custom fields as necessary.
5. Click **Submit**.

Adding inspection point custom fields

Add custom fields to work order inspection points to further define inspection points.

To add inspection point custom fields:

1. Select **Work > Work Orders**.
2. Select the work order to associate with inspection points, and then click the **Inspections** tab.
3. Select the inspection point for which to add custom fields, and then click **Point Custom Fields**.
4. Enter inspection point custom fields as necessary.
5. Click **Submit**.

Approving inspection results

The **Approve Inspection Results** form consists of two pages: the **Parameters** page and the **Preview** page. On the **Parameters** page, you can define the selection criteria for locating the inspection points to process in the batch. The **Preview** page allows you to preview all of the inspection points selected for processing based on the selection parameters, enabling you to select or unselect inspection points to include in the batch generation process before you actually process the inspection point batch. You can select or unselect individual inspection points for processing, or you can select or unselect all inspection points for processing.

Note: In order to approve inspection points, you must have the necessary authorizations to the **Approve Inspection Result** form and the **Preview** page, and you must enter a specific organization.

To approve inspection results:

1. Select **Work > Process > Approve Inspection Results**.
2. Specify this information:

   Organization
   Specify the organization to which the inspection point belongs if you use multi-organization security.

Inspection Status
Specify the status to determine at which point the batch approval of work order inspection points is to be performed.
Note: When the system is prompted to perform the batch approval of work order inspection points, work order inspection points that are associated with a work order whose inspection status is equal to the status specified here will be included.

Route
Work Order
PM
Equipment Type
Equipment
Location
Department
Equipment Class
Category
Specify one or all of these selection parameters for generating the inspection point batch.

3 Click **Process**.
4 Select each inspection point you wish to approve in the inspection point batch as necessary, or you can unselect each inspection point you do not wish to approve in the inspection point batch as necessary.

   Note: To select all the inspection points at once, select the **Select** check box. To unselect all the inspection points at once, clear the **Select** check box.

5 Click **Approve**. The Inspection Status of any affected work orders is updated. If any errors occur, then the record's visual attribute is changed to red, and an error message is displayed in the Error Message column of the Preview list.

   Note: If you have set up the system to require an electronic signature to authorize status changes to work order headers or to create work orders, the eSignature popup is displayed once for every inspection point in the inspection point batch for which there is a status change or a new work order is created.

Defining formulas

Define generic formulas to establish any calculation that produces a minimum or maximum critical value for an inspection point aspect combination or any calculation with entered monitored data, and then identify where those formulas are executed. First, define the actual formula, and then define parameters used within the formula. Formulas with SQL statements defined for the parameters used in the formula are calculated.

To define formulas:

1 Select **Work > Inspections > Formulas**.
2 Click **New Record**.
3 Specify this information:

Formula ID
Specify a unique code identifying the formula, and then enter a description of the formula in the adjacent field.

Class
Specify the class of the formula.

Formula
Specify the actual formula using codes to identify parameters. For example, to calculate minimum allowable thickness (MAT) for a cylindrical shell using design pressure (DP), actual outside diameter (OD), and nominal design stress (NDS), enter the following equation:

```
$MAT = $DP * $OD/ (2 * $NDS + $DP)
```

Note: All parameters must have a dollar sign prefix ($).

To create parameters immediately, click **Verify Parameters**. It is verified that the parameters exist. If they do not exist, you are asked if you want to create a new parameter. Click **Yes**. A new parameter is inserted for the formula and updates the Parameters list on the **Parameters** page.

To perform a validation of a formula, click **Validate Formula**.

Depending on your system configuration, **Validate Parameters** and **Validate Formula** may not be displayed. Contact your system administrator for additional information.

4 Click **Save Record**.

Associating parameters with formulas

After defining formulas, associate parameters used within the formulas.

Note: You can also associate parameters with formulas on the **Record View** page by clicking **Validate Parameters**.

To associate parameters with formulas:

1 Select **Work > Inspections > Formulas**.
2 Select the formula for which to associate parameters, and then click the **Parameters** tab.
3 Click **Add Parameter**.
4 Specify this information:

Parameter
Specify the parameter with which to associate the formula.

Formula UOM
Specify the unit of measurement of the formula.

5 Click **Submit**.
Note: Click **Validate Parameter** to check the accuracy of the SQL statement.

Editing formula parameters

Edit details of an existing formula parameter.

To edit formula parameters:

1 Select **Work > Inspections Formulas**.
2 Select the formula for which to edit parameters, and then click the **Parameters** tab.
3 Select the parameter to edit, and then click **Edit Parameter Details**.
4 Edit the parameter details as necessary.
5 Click **Submit**.

Calibration management

Understanding calibration management

Calibration is the process of comparing the performance of a piece of equipment to a known standard of accuracy. Calibration results in a measurement that documents whether the equipment deviates from the known standard of accuracy or is compliant with the standard. If the equipment is not in compliance with the standard, calibration may also include adjusting the equipment in a manner that results in the instrument's compliance with the known standard.

The accuracy of electronic and/or mechanical components within equipment shifts over time, which affects the quality, reliability, health, and safety of component output. Therefore, some instruments/equipment must be calibrated at regular intervals to ensure their accuracy.

Define calibration data for equipment categories, assets, systems, and positions. After defining the test point data, associate equipment work orders and PM work orders. Creating PM work orders enables you to generate regularly scheduled jobs for equipment requiring calibration. You can also create regular calibration work orders as necessary. Designate calibration work orders by selecting the calibration work order type when creating a work order.

See Defining regular work order headers on page 775.

Calibrate equipment as necessary, and then enter the calibration data and results. Statuses are assigned to calibration work orders based on the test point measurement results.

Run calibration reports for generating, tracking, and maintaining calibration data for your records.

Understanding calibration loops

A loop is a series of one or more instruments. Typically, the individual instruments in a loop are not calibrated; the loop is calibrated as one unit. Therefore, you must be able to measure the output of a loop whenever you apply a known standard as the loop's input.

Designate an instrument as a loop on the **Calibration** tab of the equipment record.

See Defining Calibration Test Point Data on page 1043.

Note: Depending on your system configuration, the system may not display **Loop** on the **Calibration** tab of the **Categories**, **Assets**, **Positions**, or **Systems** forms. Contact your system administrator for more information.

Link instruments to the loop equipment through parent-child relationships in a hierarchy. All instruments in a loop must be linked directly as children of the loop equipment in an equipment hierarchy.

See Creating equipment hierarchies on page 385.

Within the equipment hierarchy of the loop, designate the parent equipment as a Loop and designate the child equipment in the loop as an Instrument on the **Calibration** tab of the equipment record.

See Defining Calibration Test Point Data on page 1043.

If you create a calibration work order for a loop, the loop is displayed on the work order header, and the test points defined on the loop are copied to the work order. When calibrating loops, the calibration standard is often applied to the input loop instrument. The reading is then taken at the output loop instrument. The system creates test points on the work order for instruments in the loop that are defined as type Reading taken from.

See Entering Calibration Results on page 1047.

Defining calibration test point data

Define test point data for assets, positions, and systems or for equipment categories.

Define calibration data for equipment categories to associate calibration data at the category level. The system applies the calibration data to all equipment within the specified category. For example, define calibration test points for all pressure indicators rather than having to enter the data individually for each pressure indicator.

The system copies calibration and test point data entered for a piece of equipment to the **Calibration** page of the **Work Orders** form when a calibration work order for the piece of equipment is released.

Step 1: Define basic calibration data

To define basic calibration data:

1. Select **Equipment > Assets**.

   Select **Equipment > Positions**.

   Select **Equipment > Systems**.

   Select **Equipment > Setup > Categories**.

   Select **Equipment > Equipment Configuration > Equipment Configurations**.
2. Select the asset, position, system, or category for which to define calibration data, and then click the **Calibration** tab.
3. Specify this information:

Instrument
Loop
Select to indicate whether the piece of equipment is an individual calibration instrument or is part of a calibration loop.

Instrument Type
Choose one of the following options if the instrument is within a loop:

- **Standard applied to**
Select to indicate the instrument is a point in the loop to which a standard is applied.

- **Accessory**
Select to indicate the instrument is secondary or subordinate within the loop.

- **Reading taken from**
Select to indicate the instrument is a point in the loop at which calibration readings are taken.

Test Point UOM
Specify the unit of measure for the test point.

Device Tolerance
Specify the range of the device tolerance for the piece of equipment, e.g., 10 to 20. The values entered indicate the desired range for the calibration measurement and can be either an absolute or a percentage.

Alert Tolerance
Specify the alert tolerance for the piece of equipment. The system interprets the value entered as a percentage.

Precision
Specify the precision of the instrument.

Output Range
Specify numeric values indicating the potential range of the device output, e.g., 200 to 500.

Default Set
Specify a value identifying the calibration data and test points as the default set of test points for the equipment. Designate the set of test points as the default set to indicate which set of test points to copy to manually created calibration work orders. The system also copies the default set when creating PM equipment records.

P&ID Drawing
Specify the process and instrument diagram drawing number.

P&ID No
Specify the process and instrument diagram number.

Output UOM
Specify the unit of measure for the device output.

Choose one of these options to indicate the type of value for the specified **Device Tolerance**:

Percentage
Select to apply the values entered in **Device Tolerance** as a percent value.

Absolute
Select to apply the values entered in **Device Tolerance** as an absolute value.

Increment
Specify the increment that the instrument can read.
Note: If you enter an Increment for a test point, the **Device Reading** that you enter on the **Calibration** page of the **Work Orders** form must be a multiple of the specified Increment when entering calibration results. For example, if you enter an increment of 5, you must enter a **Device Reading** that is a multiple of 5, such as 5, 10, 15, 20, 25, etc.

Device Range
Specify numeric values indicating the potential range for the device, such as 250 to 450.

Process Tolerance
Specify the range of the process tolerance, such as 10 to 20.

Process Range
Specify the range of the process, such as 150 to 600.

S.O.P.
Specify the standard operating procedure for calibration.

4 Click **Save Record**.

The system automatically populates **Next Cal. Due** with the date of the next calibration work order for the piece of equipment.

Note: The system does not display **Next Cal. Due** on the **Calibration** page of the **Categories** and **Equipment Configurations** forms.

Update calibration data as necessary. The system applies new data entered in **Test Point UOM** and **Device Tolerance** to work order test points created after you make the update. The system does not update the data on existing test point records.

Right-click and then select **View Calibration Results** to view calibration results for the equipment record.

If you are defining calibration data for a category, click **Update Equipment** and **Update Equipment Configurations**. The system copies the calibration data to all equipment records within the category. Prior to copying the calibration data, the system deletes any calibration data for this category from related equipment records.

Note: The system does not display **Update Equipment** and **Update Equipment Configurations** on the **Calibration** page of the **Equipment Configurations**.

Step 2: Define or import test point data

Defining test point data

To define test point data:

1. Select **Equipment > Assets**.

   Select **Equipment > Positions**.

   Select **Equipment > Systems**.

   Select **Equipment > Setup > Categories**.

   Select **Equipment > Equipment Configuration > Equipment Configurations**.
2. Select the asset, position, system, category, or equipment configuration for which to define test point data, and then click the **Test Points** tab.

   The system automatically populates **Sequence** and **Device Tolerance** if available.
3. Click **Add Test Point**.
4. Specify this information:

   Set
   Specify a value to identify the test point set.

   Sequence
   Specify a value identifying the sequence in which the test point is calibrated.

   Test Point
   Specify the point at which to test the piece of equipment, and then enter the unit of measure for the test point in the adjacent field.

   Output
   Specify the test point output if testing is performed for dual units of measure, and then enter the unit of measure of the output in the adjacent field.

   Device Tolerance
   Specify the range of the device tolerance for the piece of equipment, e.g., 10 to 20. The values entered indicate the desired range for the calibration measurement and can be either an absolute or a percentage. By default, the system reads these values as percentages.

   Comments
   Enter comments for the test point.

5. Click **Submit**.
   Note: if you delete a test point, the system does not update the sequence numbers of other test points.

   To modify an existing test point, select the test point to modify, and then edit fields as necessary. You can update **Test Point**, **Device Tolerance**, and **Comments** for existing test points. You cannot update **Sequence**.

   If you are defining test points for a category, click **Update Equipment** and **Update Equipment Configurations**. The system copies the test points to all equipment records within the category. Prior to copying the test points, the system deletes any test points for this category from related equipment records.

Importing test point data

Test point data can be imported from existing equipment, categories, or work orders to save time if test points are duplicated across similar instruments or calibration records.

Note: Test points cannot be imported from or to more than one record simultaneously.

Test points can be imported to a work order from an asset, position, system, category record, or work order. However, test points cannot be imported to an asset, position, system, or category from a work order.

When copying test points from one work order to another work order, the system will not copy the **Device Reading**, **Deviation**, or test point **Status**. No "As Left" data will be copied.

If one or more imported test points already exist on the destination record, the system displays a warning message and re-sequences the imported test points to avoid duplication. You may then make any corrections if necessary.

Records that do not have any associated test points will not be available to import from. Records whose organization is not associated to the user will not be available to import from.

When importing from a work order to a work order, records whose organization does not match the destination work order organization will not be available to import from.

Categories, assets, positions, systems, and work orders whose **Precision** is less than the **Precision** of the destination record will not be available to import test points from **Precision**.

When importing test points to a work order from a category or equipment, the system always converts any test point tolerances defined as **Percentage** to absolute values for display on the **Calibration** page of the **Work Orders** form. This conversion is not necessary when importing test points from another work order since the system will have already converted the work order test point tolerances to absolute values.

Entering calibration results

Enter calibration results for work orders to report calibration data for the actual work performed while calibrating a piece of equipment.

Test point data for equipment is copied to the **Calibration** tab of the **Work Orders** form for any calibration work order once it is released.

See Defining calibration test point data on page 1043.

If you need to enter calibration results for a work order that you did not specify as being a calibration work order, you must manually enter the test point data.

If a work order is a multiple equipment work order, you can also enter calibration test points and data for child equipment on the work order.

The calibration results you enter determine the **Calibration Status** of the work order, as well as the **Status** for each test point.

Note: Generate a calibration record report for a work order as necessary before beginning the calibration process.

To enter calibration results:

1 Select **Work > Work Orders**.

2 Select the work order for which to enter calibration results, and then click the **Calibration** tab.

Calibration Status is automatically populated with the status of the calibration and **S.O.P.**, **P&ID No.**, **Precision**, **Increment**, **P&ID Drawing**, and **Alert Tolerance** based on the information entered on the**Calibration** tab of the equipment record listed on the work order. **Last Calibrated** is automatically populated with the completed date for the last calibration work order for the piece of equipment and **Calibration Interval** with the interval specified on the PM work order.

3 Select the test point for which to enter calibration results. If the calibration work order is released, **Equipment**, **Sequence**, **Equipment Org.**, **Test Point**, and the unit of measure for the test point are automatically populated based on the test point data entered for the equipment listed on the work order.

4 Specify this information:

Equipment
Choose one of the following options if the work order is a multiple equipment work order:

Option	Description
All Equipment	Specify All Equipment to create the test point for each of the **Related Work Orders** associated with all of the equipment records on the **Calibration** tab of the **Work Orders** form. **Note:** If the work order is a multiple equipment type work order and you click **Add Test Point** without selecting an existing test point, **Equipment** is automatically populated with All Equipment. If you select an existing test point and then click **Add Test Point** on a multiple equipment work order, **Equipment**, **Equipment Description**, **Equipment Org.**, **Related Work Order**, **Test Point UOM**, **Standard UOM**, and **Output UOM** are automatically populated from the selected record. If All Equipment is selected for **Equipment**, then **Device Tolerance**, **Device Reading**, and **Status** are protected, because you cannot distribute these values to all equipment on the work order.
WO Header Equipment	Specify WO Header Equipment to create the test point for each equipment record on the **Calibration** tab of the **Work Order** on the work order header.
Equipment	Specify a specific Equipment record to create the test point for the **Related Work Order** associated with the selected Equipment. See Adding Equipment to Work Orders to Distribute Work Order Costs on page 789.

Not Applicable
Select to indicate the test point is no longer applicable for the calibration process.

Test Point
Specify the test point value for the calibration, and then enter the unit of measure for the test point in the adjacent field.

5 Specify the following in the **As Found** section of the form to enter the initial calibration results:

Standard
Specify the standard value for the calibration, and then enter the unit of measure for the standard in the adjacent field.

Device Tolerance
Specify the range of the device tolerance.

Output
Specify the value of the test point output, and then enter the output's unit of measure in the adjacent field.

Device Reading
Specify the reading of the device.

Standard is subtracted from the **Device Reading** to determine the **Deviation**. **Status** is populated based on the calibration results you enter.

6 Specify the following in the **As Left** section of the form if re-calibration is required:

Note: Click **Copy to As Left** to copy the data from the **As Found** section to the **As Left** section, and then modify the fields as necessary.

Specify the calibration **Standard**, **Output**, **Device Tolerance**, and **Device Reading**. **Standard** is subtracted from the **Device Reading** to determine the **Deviation**. **Status** is populated based on the calibration results you enter.

7 Click **Submit**.

Note: To add a new test point, click **Add Test Point**. Enter data as necessary, and then click **Submit**.

If you delete a test point for which the test point **Equipment** is associated with a MEC work order, the test point is removed from the **Related Work Order**.

The work order's calibration status is calculated based on the status of each test point. For multiple equipment work orders, the calibration status of the parent work order considers the test points for all of its related work orders.

To run a calibration record report, click **Run Calibration Report**.

Viewing loop instruments for a work order

View loop instruments for a work order containing an object that is a loop to access a list of all the instruments within the loop.

Note: The system activates **View Loop Instruments** if the work order contains a loop.

See Understanding Calibration Loops on page 1042,

To view loop instruments for a work order:

1 Select **Work > Work Orders**.
2 Select the calibration work order for which to view a loop, and then click the **Calibration** tab.
3 Click **View Loop Instruments**.
4 View the loop instrument information.

   Note: If the work order for which you are viewing loop instruments is a multiple equipment work order, then the system displays the loop instruments associated with the selected test point **Equipment**, because more than one loop can be calibrated on a multiple equipment work order.

5 Click **Close**.

Defining standards used for calibration

Define the specific piece of equipment used as a standard for the selected work order. The Standards Used popup displays a list of parts that serve as potential parts from which to specify the piece of equipment and/or lot used for the calibration.

To define standards used for calibration:

1 Select **Work > Work Orders**.
2 Select the work order for which to define standards used during calibration, and then click the **Calibration** tab.
3 Click **Standards Used**.

   The Standards Used popup automatically displays parts for which you specified Calibration Standard and to which you associated the work order's equipment record on the **Parts Associated** tab of the Assets, Positions, or Systems form.

   See these references:

   - Creating parts on page 525
   - Associating parts on page 327

   Note: If the work order for which you are defining standards used is a multiple equipment work order, then the system displays the parts used as calibration standards associated with the selected test point equipment record.

4 Select the part for which to specify equipment and/or lot information. The system automatically populates **Part**and **Part Org.**
5 Specify this information:

   Equipment
   Specify the equipment record used for calibration.
   Note: The system displays equipment records to which you associated the selected part via the **Part** field on the **Record View** tab of the Assets, Positions, or Systems form.

   See these references:

   - Defining assets on page 345
   - Defining positions on page 351
   - Defining systems on page 358

If the work order for which you are defining standards used is a multiple equipment work order, you can associate a test point with a specific equipment or with all equipment on the work order.

Lot
Specify the lot of the part record.

6 Click **Submit**.

Note: To add a standard, click **Add Standard**. Enter the **Part**, **Equipment**, and **Lot**, and then click **Submit**.

Viewing calibration results

To view calibration results:

1 Select **Work > Calibration Results**.
2 View the calibration information.

Project management

Defining initial project information

Define initial project information before using the project management module.

Defining budget codes for projects

Define budget codes to be associated with projects. Designate default budget codes.

Note: The system only displays**Cost Area**, **Cost Center**, and **Code of Accounts** if the installation parameter PROJTRCK is ON. **Cost Area**, **Cost Center**, and **Code of Accounts** are linked to entities for which you must define user codes. Contact your system administrator for more information.

To define budget codes for projects:

1 Select **Work > Projects > Project Budgets**.
2 Click **New Record**.
3 Specify this information:

Project Budget
Enter a unique code identifying the budget, and then enter a description of the budget in the adjacent field.

Class
Enter the class of the budget. The system automatically populates**Class Org.**

Cost Area
Select the cost area of the budget.

Default
Select if the budget is a default budget.
Note: You can link default budgets to projects on the **Project Budgets** form.

See Linking Default Budget Codes with Projects on page 1056.

Cost Center
Select the cost center of the budget.

Code of Accounts
Select the code of accounts for the budget.

4 Click **Save Record**.

Defining shutdown codes

Define shutdown codes, and then define equipment to service during shutdowns. Your organization might have equipment that can only be serviced when it is completely out of service or shut down. A shutdown can represent either a part of the facility or a type of shutdown to be performed.

To define shutdown codes:

1 Select **Work > Projects > Shutdowns**.
2 Click **New Record**.
3 Specify this information:

Organization
Enter the organization to which the shutdown belongs if you use multi-organization security.

Shutdown
Enter a unique code identifying the shutdown, and then enter a description of the shutdown in the adjacent field.

Class
Enter the class of the shutdown. The system automatically populates **Class Org.**

4 Click **Save Record**.

Associating standard work orders, equipment, and projects with shutdown codes

Associate standard work orders, specific equipment, and project budgets with the shutdown identification codes. For example, create a shutdown identification code for each station, and then associate each piece of equipment in the station with that identification code.

Note: You cannot associate standard work order templates with shutdown codes.

To associate standard work orders, equipment, and projects with shutdown codes:

1 Select **Work > Projects > Shutdowns**.
2 Select the shutdown code with which to associate a standard work order and equipment, and then click the **Equipment** tab.
3 Click **Add Equipment**.
4 Specify this information:

   Equipment
   Specify the equipment to associate with the shutdown code. The system automatically populates **Equipment Org.**and **Equipment Type**.

   Standard WO
   Specify the standard work order describing the work to be performed when the shutdown occurs.

   Project Budget
   Specify the budget code to be referenced on the shutdown work order.

5 Click **Submit**.

Defining parent and child projects

Define parent projects and create as many child projects as needed. Define parent projects and budget codes before defining child projects. For example, if the parent project is building a new road, set up a project for the road construction, and then define individual steps for each child project, such as surveys, excavation, infrastructure, paving, seal coating, and painting.

For each project you create, include a budget amount. Once the project is approved, the system saves the budget amount. Update the amount later if the budget changes. The system retains the original value and stores revision information against that amount. Any changes to labor and material estimates for child projects are validated against the parent project budget. If estimates exceed the set budget, the system displays a warning message.

Defining project basics

Define project basics by entering basic project information. Define parent projects and budget codes before defining child projects. When you specify a parent project for a child project, the budget records of the parent project are inserted on the child project.

Note: Estimate to Complete indicates the calculated sum of the values displayed for **Estimate to Complete** for each budget entered on the **Budgets** page of the **Projects** form.

See Associating Predefined Budget Codes with Projects on page 1055.

Estimate to Complete is automatically updated any time **Estimate to Complete** is updated manually or automatically for any budget on the **Budgets** page.

To define project basics:

1 Select **Work > Projects > Projects**

2 Click **New Record**.

3 Specify this information:

Organization
Specify the organization to which the project belongs if you use multi-organization security.

Project
Specify a unique code identifying the project, and then enter a description of the project in the adjacent field.

Coordinator
Specify the employee code of the project coordinator.

Parent Project
Specify a parent project if applicable.
Note: You can only specify a parent project while defining a new project. Once the project is saved, you are not allowed to add a parent project.

Estimated Start Date
Specify the intended starting date for the project.

Estimated End Date
Specify the intended ending date for the project.

Shutdown
Specify a shutdown identification code to associate with the project if the project requires the shutdown of equipment.

Status
Specify the status of the project.
Note: All projects start with a **Status** of Awaiting Approval.

Actual Start Date
Specify the actual starting date for the project.

Actual End Date
Specify the actual ending date for the project.

Class
Specify the class of the project.
Note: **Capital Planning Request**, **Capital Planning Request Org.**, **Project WOs**, and **Shutdown WOs Created** are automatically populated for projects created on the **Capital Planning Requests** form.

Current Budget
Specify the total budget amount for the project. Budgets of child projects do not roll up to the budget of the parent project. The estimated cost of completing the project is displayed in **Estimate to Complete** and the total budget for the project is approved in **Budget Approved**.

Budget Date
Specify the date the budget was established.
Note: You must enter a **Budget Date** that is before or equal to the current date.

Labor
Specify the estimated internal labor costs.

Services
Specify the estimated services costs.

Hired Labor
Specify the estimated hired external labor costs.

Stock Items
Specify the estimated stock material costs.

Direct Purchases
Specify the estimated amount of money needed to purchase materials not normally stocked in house.

Tool Cost
Specify the estimated tool usage costs.

4 Click **Save Record**.

Note: Depending on your system configuration, an electronic signature may be required to create a work order. The eSignature popup is displayed once regardless of the number of shutdown work orders created.

To generate shutdown work orders associated with a project, click **Create Shutdown WOs**.

To close open work orders associated with a project, click **Close WOs**.

To detach detachable work orders associated with a project, click **Detach WOs**.

To delete work orders associated with a project, click **Delete WOs**.

Associating predefined budget codes with projects

Associate one or more budget codes with each defined project. Also, define the budget amount for the project. Define child projects, or sub-projects, only after finishing this procedure. Child projects share the budget codes of the parent project.

Note: If you do not associate the budget of a shutdown work order with the project, the system does not create the shutdown work order when you click **Create Shutdown WOs** on the **Projects** form.

See Generating Shutdown Work Orders on page 1059.

The system monitors the expenditures for parts and labor for the project and any child projects, and it breaks the budget amount of the main project down into a budget amount for each subproject. It validates these expenditures against the budget amount. Regard the budget values defined here as sub-budget values, in comparison with the budgets defined on the **Projects** form. After the project is complete, the system freezes all associated budget items.

Note: You do not need to create project budget codes for child projects.

To associate predefined budget codes with projects:

1 Select **Work > Projects > Projects**.

2 Select the project for which to associate budget codes, and then click the **Budgets** tab.

3 Click **Add Budget**.

4 Specify this information:

Budget
Enter a budget code for the project. The system automatically populates the budget description, **Class**, **Class Org.**, **Cost Area**, **Cost Center**, and **Code of Accounts** from the project budget code.

Budgeted Amount
Enter the total budgeted amount for this project.
Note: You can associate additional budget codes with a project throughout the project life cycle; however, you cannot delete codes after assigning them to a work order.

You may change **Budgeted Amount** at any time.

Estimate to Complete
Enter the estimated expenditures remaining for this project for the selected budget.
Note: When creating an initial budget for the selected budget code, the system automatically populates **Estimate to Complete** with the value entered in **Budgeted Amount**. If applicable, the system automatically subtracts the value of any planned, on order, actual, and invoice difference costs that may be incurred against this project/budget from the value entered in **Budgeted Amount**, and then populates **Estimate to Complete** with the calculated value. Modify the value of **Estimate to Complete** as necessary.

Additionally, the system calculates the sum of all the values entered for **Estimate to Complete** for each budget on the **Budgets** page of the **Projects** form and then automatically populates **Estimate to Complete** on the project record with this value.

See Defining Project Basics on page 1053.

5 Click **Submit**.

Linking default budget codes with projects

Link default budget codes with a project to retrieve all budget codes for which **Default** is selected on the **Project Budget Codes** form.

You can define budget codes as default codes on the **Project Budget Codes** form.

See Defining Budget Codes for Projects on page 1051.

To link default budget codes with projects:

1 Select **Work > Projects Projects**.

2 Select the project for which to associate default budget codes, and then click the **Budgets** tab.

3 Click **Add Default Budgets**.

Granting purchasing authorization permissions for projects

Authorize users to create requisitions and/or purchase orders for a specific project. If you add any authorized users to a project, no other users can create requisitions and/or purchase orders for the project.

If you do not add any authorized users to a project, any user with the appropriate group-level permissions can create requisitions and purchase orders for the project.

Select **Approver** to enable a user to approve purchase requisitions and purchase orders for the project. A user can only approve purchase requisitions and purchase orders for the project if you selected **Approver** for the user and if the user has the proper authorizations set on the **Status Change Authorizations** form. If you specify any authorized users as approvers for a project, no other users can approve requisitions and/or purchase orders for the project.

If you add authorized users to the project but do not select **Approver** for any of them, the system does not allow any users to approve purchase requisitions or purchase orders for the project.

Additionally, if the user has been granted proper authorization on the **Status Change Authorizations** form, selecting **Approver** for a user also enables them to create, update, and delete budget code information on the **Budgets** tab of the **Projects** form.

Click **Add Buyers** to retrieve a list of all users set up as buyers for the organization of the project. The system retrieves all users set up as buyers, adds each buyer to the User Authorization list, and automatically selects**Approver** for each user. You can unselect **Approver** for each user as necessary.

See the *Infor EAM System Administrator's Guide*.

To grant purchasing authorization permissions for projects:

1. Select **Work > Projects Projects**.
2. Select the project for which to add authorized users, and then click the **User Authorization** tab.
3. Click **Add User**.
4. Specify this information:

   User
   Specify the user to add as an authorized user for the project.

   Approver
   Select to indicate that the authorized user can approve purchase requisitions and purchase orders for the project.

5. Click **Submit**.

Viewing project hierarchy

View all child projects, or sub-projects, related to a parent project.

To view project hierarchy:

1. Select **Work > Projects** .
2. Select the project for which to view hierarchy, and then click the **Sub-projects** tab.

3 View the sub-projects related to the project.

Creating project work orders

Create project work orders by creating new work orders in the work management module or by associating work orders created previously with a project.

Creating new project work orders

After defining the project and any sub-projects, use the **Work Orders** form to create the appropriate work orders. To link the work order to a specific project, enter a project budget on the work order.

To create new project work orders:

1 Select **Work > Work Orders**.
2 Click **New Record**.
3 Enter information into the fields as necessary.
   See Creating Regular Work Orders on page 775.
4 Specify this information:

   Project-Budget
   Specify the project and budget of the work order.

   Department
   Specify the department of the work order.

5 Click **Save Record**.

Associating predefined budget codes with projects

Associate one or more budget codes with each defined project. Also, define the budget amount for the project. Define child projects, or sub-projects, only after finishing this procedure. Child projects share the budget codes of the parent project.

Note: If you do not associate the budget of a shutdown work order with the project, the system does not create the shutdown work order when you click **Create Shutdown WOs** on the **Projects** form.

See Generating Shutdown Work Orders on page 1059.

The system monitors the expenditures for parts and labor for the project and any child projects, and it breaks the budget amount of the main project down into a budget amount for each subproject. It validates these expenditures against the budget amount. Regard the budget values defined here as sub-budget values, in comparison with the budgets defined on the **Projects** form. After the project is complete, the system freezes all associated budget items.

Note: You do not need to create project budget codes for child projects.

To associate predefined budget codes with projects:

1 Select **Work > Projects > Projects**.
2 Select the project for which to associate budget codes, and then click the **Budgets** tab.
3 Click **Add Budget**.
4 Specify this information:

Budget
Enter a budget code for the project. The system automatically populates the budget description, **Class**, **Class Org.**, **Cost Area**, **Cost Center**, and **Code of Accounts** from the project budget code.

Budgeted Amount
Enter the total budgeted amount for this project.
Note: You can associate additional budget codes with a project throughout the project life cycle; however, you cannot delete codes after assigning them to a work order.

You may change **Budgeted Amount** at any time.

Estimate to Complete
Enter the estimated expenditures remaining for this project for the selected budget.
Note: When creating an initial budget for the selected budget code, the system automatically populates **Estimate to Complete** with the value entered in **Budgeted Amount**. If applicable, the system automatically subtracts the value of any planned, on order, actual, and invoice difference costs that may be incurred against this project/budget from the value entered in **Budgeted Amount**, and then populates **Estimate to Complete** with the calculated value. Modify the value of **Estimate to Complete** as necessary.

Additionally, the system calculates the sum of all the values entered for **Estimate to Complete** for each budget on the **Budgets** page of the **Projects** form and then automatically populates **Estimate to Complete** on the project record with this value.

See Defining Project Basics on page 1053.

5 Click **Submit**.

Generating shutdown work orders

Generate shutdown work orders, directly from the **Project** form, if the nature of your project requires that you take equipment out of service. A shutdown work order is no different than any other work order with the exception that you create shutdown work orders in the **Project** form and specify a shutdown identification code for the project.

After creating shutdown work orders, you can view them in the List View of the **Work Order** form. Newly created shutdown work orders contain a system status of Released or the equivalent to that system status based on your system configuration.

Note: The project status must be approved and a shutdown identification code must be specified in **Shutdown** to create shutdown work orders.

See Defining Shutdown Codes on page 1052.

Before creating a shutdown work order, you must associate the budget code of a shutdown work order with the project on the **Budgets** page of the **Project** form.

See Associating Predefined Budget Codes with Projects on page 1055.

To generate shutdown work orders:

1 Select **Work > Projects Projects**.
2 Select the project for which to generate shutdown work orders, and then click the **Record View** tab.
3 Click**Create Shutdown WOs**.

   Note: You may only create shutdown work orders for a project once. If Shutdown WOs is any number other than 0, the system does not allow you to create shutdown work orders.

Viewing all work orders associated with projects

View all work orders related to projects. If necessary, detach work orders from a project.

To view all work orders associated with projects:

1 Select **Work > Projects Projects**.
2 Select the project for which to view associated work orders, and then click the **Work Orders** tab.
3 View the work orders associated with the project.

   Note: Click **Detach WOs** to detach work orders from the project. The system only detaches those work orders that have no costs or transactions associated with them. Before detaching the work orders, the system verifies that you want to detach all detachable work orders. Click **Yes** to detach all work orders that have no costs or transactions associated with them from the project.

Closing work orders associated with projects

Close open work orders associated with a project. The system does not close those work orders that have a system status of C, or Closed. Before closing the open work orders, the system verifies that you want to close all open work orders. Click **Yes** to close all open work orders.

To close work orders associated with projects:

1 Select **Work > Projects > Projects**.
2 Select the project for which to close associated work orders, and then click the **Record View** tab.
3 Click **Close WOs**.

Detaching and deleting work orders associated with projects

Detach work orders from a project or delete the work orders completely.

The system only detaches those work orders that have no costs or transactions associated with them. Before detaching the work orders, the system verifies that you want to detach all detachable work orders. Click **Yes** to detach all work orders that have no costs or transactions associated with them from the project.

The system only deletes those work orders that are deletable on the **Work Orders** form. Before deleting the work orders, the system verifies that you want to delete all deletable work orders. Click **Yes** to delete all deletable work orders associated with the project.

To detach and delete work orders associated with projects:

1 Select **Work > Projects Projects**.
2 Select the project for which to detach or delete associated work orders, and then click the **Record View** tab.
3 Choose one of the following options:
   - Click **Detach WOs**.
   - Click **Delete WOs**.

Viewing project purchase orders

View purchase orders associated with a specific project. Information in the list includes the purchase order number, status, creation date, supplier, store, purchase order type, total cost, and outstanding balance.

Purchase order headers are not directly associated with projects because a single purchase order may include parts and/or services for several projects. However, an individual order line of a purchase order can be project-specific. The system automatically associates an order line, both for parts or services, with a project when the order line links to a work order activity that is part of a project. When a purchase order has at least one order line associated with a project, the system displays the purchase order in the project's list.

See Creating and Revising Purchase Orders on page 678.

To view project purchase orders:

1 Select **Work > Projects Projects**.
2 Select the project for which to view associated purchase orders, and then click the **Purchase Orders** tab.
3 View the project purchase order information.

Viewing detailed project cost summaries

View existing costs for a Project. The system includes all child projects associated with a parent project.

The **Costs** page summarizes and compares estimated, planned, actual, and total costs for projects. It also summarizes and compares the cost of materials on order, the budget amount remaining, and the difference between the actual cost of each cost category and the invoice cost for each project.

To view detailed project cost summaries:

1 Select **Work > Projects Projects**.
2 Select the project for which to view associated costs, and then click the **Costs** tab.
3 View the costs associated with the project.

Printing the project summary chart

Print the project summary chart report to view costs associated with a specific project.

To print the project summary chart:

1 Select **Work > Projects Projects**.
2 Select the project for which to print the project summary chart, and then click the **Project Summary Chart** tab.
3 View the chart.

Creating campaigns

A campaign is a list of jobs that may be performed on a given list of equipment as necessary to complete work. Campaigns are comprised of two types of events:

Type	Description
Survey	Maintenance personnel checks equipment specified on the work order to see if issue(s) exist.
Job	Work order to correct issue(s) found.

If equipment passes the survey, work on the equipment is unnecessary.

If equipment fails the survey, work on the equipment is necessary. All survey results are recorded on the **Equipment** page of the **Campaigns** form, or the **Survey Equipment** page of the **Work Orders** form.

A campaign can have multiple jobs listed to complete work on necessary equipment, however only one survey is allowed per campaign.

To create campaigns:

1 Select **Work > Projects > Campaigns**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization of the campaign.

Campaign
Specify the unique, identifying code for the campaign, and then enter a description in the adjacent field.

Status
Select the status of the campaign.

Class
Specify the class of the campaign.

Type
Specify the type for the campaign.

Survey Required
Select to require a survey campaign event to check all specified equipment for necessary repairs.

Campaign Manager
Specify a manager for the campaign.

Project-Budget
Specify both the project and budget to associate to this campaign.

4 Click **Save Record**.

Adding events to campaigns

A campaign event is either a survey of equipment on the specified campaign to check for equipment repairs needed, or a job to perform to repair equipment. If a piece of equipment passes the survey event, work is not necessary. If a piece of equipment fails the survey, a job event is performed to repair the equipment. A campaign can have only one survey event, but several job events.

Add, change, or delete campaign events as necessary.

To add events to campaigns:

1 Select **Work > Projects > Campaigns**.
2 Select a campaign, and then click the **Campaign Events** tab.
3 Click **Add Campaign Event**.
4 Specify this information:

Campaign Event
Enter the order in which this campaign event will occur.

Project-Budget
Enter both the project and budget to associate to this campaign event.

Standard WO
Enter the standard work order to associate to this campaign event.

Assigned To
Enter the person responsible for the work order.

Assigned By
Enter the supervisor who assigned the work order.

Requested By
Enter the person who requested the work.

Survey
Select to mark this campaign event as an equipment survey type.

Production Priority
Enter the priority for the production. The system automatically populates **Production Priority Desc.**

Req. Start Date Buff. (Days)
Enter the number of days needed prior to the starting date for the work order.

Req. End Date Buff. (Days)
Enter the number of days needed after the ending date for the work order.

Downtime (Hours)
Enter the number of hours that the equipment was out of operation due to failure.

WO Description
Enter a description of the work to be performed for the campaign event.

WO Type
Select the type for the work order.

Priority
Enter the priority of the work order for the campaign event.

WO Class
Enter the work order class for the campaign event. The system automatically populates **WO Class Org.**

Duration
Enter a duration (time) for the work order for the campaign event.

Problem Code
Enter the code to identify the type of problem.

Safety
Select if this campaign event requires special safety precautions.

Trade
Enter the trade required to perform the activity.

Task
Enter the task code for the activity.

Material List
Enter the material list code for the material list containing the parts needed for the work order.

Estimated Hours
Enter the estimated number of hours required to complete the activity.

People Required
Enter the number of people required to perform the activity.

Activity Duration
Enter a duration (time) for the activity for the campaigning event.

5 Click **Submit**.

Managing equipment for campaigns

Manage equipment for campaigns on the **Equipment** page of the **Campaigns** form by adding, editing, deleting, or marking equipment for a campaign. Mark equipment as passed, failed, or not evaluated.

In addition to managing equipment on the **Equipment** page of the **Campaigns** form, drive the campaign process by creating campaign work orders, generating survey work orders, or clearing survey work orders.

Adding equipment to campaigns

To add equipment to campaigns:

1. Select **Work > Projects > Campaigns**.
2. Select a campaign for which to add equipment, and then click the **Equipment** tab.
3. Click **Select Equipment**.
4. Select the equipment to add to a campaign, and then click **OK**.

   Note: To generate survey work orders for equipment, select the equipment, click **Select**, and then click **Generate Survey WO**.

   To generate work orders for equipment, select the equipment, click **Select**, and then click **Generate WO(s)**.

   To clear survey work orders for equipment, select the equipment, click **Select**, and then click **Clear Survey WO**.

   To clear errors, select the equipment, click **Select**, and then click **Clear Error(s)**.

Marking equipment for campaigns

Mark equipment as having passed the survey work order, failed the survey work order, or not evaluated on the survey work order.

Note: Campaign **Status** must be **Active** before the system allows marking equipment for a campaign.

To mark equipment after survey work orders are completed for equipment on campaigns:

1. Select **Work > Projects > Campaigns**.
2. Select a campaign for which to mark equipment, and then click the **Equipment** tab.
3. Select the equipment to mark for a campaign after a survey work order, and then choose one of the following options:

Option	Description
Mark as Passed	Click to mark equipment as passed.
Mark as Failed	Click to mark the equipment as failed.
Mark as Not Evaluated	Click to mark the equipment as not evaluated.

Generating work orders for campaigns

Generate regular, multi-equipment, or survey type, campaign work orders from selected equipment and campaign events on the Equipment page of the Campaigns form. See the steps below to generate regular, multi-equipment, or survey type, campaign work orders.

To generate work orders or multiple equipment work orders for campaigns:

1. Select **Work > Projects > Campaigns**.
2. Select a campaign for which to generate a work order, and then click the **Equipment** tab.
3. Select the equipment for which to generate a campaign work order, and then click **Generate Survey WO**.
4. Specify this information:

   Campaign Event
   Specify the campaign event for which to generate a work order. The system automatically populates the campaign event description.

   Create Multiple Equipment WO
   Select to generate multiple equipment work orders for the selected campaign event.

   Include Campaign Comments
   Select to include comments on the work order generated for the campaign.

   Include Campaign Documents
   Select to include documents on the work order generated for the campaign.

   Equipment
   Specify the equipment for which to perform work. The system automatically populates the equipment description and **Equip. Org.**

   Status
   Select the status of the work order generated for the campaign.

   Sched. Start Date
   Specify a scheduled start date for the work to be performed.

   Sched. End Date
   Specify a scheduled end date for the work to be performed.

5. Click **Submit**.

Generating survey work orders for campaigns

To generate survey work orders for campaigns:

1. Open the **Campaigns** form.
2. Select a campaign for which to generate a work order, and then click the **Equipment** tab.
3. Select the equipment for which to generate a campaign work order, and then click **Generate Survey WO**.
4. Specify this information:

Campaign Event
Specify the campaign event for which to generate a survey work order. The system automatically populates the campaign event description and selects **Survey**.

Create Multiple Equipment WO
Select to generate multiple equipment work orders for the selected campaign event.

Include Campaign Comments
Select to include comments on the survey work order generated for the campaign.

Include Campaign Documents
Select to include documents on the survey work order generated for the campaign.

Equipment
Specify the equipment for which to perform survey work. The system automatically populates the equipment description and **Equip. Org.**

Status
Select the status of the work order generated for the campaign.

Sched. Start Date
Specify a scheduled start date for the survey work to be performed.

Sched. End Date
Specify a scheduled end date for the survey work to be performed.

5 Click **Submit**.

Viewing work orders for campaigns

View the list of existing work orders for a specific campaign.

To view work orders for campaigns:

1 Select **Work > Projects > Campaigns**.
2 Select the campaign for which to view work orders, and then click the **Work Orders** tab.
3 View the work orders.

Copying campaigns

Copy child records of campaigns and campaign header information to a new campaign.

To copy campaign records to new campaigns:

1 Select **Work > Projects > Campaigns**.
2 Select the campaign for which to copy, and then click the **Record View** tab.
3 Click **Copy Campaign**.
4 Specify this information:

New Campaign
Specify a unique code identifying the new campaign, and then enter a description for the new campaign in the adjacent field.

Custom Field Value
Select to copy the custom field values to the new campaign.

User Defined Fields
Select to copy the user defined fields to the new campaign.

Campaign Events
Select to copy the campaign events to the new campaign.

Equipment
Select to copy the equipment to the new campaign.

Comments
Select to copy the comments to the new campaign.

Documents
Select to copy the documents to the new campaign.

5 Click **Submit**.

GIS integration

Linking Infor EAM equipment and GIS features

When integrating Infor EAM with ESRI's GIS (Geographical Information System) package, both programs should reflect an accurate representation of your company assets. You may have an Infor EAM equipment record that has not been defined in the GIS system or a GIS feature that has not been defined in the Infor EAM system. If you want to view a piece of equipment on a GIS map, create a corresponding GIS feature for the Infor EAM equipment record. Likewise, if you want access to Infor EAM functionality, e.g., creating and scheduling work orders for a GIS feature, create a corresponding Infor EAM equipment record for the GIS feature.

The systems link corresponding equipment/features together with a GIS object identification number (**GIS ID**) in Infor EAM, `GISOBJID` in ESRI).

Processing rules for defining equipment records within ESRI

See the following list of processing rules the system follows when automatically creating Infor EAM equipment records for GIS features you have created within ESRI:

Note: Contact your system administrator for more information regarding these processing rules.

- A GIS feature must reside within a layer that contains the `GISOBJID` attribute before you can create a corresponding equipment record.
- The system creates equipment records based on the field mappings defined for the feature's layer. If a field mapping has not been defined, the system populates the field based on the GIS profile defined on the user's default preference record for the layer.
  Note: If a field mapping for an attribute exists, the system always populates the equipment field based on the data of the attribute, even if the attribute value is empty and the GIS profile value contains data.

  Field mappings are not defined for **Layer**, **Location X**, and **Location Y**. The system creates equipment records based on an implied mapping where GIS is the owner and the data is automatically mapped to the **Layer**, **Location X**, and **Location Y** fields in Infor EAM. If a feature is a line or polygon feature, the system populates the Infor EAM **Location X** and **Location Y** based on the feature's center point.
- If more than one GIS attribute is mapped to a single Infor EAM field, the system concatenates the data into the single field based on the **Sequence** and **Delimiter** values on the mapping record. Likewise, if a GIS attribute that contains concatenated data is mapped into more than one Infor EAM field, the system parses the data based on the **Sequence** and **Delimiter** values on the mapping record.
- The system automatically defines the equipment as an Asset record if a field mapping does not exist for the equipment type.
- The system assigns the equipment code of the equipment record based on any existing field mapping. If a feature attribute is mapped to the equipment code field, the system assigns the equipment code based on the field mapping even if the `AUTOANUM` installation parameter is set to Yes. If no field mapping exists for the equipment code, the system automatically generates an equipment code even if `AUTOANUM` is set to No.
- The Infor EAM **Class**, **Location**, **Position**, **Parent**, **PO**, and **Part** can be unique per Infor EAM organization. This organization may or may not be the same organization of the equipment record. If there is a mapping record for **Class**, **Location**, **Position**, **Parent**, **PO**, or **Part**, the system must also populate the organization of **Class**, **Location**, **Position**, **Parent**, **PO**, or **Part**. If you map data into these fields, you must also map the organization field for each of them.

  If a field mapping does not exist for the organization of **Class**, **Location**, **Position**, **Parent**, **PO**, or **Part**, the system populates the information based on the following:

  - If the mapped value for **Class**, **Location**, **Position**, **Parent**, **PO**, or **Part** belongs to a single organization:

    The organization is copied.
  - If the mapped value for **Class**, **Location**, **Position**, **Parent**, **PO**, or **Part** belongs to multiple organizations:

    An attempt is made to populate the organization based on the GIS profile defined on the user's default preference record for the layer.
  - If the mapped value for **Class**, **Location**, **Position**, **Parent**, **PO**, or **Part** belongs to multiple organizations and there is not a default GIS profile:

    An attempt is made to populate the organization based on the organization of the equipment record.

Defining Infor EAM equipment (ESRI)

For every GIS feature within ESRI that you want to integrate with Infor EAM, define a corresponding Infor EAM equipment record.

You can also define equipment records within ESRI through synchronization.

Note: Depending on your system configuration, the system automatically creates an equipment record in Infor EAM as soon as you save a new feature, and then displays the **Create Infor EAM Equipment** popup to notify you of the transaction. Contact your system administrator for more information.

To define Infor EAM equipment:

1. Open `ArcMap` to an existing map.
2. Select the GIS feature(s) for which to define equipment records, and then click **Infor EAM Create Equipment**.

   ESRI connects to Infor EAM, verifies that you are authorized to define equipment within the organization you specified on the profile, and creates the equipment record in Infor EAM. A popup containing success and error messages in **Result** is shown. An Infor EAM equipment record is defined for each GIS feature with a success message.
3. Click **Close**.

   Note: To save this data, right-click, and then select **Save As**. Select the file in which to save the data, and then click **Save**. The data in the file is saved, e.g., if you receive error messages because the corresponding Infor EAM equipment records are not successfully defined for the GIS features, save the data. Use the saved list of data to identify those GIS features for which you still need to create equipment records. Correct the error identified in the **Result** column, and then complete the process to define equipment records within ESRI again.

Processing rules for defining GIS features within Infor EAM

See the following list of processing rules that are followed when creating corresponding GIS features for equipment records you have created within Infor EAM:

Note: Contact your system administrator for more information regarding these processing rules.

Features are created based on the field mappings defined for the selected layer. If a field mapping has not been defined, the field is populated based on the GIS profile defined on the user's default preference record for the selected layer.

Note: If a field mapping exists, the attribute is always populated based on the data of the equipment field, even if the field's value is empty and the GIS profile value contains data.

If more than one Infor EAM field is mapped to a single GIS attribute, the data is concatenated into the single attribute based on the **Sequence** and **Delimiter**. Likewise, if an Infor EAM field that contains concatenated data is mapped into more than one GIS attribute, the data is parsed based on the **Sequence** and **Delimiter** values on the mapping record.

Defining GIS features (Infor EAM)

To define GIS features:

1 Open the Assets, Positions, or Systems form.
2 Click **New Record**.
3 Specify the information necessary to define the piece of equipment.
4 Specify the profile that GIS should use to create the GIS feature.
5 Click **Save Record**. A **GIS ID** number is generated.

   Note: Depending on your system configuration, a **GIS ID** number may not be automatically generated.

   - The Create GIS Feature popup is shown after you click **Save Record**, enter the **Layer**, **Location X**, and **Location Y** for the GIS feature, and then click **Submit**. The record is saved, and a **GIS ID** number is generated.
   - If the **Create GIS Feature** button is enabled, click **Create GIS Feature** after you click **Save Record**. Enter the **Layer** , **Location X** , and **Location Y** for the GIS feature, and then click **Submit**. The record is saved and a **GIS ID** number is generated.

6 Synchronize features with equipment records so that the corresponding feature is created within GIS.

Synchronizing records (ESRI)

Synchronize Infor EAM and ESRI's GIS to ensure both systems contain a complete and accurate list of corresponding features/equipment.

Synchronize attributes to ensure that corresponding features and equipment reflect the same attribute values.

Note: You can only synchronize records from a GIS map that contains layers integrated with Infor EAM, e.g., the layer contains a feature that has a `GISOBJID` attribute.

Synchronizing equipment with features (ESRI)

Search for GIS features with no corresponding defined Infor EAM equipment records, view a list of discrepancies, and create corresponding equipment records for the existing features.

To synchronize equipment records with features:

1 Open `ArcMap` to an existing map, and then click **Infor EAM Synchronize Attributes**.
2 Specify this information:

   Layer
   Select the layer for which to view features without corresponding equipment records.

3 Select the **Consider only features selected on the map** check box to only compare features that are selected on the map.
4 Select the **Consider only features with a GISOBJID** check box to only compare features that reference a `GISOBJID` number.

Note: Unselect **Consider only equipment with a GISOBJID** to compare features without a `GISOBJID` number, which enables you to create equipment records for existing features that were not previously integrated.

5 Click **View Discrepancies**.

6 Select the features for which you want to create corresponding equipment records.

All of the features are automatically selected. Remove individual features from the list by unselecting the line.

7 Click **Create Equipment**. Corresponding equipment records are created within Infor EAM.

Result and **Creation Date/Time** are automatically populated, and all features are unselected for which corresponding equipment records were created.

Note: If the corresponding equipment record cannot be created for a selected feature, the reason is displayed in **Result**. The feature remains selected.

You must have insert privileges in Infor EAM to create an equipment record. Contact your system administrator for more information.

The feature's existing `GISOBJID` number is assigned to the equipment record. If the feature does not have a `GISOBJID` number, one is automatically generated.

The equipment record's **Layer**, **Location X**, and **Location Y** are automatically populated. If the feature is not a point feature, **Location X** and **Location Y** are automatically populated for its corresponding equipment record based on the center of the feature.

Synchronizing features with equipment (ESRI)

Search for Infor EAM equipment records with no corresponding defined GIS features, view a list of discrepancies, and create corresponding features for the existing equipment records.

Note ESRI's `ArcMap` displays features as soon as the system creates them.

To synchronize features with equipment:

1 Open `ArcMap` to an existing map, and then click **Infor EAM Synchronize Attributes**.

2 Click the **GIS** tab.

3 Specify this information:

Layer
Select the layer for which to view equipment records without corresponding features.

4 Select the **Consider only equipment with a GISOBJID** check box to only compare equipment records that reference a `GISOBJID` number. The `GISOBJID` number is referenced on the Infor EAM equipment record in the **GIS ID** field.

Note: If you clear the **Consider only equipment with a GISOBJID** check box, equipment records that do not have a **GIS ID** but do reference a **GIS Profile** or GIS layer are compared.

5 Click **View Discrepancies**. **Layer**, **Location X**, and **Location Y** for each equipment record are automatically populated if available.

Note: Only equipment records for which you have query web service permissions are displayed. Contact your system administrator for more information.

6 Select the equipment records for which you want to create corresponding features.

All of the equipment records are automatically selected. Remove individual records from the list by unselecting the line.

7 Specify this information:

Layer
Select a layer for each equipment record for which you want to create corresponding features.

Location X
Location Y
Enter the X and Y coordinates for each equipment record for which you want to create corresponding features.
Note: Highlight the equipment record within the list, click **Record**, and then click the location on the map within ESRI's **ArcMap** page on which to place the feature. The X and Y coordinates are determined and **Location X** and **Location Y** are automatically populated.

If the selected layer contains line or polygon features, click on the map more than once to include all necessary coordinates for the feature. The additional X and Y coordinates are saved.

If you enter **Location X** and **Location Y** with the **Record** button and then need to edit the fields with the **Record** button, you must first right-click on the equipment record, and then select **Clear Map Coordinates**.

8 Click **Create Feature(s)**. Corresponding features within ESRI's GIS are created for each selected equipment record and the newly created features are highlighted on the map. **Result** and **Creation Date/Time** are populated, and all equipment records are unselected for which corresponding features were created.

Note: If the system cannot create a corresponding feature for a selected equipment record, the reason is displayed in **Result**. The equipment record remains selected.

Synchronizing attributes (ESRI)

Infor EAM and ESRI's GIS attributes may be synchronized based on the field mappings defined for each layer. The system compares the attributes of corresponding features/equipment (based on the `GISOBJID`/**GIS ID**), provides you with a list of discrepancies, and enables you to synchronize the attribute values.

Field mappings are not defined for a feature/equipment record's layer, location X, and location Y. The system synchronizes based on an implied mapping where GIS is the owner and the data is automatically mapped to the **Layer**, **Location X**, and **Location Y** fields in Infor EAM. If a feature is a line or polygon feature, the system populates the Infor EAM **Location X** and **Location Y** based on the feature's center point. Contact your system administrator for more information.

Note: Infor EAM recommends synchronizing features and equipment prior to synchronizing attributes.

To synchronize attributes:

1 Open `ArcMap` to an existing map.
2 Click **Infor EAM Synchronize Attributes**.
3 Specify this information:

Map
Enter the map for which to synchronize attributes.

Layer
Select the layer for which to view attribute discrepancies.

4 Select the **Consider only features selected on the map** check box to only consider features that are selected on the map.

5 Click **View Discrepancies**. The system displays features for which the system locates a corresponding equipment record based on the `GISOBJID`, but for which there are attribute discrepancies.

Note: The system only considers mapped attributes that have an **Action** of Copy. Contact your system administrator for more information.

You must have query web service permissions in Infor EAM to view discrepancies. Contact your system administrator for more information.

6 Select the features for which you want to synchronize attribute discrepancies.

The system automatically selects all of the features. Remove individual features from the list by unselecting the line.

Note: To select all lines at once, click **Select All**. To unselect all lines at once, click **Unselect All**.

7 Click **Synchronize Discrepancies**.

The system synchronizes attributes based on the values contained within the owner system of the field mapping record. Contact your system administrator for more information.

Note: The system displays an error message in either Infor EAM **Result** or **GIS Result** for any record whose discrepancies cannot be synchronized.

You must have update web service permissions in Infor EAM to synchronize discrepancies. Contact your system administrator for more information.

8 Click **Close**.

Synchronizing attribute details (ESRI)

To synchronize attribute details:

1 Open `ArcMap` to an existing map.

2 View attribute discrepancies.

Note: Do not click **Synchronize Discrepancies**.

3 Highlight the feature for which to view discrepancy details, and then click the **Details** tab. **Layer**, **Equipment**, **FID**, **Description**, and **Org.** are automatically populated, and a list of field mapping records is displayed for the feature.

Note: Only discrepancy mapping records with an **Action** of **Copy** are displayed. Contact your system administrator for more information.

4 View the discrepancy records. **GIS Attribute** and its data in **GIS Value** are displayed and the corresponding Infor EAM **Attribute** and its data in Infor EAM **Value**. The **Owner** indicates the system from which the data will be copied during synchronization.

Note: If multiple GIS attributes are mapped to a single Infor EAM attribute or vice-versa, the system lists the attributes on separate lines but groups them together.

During synchronization, the system concatenates or parses data according to the **Sequence** and **Delimiter** defined on the field mapping record. Contact your system administrator for more information. If the system must parse data because one field is mapped to multiple fields, it verifies that the number of fields to which to map data matches the instances of concatenated data in the source field. If it does not, the system does not synchronize the data. If, however, the source field in the owner system contains a null value, the system copies the null value to the multiple fields in the other system and overwrites any data that those fields originally contained.

5 Specify this information:

New Owner Value
Enter a value to override the current data contained within the owner system. During synchronization, the system writes the new value to the owner system and then copies the value to the other system.
Note: You cannot enter a **New Owner Value** if there is a discrepancy with a **Layer**, **Location X**, or **Location Y**. These values are populated automatically based on the feature's actual map location.

6 Click **Synchronize Discrepancies**.

The system synchronizes the attributes based on the values contained within the owner system or based on the values entered in **New Owner Value**.

Note: The system displays an error message in either Infor EAM **Result** or **GIS Result** for any record whose discrepancies cannot be synchronized.

Click **Next Record** or **Previous Record** to view the details of the next or previous discrepancy record within the list on the **Synchronize Attributes** page.

7 Click **Close**.

Applying a data filter (ESRI)

Create a filter for integrated features based on attribute data stored in either ESRI, Infor EAM, or both. ESRI highlights the GIS features that satisfy the search criteria on the GIS map.

See the following list of Infor EAM grids that the system queries:

Grid	Function
Equipment	BEGEQ
Equipment and related cost details	BEGEQC
Equipment and related event details	BEGEQE
Work order and related activity details	BEGWAC
Work order and related equipment details	BEGWEQ

Note: The system only queries those grids to which you have Query access. If you do not have access to a grid, contact your system administrator to grant you access to its related function.

Running a data filter (ESRI)

To run a data filter:

1. Within ESRI, click **Infor EAM Data Filter**.

   Note: Highlight features on the GIS map prior to opening the Data Filter popup, and then select **Consider only features highlighted on the map**. Only the highlighted features in the search are considered.

2. Specify this information to enter the filter's GIS criteria:

   Layer
   Select a GIS layer.

   Filter
   Enter filter information for features.

   Note: The available fields are based on the selected **Layer**.

3. Specify this information to enter the filter's Infor EAM criteria:

   Grid
   Select an Infor EAM grid.

   Filter
   Enter filter information for equipment records.

   Note: The available fields are based on the selected **Grid**.

4. Click **Select Custom Fields** to select the custom fields to display on the **Results** page.

   Note: The displayed fields are based on the selected **Grid**.

5. Select the custom fields to display on the **Results** page, and then click **Submit**.

   Note: Search response time increases as the selected number of custom fields increases.

6. Click **Apply**. A search based on the criteria is ran and Infor EAM data that satisfies the filter is displayed on the **Results** page.

Saving filter criteria (ESRI)

Save filter criteria so it can be accessed in the future, reducing the amount of time it takes to run common searches.

To save filter criteria:

1. Within ESRI, click **Infor EAM Data Filter**.

   Follow steps 2 through 5 to save a GIS criteria record.

2. Select a **Layer**, and then enter **Filter** information.
3. Click **Set As Default** to select to identify this criteria as the default GIS criteria record.

   Note: If you select **Set As Default**, the system automatically displays this GIS criteria record whenever you open the Data Filter popup.

4. Click **Save As**.

5 Enter the file name, select a file type, and then click **Save**. The system populates **Criteria** with the file name.

Note: Save the file as either an .XMLGIS or .EXP file. If you save the file as an .EXP file, the system clears filter information and displays **WHERE Clause**, **Edit Query**, and **Reset Filter**. Modify the **WHERE Clause** as necessary. Click **Edit Query** to open `ArcMap`'s Select By Attributes popup. Click **Reset Filter** to enable the filter lines, and then modify the filter as necessary.

Follow steps 6 through 9 to save an Infor EAM criteria record.

6 Select a **Grid**, enter **Filter** information, and select custom fields to display on the **Results** page.

7 Click **Set As Default** to select to identify this criteria as the default Infor EAM criteria record.

Note: If you select **Set As Default**, the system automatically displays this Infor EAM criteria record whenever you open the Data Filter popup.

8 Click **Save As**.

9 Enter the file name, and then click **Save**. The system populates **Criteria** with the file name.

Note: The file type must be .xmlinforEAM.

10 Click **Apply**. The system runs a search based on the criteria and displays Infor EAM data that satisfies the filter on the **Results** page.

Running existing data filters (ESRI)

Select saved criteria records to quickly run searches.

Note: If you selected **Set As Default** for a saved GIS or Infor EAM criteria record, it is automatically displayed when you open the Data Filter popup.

To run existing data filters:

1 Within ESRI, click **Infor EAM Data Filter**.

2 Specify this information:

Criteria
Enter an existing GIS criteria record. You may enter a saved file type of either .EXP or .XMLGIS.

Criteria
Enter an existing Infor EAM criteria record. You may enter a saved file type of either .EXP or .XMLINFOREAM.

3 Click **Apply**. A search is run based on the criteria and Infor EAM data that satisfies the filter is displayed on the **Results** page .

Viewing data filter results (ESRI)

To view data filter results:

1 Within ESRI, click **Infor EAM Data Filter**.

2 Apply a filter, and then click the **Results** tab.

Note: The **Results** page is automatically displayed if the criteria includes an Infor EAM Grid.

Infor EAM records that satisfy the defined criteria are displayed. See the following list for more information regarding the results:

- If you defined both GIS and Infor EAM criteria:

  The filter results that reference GIS-integrated equipment records are displayed, including all fields associated with the selected **Grid** and any selected custom fields.

- If you only defined GIS criteria:

  Filter results are not displayed.

- If you only defined Infor EAM criteria:

  The filter results that reference all equipment records are displayed, including all fields associated with the selected **Grid** and any selected custom fields.

3 View the Infor EAM records.

  Note: To remove records from the list, highlight the record(s) to remove, and then click **Remove Highlighted Record(s)**.

4 Click **Save As**.

5 Enter the file name, select a file type, and then click **Save**.

  Note: The default file type is .CSV. If you save the file as a .DBF file, the file is available within the GIS map as a data table.

6 Click **Close**.

Performing Infor EAM functionality (ESRI)

Access Infor EAM functionality via the Infor EAM GIS Extensions in ESRI's `ArcMap`. Create Infor EAM work orders and view Infor EAM events for any GIS feature that is integrated with Infor EAM.

Note: You can also define Infor EAM equipment records, synchronize records, and create data filters via the Infor EAM GIS Extensions Also, define user information and preferences. Contact your system administrator for more information.

Many of the Infor EAM forms accessible in ESRI display a grid with a list of records. Select the record(s) or field(s), and then right-click to access additional functionality. See the following table for more information:

Right-Click Option	Description
Clear Map Coordinates	Clear map coordinates associated with the record
Identify Feature(s)	View the GIS attributes of an equipment record
Memo Editor	View the full text of a field
Record View	View the information pertaining to a record in a vertical list
Save As	Save the displayed data as a .csv or .dbf file

Right-Click Option	Description
Show Feature	Temporarily highlight the feature on the map **Note:** You will not see the highlighted feature if it is not on the map's visible layer or not within the map's current extent.

Creating Infor EAM work orders (ESRI)

Locate a feature within the GIS system, and then create an Infor EAM work order. Associate activities, comments, custom field values, and linear reference information to the work orders if necessary.

You can only create an Infor EAM work order for a GIS feature that has a corresponding Infor EAM equipment record. In addition, the equipment record cannot have a status of Withdrawn, In Transit, or Awaiting Purchase or be out of service.

To create an Infor EAM work order within GIS, you must have permission to create work orders within Infor EAM. Contact your system administrator for additional information.

To create Infor EAM work orders within GIS:

1. Within ESRI, select a feature, and then click **Create Work Order**.

   Equipment, **WO Organization**, **Department**, **Location**, **Cost Code**, **Criticality**, **Safety**, **Assigned To**, and **Assigned By** are automatically populated based on the corresponding equipment record of the selected feature.

2. Specify this information:

   WO Description
   Enter a description of the work needed.

   WO Organization
   Enter the organization to which the work order belongs.

   Status
   Select the status of the work order.

   Type
   Select the work order type.

   Priority
   Select the priority level of the work order.

   Problem Code
   Enter the problem code.

   Class
   Enter the class of the work order.

   Department
   Enter the department responsible for completing the work order.

Location
Enter the location of the work to be completed.

Cost Code
Enter the cost code of the work order.

Criticality
Select a criticality code to indicate the relative importance of the asset to the overall production of goods or services for your organization.

Standard WO
Enter the standard work order if applicable.

Safety
Select to observe safety precautions when working with this asset.

Sched. Start Date
Sched. End Date
Select the starting and ending dates for the work order.

Date Reported
Enter the date and time that the problem was reported.

Assigned To
Enter the username of the person responsible for the work order.

Assigned By
Enter the supervisor who assigned the work order.

3 Enter activities, comments, custom fields, and linear reference information.
4 Click **Submit**. The work order and any information entered on the Activities, Comments, Custom Fields, and/or Linear References pages is saved.

Defining activities

To define activities:

1 Enter work order details.
2 Click the **Activities** tab.
3 Click **Add Activity**. The system automatically populates **Activity** with the next available activity number, populates **Start Date** and **End Date** with the scheduled start date of the work order, and populates **People Required** with a default value of "1."
4 Specify this information:

Activity
Modify the activity number as necessary.

Trade
Enter the trade required to perform the activity.

Estimated Hours
Enter the estimated number of hours required to complete the activity.

People Required
Modify the number of people required to perform the activity as necessary.

Completed
Select if the activity is completed.

Task
Enter the task code for the activity. The system updates the value for**People Required** to correspond with the **Task**as necessary.

Material List
Enter the code identifying the material list that contains the parts needed for the activity.

Activity Comments
Enter comments or instructions for the activity.

5 Click **Add to List**.
6 Enter comments, custom fields, and linear reference information for the work order.
7 Click **Submit**. The system saves the work order and any information entered on the Activities, Comments, Custom Fields, and/or Linear References pages.

Associating comments

To associate comments:

1 Enter work order details.
2 Click the **Comments** tab.
3 Specify this information:

Comments
Enter comments or instructions for the work order.

Print with WO
Select to print the comments with the work order.

4 Enter activities, custom fields, and linear reference information for the work order.
5 Click **Submit**. The system saves the work order and any information entered on the Activities, Comments, Custom Fields, and/or Linear References pages.

Entering custom fields

To enter custom fields:

1 Enter work order details.
2 Click the **Custom Fields** tab. The system automatically displays custom fields specific to the class and/or work order entity.
3 Enter the custom fields information.

4 Enter activities, comments, and linear reference information for the work order.
5 Click **Submit**. The system saves the work order and any information entered on the Activities, Comments, Custom Fields, and/or Linear References pages.

Defining linear reference details

To define linear reference details:

1 Enter work order details.
2 Click the **Linear Details** tab.
3 Specify this information:

From Point
Enter the point on the linear equipment record from which to perform the work order. The system automatically populates **Ref. Description** and **Geographical Ref.** if available.

To Point
Enter the point on the linear equipment record to which to perform the work order. The system automatically populates the **Ref. Description** and **Geographical Ref.** if available.

4 Enter activities, comments, and custom fields for the work order.
5 Click **Submit**. The system saves the work order and any information entered on the Activities, Comments, Custom Fields, and/or Linear References pages.

Viewing Infor EAM events (ESRI)

View a history of all events performed within Infor EAM for a GIS feature's corresponding equipment record. View such events as work orders.

Note: You cannot update any event records on the Infor EAM Events popup.

To view Infor EAM events within GIS:

1 Within ESRI, select an integrated feature(s), and then click **Infor EAM Events**.

All of the selected features are displayed in the Equipment list. The total number of selected equipment records is displayed next to **Equipment**, **Total Events** is populated with the total number of events for all equipment records within the Equipment list, and the number of events for the selected equipment record is displayed next to **Events**.

2 In the Equipment list, double-click the equipment record from the Equipment list for which to view events.

Note: If you double-click a linear equipment record, **From Point** and **To Point** are enabled.

3 Specify this information:

From Point
Enter the point on the linear equipment record from which to display events.

To Point
Enter the point on the linear equipment record to which to display events.

4 View the events information in the Events list.

Note: The Dataspy available on this popup is defined on the **Events** page of the Assets, Positions, or Systems form of Infor EAM.

5 Click **Close**.

Performing a GIS map search (Infor EAM)

Perform a GIS map search to locate equipment according to address or equipment type, such as asset, position, or system.

Map layers are searched. A **layer** contains a set of thematic data, such as streets, hydrants, or pipes. A GIS map contains multiple layers, which create overlays of geographical information.

In Infor EAM GIS maps are searched based on active and buffer layers. The active layer is the layer in which a search originates. If your search involves multiple layers, the buffer layer is the layer in which the equipment for which you are searching resides, e.g., your GIS map contains a Pipe layer and a Hydrant layer. You want to locate a fire hydrant based on the location of a specific pipe. Select the Pipe layer as your active layer and the Hydrant layer as your buffer layer. The pipe in the Pipe layer is searched and fire hydrants found within the Hydrant layer are returned. See the following image:

Note: If you are performing a search based on an address, you do not need to specify an active layer. The search originates in the address layer, which is defined by installation parameter `GISADDR`.

Once you have performed a map search, use the GIS Map Search toolbar to modify the map view.

If you use geocoding services, address searches are performed based on the primary geocode as defined in installation parameter `GISSERV`. If no records are found that match your search criteria, the search is performed based on the secondary geocode as defined in installation parameter `GISGEOSV`. Contact your system administrator for more information.

Note: The screen display and functionality depend upon your `GISSERV` and `GISGEOSV` installation parameters. `GISSERV` must be set to `REST` and `GISGEOSV` must be set to `Geocode services URL` to experience the full features of this screen which include:

- By default, the startup view for this screen is set to Record View and the map is loaded on the full screen.
- This new map feature supports only GIS 10.1 and 10.2 servers.
- This new map screen utilizes architecture available on ESRI ArcGIS 10.1 and 10.2.
- For the new screen REST services are used instead of SOAP services. The result is better performance and faster map loads.
- The GIS Attributes popup is displayed as you navigate to the equipment List View screen.
- The new map screen features a floating popup which displays the GIS Attributes and the **Action** button is now located at the bottom of the popup.
- The **Action** button is also accessible:
  - as a right-click option on the equipment grid and work order grids

- on the List View page near the **Export To Excel** and **Save Layout** icons.

Performing a map search (Infor EAM)

Perform a map search to search for equipment in one layer. Enable the advanced search option to search for equipment across multiple layers. In addition, you may apply a GIS filter and specify a search radius for each selected layer.

Note: Some of the map search features display and function differently based upon your GISSERV and GISGEOSV installation parameters. See the *Infor EAM System Administrator Guide*.

`GISSERV` must be set to mapservice REST URL and `GISGEOSV` must be set to Geocode service REST URL published on ArcGIS Server to experience the full features of this screen. Set the installation parameters according to the following format:

For `GISSERV` use the following format:

```
http://<arcgisserver:port>/arcgis/rest/services/<servicename>/MapServer
```

For `GISGEOSV` use the following format:

```
http://<arcgisserver:port>/arcgis/rest/services/<servicename>/GeocodeServer
```

To perform a map search:

1 Select **Equipment > GIS Map Search**.

Note: Depending upon your `GISSERV` and `GISGEOSV` installation parameter settings, the **GIS Map Search** screen opens with the map search options displayed, or in Record View with the map displayed.

See Performing a GIS map search (Infor EAM) on page 1083.

2 Click **Search**.

Note: If `GISSERV` is set to `REST` and `GISGEOSV` is set to `Geocode services URL`, the search icon appears on the map toolbar. Specify your search criteria, and then click **Search** to search for map records. The GIS Attributes floating popup is displayed with the **Options** drop-down available at the bottom of the popup.

3 Specify this information:

Map
Specify the map for which to perform the search.
Note: **Map** is available only when GISMAPS installation parameter is set to **Organization** or **Department**.

Search For
Note: To search for all records that contain like characters in **Address**, **Street**, **Equipment**, **Asset**, **Position**, or **System**, enter "%." For example, if you want to search for all assets beginning with the letter "M," enter "M%" in **Asset**. If you want to search for all positions containing the letters "PMP," enter "%PMP%" in **Position**.
Specify one of the following options:

Option	Description
Address	The **Street** and **Zone** fields are displayed. Specify the street address and/or zone location for which to search. **Note:** To search for intersections, enter the street names with the appropriate separator as defined in installation parameter `GISINTRS`. For example, enter Main & Broadway.
Equipment	The **Equipment** field is displayed. The equipment lookup with GIS-integrated equipment records in Infor EAM that are installed, in use, and are associated with the organizations to which you have rights is populated. Specify the equipment for which to search.
Asset	The **Asset** field is displayed. The asset lookup with GIS-integrated asset records in Infor EAM that are installed, in use, and are associated with the organizations to which you have rights is populated. Specify the asset for which to search.
Position	The **Position** field is displayed. The position lookup with GIS-integrated position records that are associated with the organizations to which you have rights is populated. Specify the position for which to search.
System	The **System** field is displayed. The system lookup with GIS-integrated system records that are associated with the organizations to which you have rights is populated. Specify the system for which to search.

Note: Edit the equipment's **From Point** and **To Point** via the map if you entered a linear equipment record in **Equipment**, **Asset**, **Position**, or **System**.

Dataspy
Select a dataspy.
Note: Click **Edit** to create a Dataspy.

Buffer Layers
Select the layer in which the equipment for which you are searching resides if you are searching for an address.

Active Layer
Specify the layer in which the search should originate if you are searching for equipment, assets, positions, or systems.
Note: If possible, **Active Layer** for the equipment, asset, position, or system record for which you are searching is automatically defaulted. Editing the **Active Layer** returns no search results.

GIS Filter
Select a GIS filter for the specified layer.
Note: Click **Edit** to create a GIS filter.
Note: If you selected Address in **Search For**, you do not need to specify an **Active Layer**. The search originates in the address layer as defined by installation parameter `GISADDR`.

Radius
Specify the radius in which to search, and then select the unit of measure (Feet, Meters, Kilometers, or Miles) in the adjacent field.
Note: If your search is for a linear equipment record, enter a radius and unit of measure to create a buffer around the linear equipment record on the map. All GIS-integrated equipment records that fall within the from point and to point along the linear equipment record are searched.

4 Optionally, select the **Enable Advanced Search** check box to select additional buffer layers, and specify a **GIS Filter** and **Radius** for each layer, as necessary. Click **Add Line** to add an additional line. You may add a maximum of ten lines.

5 Optionally, select the **Search Along** check box to search non-integrated features for the selected buffer layer.

6 Click **Search**. The search results are displayed in the Equipment Within Search Area list and on the map. If `GISSERV` is set to `REST`, the search results are displayed in the List View section on the left-hand side of the page. After the selecting a specific record, click **Expand Left** to expand the record on the screen.

   Note: If you use geocoding services and you entered a street name and number in **Address**, more than one address matching your search criteria may be returned depending upon your Address Locator configured with the geocode service. If multiple addresses match your search criteria, the Matching Addresses popup is displayed. On the popup the addresses that match the search criteria are listed and a **Match Score** is displayed which is assigned for each address depending upon your Address Locator configured with the geocode service. The closer the **Match Score** is to 100, the more likely the corresponding address is the address for which you are searching. Select the address or addresses to view on the map, and then click **Submit**. The map is displayed.

   If your search is for a linear equipment record, the length of the equipment record defined between the **From Point** and **To Point** is highlighted, and the GIS-integrated equipment records that fall within the linear equipment record's buffer are highlighted as well.

   Double-click an equipment record to view the record details if you opened the **GIS Map Search** form via the menu bar.

7 To view work orders associated to the equipment, select equipment(s) from the grid, and right-click to open the context menu. Select **Show WOs**. Work orders are shown in a floating grid.

   Optionally, expand the summary grid and use the **Actions** menu to select the **Show WOs** option.

   To hide the work order grid, click the grid, and then select **Hide WOs**.

GIS map search toolbar (Infor EAM)

See the following descriptions when accessing buttons on the GIS Map Search toolbar:

Button Hover Text	Function
Toggle Overview Map	Displays/removes an overview map in the upper left-hand corner of the main map. If the overview map is displayed, the system outlines the current extent of the main map within the overview map in red. **Note:** If you click and drag to select an area within the overview map, the system highlights the area within the overview map and updates the extent of the main map.
Zoom to Full Extent	Displays the full extent map defined in ESRI.
Zoom In	Displays a closer, more detailed view of the map area selected. Records displayed in the Equipment Within Search Area list will continue to be based on the search criteria.
Zoom Out	Displays a larger view of the map area selected. Records displayed in the Equipment Within Search Area list will continue to be based on the search criteria.
Pan	Changes the focus of the map center. Records displayed in the Equipment Within Search Area list will continue to be based on the search criteria.
Zoom to Previous Extent	Refreshes the map to focus on the previous map. Records displayed in the Equipment Within Search Area list will continue to be based on the search criteria.
Select by • **Select by Rectangle** • **Select by Polygon** • **Select by Freehand Polygon** • **Select by Circle**	Select the method to draw over the desired map area. Choose one of the following options: • Select to form a rectangle over the desired map area. • Select at least three points to form a polygon over the desired map area. • Select to draw a line between at least two points on map. • Select to form a circle over the desired map area.
Pointer	Displays the equipment within the point or area selected on the map. The Equipment Within Search Area list will refresh to display equipment within the selected area on the map.
Print	Opens a new window and displays the standard Windows Print dialog box

Button Hover Text	Function
Previous Search	Displays a list of the last five searches if they occurred within the current user session and were initiated by clicking **Search**.The first search displayed in the list is the most recent search performed. Select a search, and the system displays the selected map and GIS Map Search form. **Note:** The system displays the map based on your current settings and visible layers.
Select Features	Highlights and numbers features on the map. The system also highlights the corresponding equipment records in the Equipment Within Search Area list.
Sketch	Draws on the map. Click anywhere on the map to place a map marker or click and drag to draw a line on the map.
Measure	Highlights the distance between two points on the map and displays the distance between the two points. The Measure tool calculates two distances: the current segment and a cumulative distance. For example, if you select feature A and then feature B, the system displays the distance between features A and B. If you then select feature C, the system displays the distance between features B and C (the current segment) and the distance between features A and C (the cumulative distance). **Note:** The distance is measured based on the unit of measure defined for **Radius**.
Identify Features	Displays the attributes of map features within a map's visible layers.
View Route Events	Displays the events associated to the selected route on the map. Choose the event layer for which to view events. Alternately displays only the events currently highlighted on the map for the selected layer or for all events for the selected layer.
View Nearest Address	Displays the nearest address to a selected point on the map.

Button Hover Text	Function
Visible Layers	Displays the Visible Map Layers popup. Select the layers to display in the GIS map, and then click **Submit**. **Note:** Temporary layers are created and displayed in the event you highlight or mark the map. Un-select a temporary layer to remove its markup from the map. See the table below for more information. Visible layers are saved with the exception of temporary layers, according to your user ID. When you open the **GIS Map Search** form, your saved visible layers are shown.
Show Legend	Displays a legend of icons for each type of feature on the GIS map
Switch Basemap	Determines the default ESRI base map that is displayed. Valid values are: Streets, Imagery, Imagery with Labels, Terrain with Labels, Topographic, Light Gray Canvas, Dark Gray Canvas, Oceans, National Geographic, and Open Streetmap.
Opacity Slider	Adjusts the transparency (or opaqueness) of the map service in increments of 10 or as defined by the GISSERV parameter. The range of opacity is 0-100 (percentage). At 100, the map is most opaque (less transparent). At 0, the map is least opaque (more transparent).

Layer name	Markup created by
Highlights (temporary)	Search, Highlight on Map, Pointer tool
Measurements (temporary)	Measure tool
Nearest Addresses (temporary)	View Nearest Address tool
Selections (temporary)	Select Features tool
Sketches (temporary)	Sketch tool
Work Orders (temporary)	Highlight on Map

Selecting features on the GIS map (Infor EAM)

Select integrated features on the GIS map. For every feature that you select on the map, its corresponding equipment record is highlighted in the Equipment Within Search Area list and associated work orders are highlighted in the View Work Orders list.

Select features on the map to perform basic GIS Map Search functions on multiple equipment records, e.g., create a route work order.

Note: You can also select equipment records on the Equipment Within Search Area list. Click **Select Features**, and then select the equipment records in the list. The corresponding equipment record is automatically highlighted on the GIS map. Press SHIFT or CTRL to select multiple equipment records at one time.

To select equipment records on the GIS map:

1. Perform a GIS Map Search.
2. Click **Select Features**, and then select highlighted features on the map. The highlighted color of the features is changed and the features are numbered in the order that you select them.

   Note: Install parameter GISSFCLR determines the color with which the selected records are highlighted.

   Unselect features as necessary. The numbers of the remaining selected features are updated.

   To select multiple features on the map at one time, click **Select Features**, and then click and drag on the GIS map to include the desired area. All of the features contained within the area are highlighted and randomly numbered.

Identifying features (Infor EAM)

View feature attributes within the map's visible layers.

To identify features:

1. Perform a GIS map search.
2. Choose one of the following options:
   - Click **Identify Features**, and then click on the GIS map to select a point or drag to select an area for which to view features.
   - Select the equipment or work order(s) for which to view corresponding feature attributes in the Equipment Within Search Area or View Work Orders list. Select **Identify Features** in **Options**, and then click **Submit**.

   Note: To view the selected features within a layer other than the active layer, click the plus sign (+) next to the layer. The layer's selected features are displayed.

   The features are highlighted in blue if the feature's corresponding equipment or work order record is listed in the Equipment Within Search Area or View Work Orders list. All other features are highlighted in white.
3. Click the plus sign (+) next to the FID# for which you want to view attributes.
4. View the attributes.

Viewing the nearest address

Note: To enable the view nearest address feature, a value must be entered for the `GISSVAXL` installation parameter. Contact your system administrator for more information.

To view the nearest address:

1. Select **Equipment > GIS > GIS Map Search**.
2. Choose one of the following options:
   - Click **View Nearest Address**, and then click on the GIS map to select a point for which to view the nearest address.
     Note: The address of the closest feature is displayed in the address layer within the radius, in meters, as specified by installation parameter `GISNARAD`.

     If the closest feature is linear and your geocoding style contains a range, the street number is approximated.
   - Perform a GIS Map Search, and then select the equipment or work order record(s) for which to view the nearest address in the Equipment Within Search Area or View Work Orders list. Select **View Nearest Address** in **Options**, and then click **Submit**.
     Note: The nearest address for each record's corresponding feature is displayed.

     If the corresponding feature is a linear or polygon feature, the address is determined based on the first point of the feature.
3. View the address information.

Creating GIS filters (Infor EAM)

A GIS Filter, similar to a Dataspy, is a named, predefined search based on GIS attributes accessed on the **GIS Map Search** form. Create GIS Filters that are specific to individual layers.

A GIS Filter allows you to apply a second level of conditional filters to your map search: filter for equipment records using the Dataspy, and then filter for specific GIS attributes using the GIS Filter.

Note: To copy the values from an existing GIS Filter into a new GIS Filter, select the existing filter in the text box, and then click **Copy**. Edit the GIS Filter criteria as necessary.

If you define a GIS Filter for which the system returns no data, the probable cause is that the column headers within ESRI do not contain all uppercase letters.

To create GIS Filters:

1. Click **Edit**.
2. Click **New**.
3. Enter a title for the GIS Filter in the text box.
4. Edit the GIS Filter criteria as necessary. Edit GIS Filter criteria in the same manner that you edit Dataspy criteria.

   Note: Click **Cancel New** to cancel the creation of a new GIS Filter and return to the previous view.

   Select **Default Dataspy** to save the selected GIS Filter as the default filter for the active layer specified on the **GIS Map Search** form. You can have one default filter for each of your active layers.
5. Click **Save**. The GIS Filter is applied to the GIS map search.

Adjusting the range of linear equipment (Infor EAM)

Adjust the **From Point** and/or **To Point** of a linear equipment record to edit the extent of your map search or to adjust the extent of the equipment record on which work should be performed.

To adjust the range of linear equipment:

1. Perform a GIS Map Search.

   Note: You can also adjust the **From Point** or **To Point** on the View GIS Map popup accessed from the **Work Orders** form.

2. Adjust the linear equipment record's **From Point** or **To Point**.
3. Click the map at the location along the linear equipment record to which to adjust the point. The system populates **From Point** or **To Point** with the new value and marks the boundaries of the equipment's current range based on the new value.
4. Click **Submit**. The system performs a search based on the new range of the linear equipment record.

   Note: From the View GIS Map popup accessed from the **Work Orders** form, the system closes the popup and populates the **From Point** and **To Point** of the work order based on the points that you selected on the map.

Creating quick work orders (Infor EAM)

Create a quick work order for any equipment displayed in the Equipment Within Search Area list. This functionality allows you to locate a specific piece of equipment on the map and create a work order and activity without opening the **Work Orders** page.

To create quick work orders:

1. Perform a GIS Map Search.
2. Select the equipment record for which to create a work order.
3. In the **Actions** menu, select **Create Quick WO**, and then click **Submit**.
4. Specify the information necessary to create the work order.
5. Specify linear reference information.

   Note: Linear Reference Details are shown if the equipment record for which to create the work order is a linear equipment record.

6. Specify the information necessary to add the first activity to the work order.
7. Click **Submit**.
8. Click **Yes** to associate the map with the work order. A PDF file of the currently displayed map is created and attached to the work order as a linked document.

Creating work orders (Infor EAM)

Create a work order for any equipment displayed in the Equipment Within Search Area list via the **Work Orders** form.

To create work orders:

1. Perform a GIS Map Search.
2. Select the equipment record for which to create a work order.
3. In the **Actions** menu, select **Create WO**, and then click **Submit**.
4. Specify the information necessary to create the work order.
5. Click **Submit**.
6. Click **Yes** to associate the map with the work order. A PDF file is created of the currently displayed map, and the PDF is attached to the work order as a linked document.
7. Specify additional information on each page of the **Work Orders** form as necessary, and then click **Close**.

Creating multiple equipment work orders (Infor EAM)

Create a work order with multiple pieces of equipment displayed in the Equipment Within Search Area list via the **Work Orders** form.

To create multiple equipment work orders:

1. Perform a GIS Map Search.
2. Select the equipment records for which to create a work order.
3. Use the **Actions** menu to select **Create WO**, and then click **Submit**.
4. Enter the information necessary to create the work order.

   Note: The first piece of equipment selected displays on the **Record View** of the **Work Orders** form; all equipment displays on the **Equipment** page of the **Work Orders** form.

   Department Security is enforced on this form. User must have more than read-only access for the department.

   This functionality is not affected by ROUTEEOB installation parameter.

   Additional equipment may be added to the work order once the popup is open; however, the attached map will not reflect the equipment change.
5. Click **Submit**.
6. Click **Yes** to associate the map with the work order. The system creates a PDF file of the currently displayed map and attaches the PDF to the work order as a linked document.
7. Enter additional information on each page of the **Work Orders** form as necessary, and then click **Close**.

Scheduling work order activities (Infor EAM)

Schedule work order activities according to geographic location. To schedule a work order activity, first create the work order activity, and then schedule it. Search for equipment for which there are open work orders, and then schedule labor based on location for convenience.

The Work Order Activities list displays a separate record for every work order, activity, and schedule combination. The system displays work orders without activities in the grid, but each work order must have an activity in order to schedule it.

To schedule work order activities:

1. Perform a GIS Map Search.
2. Select the work order to schedule.
3. Use the **Actions** menu to select **Schedule WOs**, and then click **Submit**.
4. Specify the **From Point** and **To Point** on the linear equipment record for which to display work order activities.

   Note: The system only displays **From Point** and **To Point** if the equipment record for which you are viewing work orders is a linear equipment record.
5. Select the work order activity for which to schedule. The system displays the information for the work order activity in the **Labor Details** section.
6. Click **Add Schedule**.

   The system automatically populates **WO-Activity-Trade** with the work order, activity, and trade for the selected work order activity. The system also populates **Scheduled Date** with the scheduled start date of the work order activity, **Act. Est. Hours** with the number of hours planned for the work order activity, **Act. Sched. Hours** with the number of hours scheduled for the work order activity, and **Act. Actual Hours** with the total hours booked to date for the work order activity.
7. Specify this information:

   Employee
   Enter the employee who will complete the work order activity. The system automatically populates **Department**.

   Scheduled Date
   Enter the date for which to schedule the work order activity. You cannot schedule work for any date earlier than today's date.

   Scheduled Hours
   Enter the estimated number of hours to complete the work. The number of hours must be between 0 and 24.

   Start Time
   End Time
   Enter the scheduled start time and end time of the work order activity.

   Shift
   Enter the shift responsible for completing the work order activity.

   Department
   Enter the department responsible for completing the work order activity.

   Maintenance Equipment
   Enter equipment on which to perform maintenance during the work order activity.

   Comment
   Enter comments about the work order activity.
8. Click **Submit**.

   Note: You may delete an existing labor schedule that is scheduled for the current date or later if you have made an error entering the data and if you have access rights for deleting the labor schedule. You may only delete labor schedules that have not been frozen or completed.

Copying an existing work order activities schedule (Infor EAM)

Copy an existing work order activities schedule to add more than one schedule to each work order activity For example, you need to schedule an electrician from 9:00 to 10:00 and then, after another work order activity has been completed, the electrician needs to finish the work order activity from 1:00 to 3:00. After you copy the existing schedule, only modify the necessary fields, such as **Start Time** and **End Time**. The system maintains the original schedule and creates a new schedule for the work order activity.

Note: To schedule additional time to a work order activity immediately after submitting the original schedule, click **Add Schedule**. Modify fields as necessary, and then click **Submit**.

To copy an existing work order activities schedule:

1. Perform a GIS Map Search.
2. Select the work order for which to copy an existing schedule.
3. In the **Actions** menu, select **Schedule WOs**, and then click **Submit**.
4. Select the work order activity schedule to copy, and then click **Copy Schedule**. The system automatically populates **Employee** and **WO-Activity-Trade** with the employee, work order, activity, and trade for the selected work order. The system also populates **Act. Est. Hours** with the number of hours planned for the work order activity, **Act. Sched. Hours** with the number of hours scheduled for the work order activity, and **Act. Actual Hours** with the total hours booked to date for the work order activity.
5. Specify this information:

   Employee
   Specify the employee who will complete the work order activity.

   Scheduled Date
   Specify the date for which to schedule the work order activity. You cannot schedule work for any date earlier than today's date.

   Scheduled Hours
   Specify the estimated number of hours to complete the work. The number of hours must be between 0 and 24.

   Start Time
   End Time
   Specify the scheduled start time and end time of the work order activity.

   Shift
   Specify the shift responsible for completing the work order activity.

   Department
   Specify the department responsible for completing the work order activity.

   Maintenance Equipment
   Specify equipment on which to perform maintenance during the work order activity.

   Comment
   Enter comments about the work order activity.

6 Click **Submit**.

Creating routes and route work orders (Infor EAM)

Create routes according to the geographic location of the pieces of equipment within the route, and then create a work order and activity for the route.

To create routes and route work orders:

1 Perform a GIS Map Search.

2 Select the equipment records on the GIS map in the order in which they should appear in the route.

3 In the **Actions** menu, select **Create Route/Route WO**. The selected equipment records are displayed in the Route list. A **Sequence** number is assigned to each equipment record in the order in which you selected the equipment.

   Note: Sequence numbers are assigned based on the `INCRLINO` install parameter settings.

   To modify the order in which an equipment record appears in the route, place your cursor in the equipment record's **Sequence** field on the Route list, and then edit the sequence number.

   To remove a piece of equipment from the route, select the piece of equipment, and then click **Remove Equipment**.

4 Specify this information:

   Route
   Specify a unique code identifying the route, and then enter a description of the route in the adjacent field.

   Organization
   Specify the organization to which the route belongs if you use multi-organization security.
   Note: Click **View GIS Map** to view the current route map.

   If you are not going to create a work order and activity for the route, select **Link GIS Map to WO** on the View GIS Map popup to link the GIS map to all work orders for the route. Click **Submit**. Click **Finish** on the **Create Route** page.

5 Click **Next** to create a work order and activity for the route.

   Note: If PM Revision Control is On, the system disables **Next** because you cannot approve a route and, therefore, cannot create a work order for the route. Contact your system administrator for more information. Click **Finish** to save the route without creating a work order. The route is saved with a status of Unfinished.

   The system automatically populates **Equipment** with the first piece of equipment within the route and populates **Department**, **Location**, **Cost Code**, and **Assigned To** if available on the equipment record.

6 Specify the information necessary to create the work order.

7 Specify linear reference information.

   Note: Linear Reference Details are only shown if the equipment record for which to create the work order is a linear equipment record.

8 Specify the information necessary to add the first activity to the work order.

9 Click **Finish**. The route, work order, and work order activity records are saved and the status of the route is set to Approved.

Locating equipment and work orders on the GIS map (Infor EAM)

You can locate one or more pieces of equipment on the GIS map.

To locate equipment and work orders on the GIS map:

1 Perform a GIS Map Search.
2 Select the equipment or work order(s) to locate on the map.
3 In the **Actions** menu, select **Highlight on Map**, and then click **Submit**. The selected record(s) is highlighted on the GIS map.

   Note: For equipment to display in the Equipment Within Search Area list and display on the map, the equipment must meet the search criteria, exist in both systems, and be linked together in the database.

   If you select a work order from the View Work Orders list, the system labels the work order in addition to highlighting it, e.g., "WO 1001."

Viewing Analytics data (Infor EAM)

View analytics data for any equipment in the Equipment Within Search Area list.

Note: This feature is only available if you use Infor EAM Analytics. The **View Analytics Data** button is displayed for all users, but no data will display in the Analytics Data popup if you do not have Infor EAM Analytics.

To view analytics data:

1 Perform a GIS Map Search.
2 Select the equipment record for which to view analytics data.
3 In the **Actions** menu, select **View Analytics Data**, and then click **Submit**.
4 View the Analytics data for the selected equipment.

Viewing child equipment on the GIS map

View child equipment on the GIS map and in the Equipment Within Search Area list. The system includes all child equipment records regardless of the search criteria entered for the parent equipment record and regardless of whether the Infor EAM equipment record is linked to a corresponding GIS asset.

After viewing child equipment records, you can create Infor EAM work orders or display Analytics data for the child equipment records.

To show child equipment on the GIS map:

1 Perform a GIS Map Search.
2 Select the equipment record for which to view child equipment.

3 In the **Actions** menu, select **Show Children**, and then click **Submit**. The parent and child equipment are highlighted on the GIS map, and the parent and child equipment records are listed in the Equipment Withing Search Area list.

   Note: The child equipment records are shown directly below their parent equipment record in the Equipment Within Search Area list.

   You cannot apply a quick filter on child equipment records.

Viewing GIS maps Infor EAM

View GIS maps for equipment records, routes, and work orders within Infor EAM.

After creating a new GIS map, view it within Infor EAM. View multiple maps for one Infor EAM user.

Note: You cannot view a GIS map for any Infor EAM equipment record that does not contain a GIS ID number. Likewise, you cannot view a GIS map for a route or work order that does not contain at least one equipment record with a GIS ID number.

If you are viewing a GIS map that contains a linear equipment record, see the following information:

- If there is a discrepancy between the length of a corresponding equipment record and feature, the system highlights the equipment record based on the length of ESRI's GIS feature.
- If the linear equipment record has multiple paths, e.g., a road that forks in multiple directions, the system highlights all paths of the equipment based on the length defined on the equipment or work order's **From Point** and **To Point**.

Viewing GIS maps from equipment records

View the GIS map for a piece of equipment and configure the system to link the GIS map to work orders as they are released.

To view GIS maps from equipment records:

1 Open the Assets, Positions, Systems, or Routes form.
2 Select the asset, position, system, or route for which to view a GIS map, and then click the **Record View** tab.
3 Right-click, and then select **View GIS Map**.

   Note: The system highlights the length of linear equipment records as defined by the **From Point** and **To Point** and labels the boundary points of the equipment record.

4 Specify this information:

   Map
   Specify the GIS map for which to view. The system automatically populates the map description and **Organization**.

   Link GIS Map To WO
   Select to link the GIS map to work orders containing the selected asset, position, system, or route as the work orders are released.

When the work order is released, the system links the map to the work order as a PDF, flags it to print whenever the work order is printed, and displays it on the **Documents** page of the **Work Order** form.

Note: You can edit the view of the map, such as zoom in, using the GIS Map Search toolbar.

5 Click **Submit**.

Note: The system saves the current map settings and visible layers, e.g., if you edit the zoom extent of the map and click **Submit**, the system opens the map to that zoom extent the next time you view the map.

Map will be saved if GISMAPS is set to Organization or Department.

Viewing GIS maps from work orders

View the GIS map for the work order and associate the map with the work order.

To view GIS maps from work orders:

1 Open the **Work Orders** form.
2 Select the work order for which to view a GIS map, and then click the **Record View** tab.
3 Right-click, and then select **View GIS Map**.

The system automatically highlights the work order's equipment on the map.

Note: The system does not display **From Point** and **To Point** on the View GIS Map popup if the work order is for a route or if the work order's equipment record is not a linear equipment record.

The system only highlights the portion of linear equipment records on which to work as defined by the **From Point** and **To Point** of the work order. Edit the work order's **From Point** and **To Point** via the map.

4 Select **Associate GIS Map With WO** to associate the current GIS map with the work order.

The system saves a copy of the current map as a PDF with the work order, flags it to print whenever the work order is printed, and displays it on the **Document** page of the **Work Order** form.

Note: You can edit the view of the map, e.g., zoom in, using the GIS Map Search toolbar.

5 Click **Submit**.

Creating maps

Create GIS map records to identify the image service when using ArcIMS or the map service when using ArcGIS Server from which the map inside Infor EAM will be based.

Note: This screen is only accessible when GISMAPS installation parameter is set to Organizatioin or Department.

To create GIS maps:

1 Open the **Maps** form.
2 Click **New Record**.
3 Specify this information:

Organization
Enter the organization of the map.

Map
Enter a unique code identifying the map, and then enter a description of the map in the adjacent field.

Class
Enter the class of the map. The system automatically populates **Class Org.**

Out of Service
Select if the map is not used.

4 Click **Submit**.

Note: To add users to a map, right-click, and then select **Add to Users**.

To add departments to a map, right-click, and then select **Add to Departments**.

To copy a GIS map record, right-click, and then select **Copy Map**.

Defining parameters for GIS maps

Specify information about the map displayed inside Infor EAM including image/map service, geocoding service, and geoprocessing service. Use this page to customize how each map will look and behave using the GIS installation parameter values.

To define parameters for GIS maps:

1 Open the **Maps** form.
2 Select the GIS map for which to define parameters, and then click the **Parameters** tab.
3 Select the installation parameter, and then enter **Value**.
4 Click **Submit**.

Associating departments to GIS maps

Grant departmental privileges for specific maps. Associations made on this popup will create map records on the Maps page of the Departments form.

Note: This popup is accessible only when GISMAPS installation parameter is set to Department, and DEPTSEC installation parameter is set to On.

To associate a department to a GIS map:

1 Open the **Maps** form.
2 Select the map for which to associate departments, and then click the **Record View** tab.
3 Right-click, and then select **Add to Departments**.
4 Select the department for which to associate to the map.
5 Click **Submit**.

Associating users to GIS maps

Grant users privileges to specific maps.

Associate maps based on the user's organization or department list.

Associations made on this popup will create map records on the **Maps** tab of the **User Setup** form.

Note: This popup is accessible only when GISMAPS installation parameter is set to Organization.

To associate users to maps:

1. Open the **Maps** form.
2. Select the map for which to associate users, and then click the **Record View** tab.
3. Right-click, and then select **Add to Users**.
4. Select the user for which to associate to the map.
5. Click **Submit**.

Copying GIS maps

Copy GIS map header and detail information.

To copy GIS maps:

1. Open the **Maps** form.
2. Select the map for which to copy, and then click the **Record View** tab.
3. Right-click, and then select **Copy Map**.
4. Specify this information:

   Map
   Enter a unique code identifying the new map, and then enter the new map description in the adjacent field.

   Organization
   Enter the organization of the new map.

   Parameters
   Select to copy the GIS map parameters to the new map.

   Comments
   Select to copy the comments to the new map.

   Documents
   Select to copy the documents to the new map.

5. Click **Submit**.

Fleet management

Understanding fleet management terms

The following terms will help you become familiar with the fleet management module's unique attributes:

Term	Definition
Vehicle	A specific type of asset used in the fleet management module Example: To classify a van in a fleet as a vehicle in the system, select **Vehicle** on the **Assets** form.
Motor Pool	The motor pool is a grouping of vehicles that are either rented to employees on a short-term basis (pool/loaner vehicles) or are provided as a permanent means of transportation for employees (assignment vehicles). Example: The fleet management module will manage the entire motor pool for a company, organization, etc.
Vehicle Ticket	Tracks the issuing and returning of fleet vehicles from the motor pool Example: Create a vehicle ticket to track a specific vehicle. The ticket tracks when the vehicle is issued to and returned by employees, as well as other attributes of the vehicles such as mileage, parking location, and fuel levels.
Ticket Status	The status of a vehicle ticket changes as the ticket moves through its life cycle. This list describes the status codes. **Issued** Indicates that the vehicle is currently issued to an employee, and it is no longer an available asset in the motor pool. **Returned** Indicates that the vehicle has been returned from the employee and is back in the motor pool. **Completed** Indicates that the ticket is complete and ready to be billed. The ticket is now available for issuing.

Term	Definition
Vehicle Type	Three types of vehicles make up the motor pool. This list describes the vehicle types. **Pool** Type of vehicle that is a temporary means of transportation for employees. If an employee needs a car from the pool for the day for a specific task, a pool vehicle is issued from the motor pool. **Loaner** Type of vehicle that is a temporary means of transportation for employees, particularly when their assignment vehicles are not available. When an employee's company vehicle needs repairs, a loaner vehicle is issued from the motor pool until the assignment vehicle is repaired. **Assignment** Type of vehicle that is assigned to employees on a long-term basis. Assignment vehicles are often company vehicles that are issued to employees for weeks, months, or years at a time.
Exception	Attaches additional fees to vehicle tickets for exceptional conditions that occur to vehicles. Exception codes are associated with vehicle tickets on the **Exceptions** page of the **Vehicle Ticket** form. Example: Associate an exception code that charges customers an additional fee for low amounts of fuel in returned vehicles with the vehicle ticket.
Adjustment	Adds credits and debits to previous bills. Adjustments are reflected on the subsequent fleet bill. To correct a ticket that was billed to an incorrect cost code, enter a new **Cost Code**. Adjustments can be added to pool, loaner, and assignment vehicles. Example: If a fleet customer was overcharged for mileage during the previous billing period, then provide a credit that will reimburse the fleet customer on the next fleet bill.

Term	Definition
Bill	Fleet bills are generated by the billing process and correspond with each specific billing schedule. The frequency at which bills are generated is determined by the billing period (billing schedule). Fleet customers can also view fleets bills. Example: View a bill for a specific customer for a specific billing period.
Period	Billing schedules that determine billing process. At the end of the billing schedule, generate customer bills that correspond with the billing schedule **Period End Date**. Example: Choose to be billed weekly, monthly, quarterly, etc.
Billing Code	Determines the normal fees that customers are billed for various fleet billing categories. Together, billing codes and markup codes, when associated with specific fleet customers, determine the total rates for fleet billing categories. Example: Create a billing code for usage charges, and then associate a rate with that billing code. Fleet customers are typically billed that amount for usage charges.
Markup Code	Used to charges additional fees above and beyond the normal fees (billing codes). Together, billing codes and markup codes, when associated with specific fleet customers, determine the total rates for fleet billing categories. Example: Create a markup code for usage charges, and then associate a rate with that markup code. When markup fees are required, fleet customers are billed that amount for usage charges.
Fleet Customer	A group that is used and billed for fleet vehicles. Example: Create a fleet customer to correspond to a specific department within a company, i.e., a specific company will set up the Water and Sewer department as one fleet customer and the Parks and Recreation department as another fleet customer within its fleet management module.

Understanding motor pool management

Track vehicles with the motor pool management functionality of the fleet management module. First, create fleet customers, cost codes, and vehicles. Then, track the issuing and returning of vehicles from the motor pool, using vehicle tickets. You can also associate billing exceptions for vehicle tickets to add additional charges to the ticket and view billing adjustments for credits or debits to the bill. Finally, you can view and modify fleet bills, view fleet bill transaction and fleet bill adjustment transactions, and crate pool, loaner, and assignment adjustments for credits and debits to the bill.

Understanding the fleet billing process

Through the fleet management system, fleet customers are billed for their use of pool, loaner, and assignment vehicles. Fleet customers are also billed for other motor pool vehicle costs such as maintenance labor and parts, non-maintenance related activities, fuel, insurance, and vehicle ticket exceptions.

The fleet billing process is the means by which the fleet management module generates bills for fleet customers. The process occurs automatically and is determined by the **Process Start Date** and **Process Start Time** on the **Billing Schedules** page of the **Fleet Configuration** form. Fleet billing periods are determined by the **Period End Date** for each billing schedule on the **Billing Schedules** page of the **Fleet Configuration** form, and fleet bills are generated according to this date.

If for some reason the bills are not generated automatically, you can start the billing process manually by clicking **Run Billing Process** on the **Parameters** page of the **Fleet Configuration** form.

If periods associated with **Period End Dates** that are before the most recent **Period End Date** remain unbilled when you manually initiate the billing process, the system generates bills for the earliest unbilled period, and then generates bills for the next earliest unbilled period until all unbilled periods (which are past due) have been processed.

You can also choose to view the current charges for a fleet customer by clicking **Current Charges** on the **Billing History** page of the **Fleet Customers** form. The system will calculate and display all charges up to the current system date. Viewing the current charges provides an idea of the amount of charges for the period to date.

See the *System Administrator's Guide*.

Finally, you can regenerate the last bill for a specific fleet customer by clicking **Regenerate Bill** on the **Fleet Bills** form. The system displays the fleet bills associated with the last fleet billing period. Use the regeneration process to correct a billing mistake and regenerate the bill instead of entering a billing adjustment. The changes are reflected on the subsequent bill.

See Modifying Fleet Bills on page 1109.

Creating vehicle tickets

Create vehicle tickets that will track the issuing and returning of fleet vehicles from the motor pool. The motor pool is a grouping of vehicles that are either rented to employees on a short term basis (pool/loaner vehicles) or are provided as a long-term means of transportation (assignment vehicles).

Note: You must have specific vehicle ticket authorizations to insert, update, and delete vehicle ticket records.

To create vehicle tickets:

1. Select **Work > Fleet > Fleet Vehicle Tickets**.
2. Click **New Record**.

   The system automatically populates **Date Created** and **Created By**.
3. Specify this information:

   Ticket Type
   Choose one of the following options:

   Pool
   Select to indicate that the vehicle is a pool vehicle.

   Loaner
   Select to indicate that the vehicle is a loaner vehicle.

   Assignment
   Select to indicate that the vehicle is an assignment vehicle.

   Ticket Status
   Choose one of the following options:

   Issued
   Select to indicate that the vehicle will be issued.

   Returned
   Select to indicate that the vehicle has been returned.

   Completed
   Select to indicate that the ticket is complete and ready to be billed.

   Vehicle
   Specify the vehicle to associate with the vehicle ticket. The system automatically populates the vehicle description, **Vehicle Org.**, **Shop**, **Vehicle Status**, **Issued Fuel Level**, **Issued Parking Location**, and **Issued Mileage**.

   Received Vehicle
   Specify the received vehicle to associate with the vehicle ticket. The system automatically populates the received vehicle description, **Received Vehicle Org.**, and **Received Vehicle Status**.
   Note: You can only specify a **Received Vehicle** for loan tickets.

Issued To
Specify the employee to which to issue the vehicle. The system automatically populates **Cost Code**, **Fleet Customer**, **Fleet Customer Org.**, **License No.**, and **Phone No.**

Cost Code
Specify the cost code with which to associate the vehicle ticket.

License No.
Specify the employee's driver's license number.

Other
Specify the visiting employee to which to issue the vehicle.
Note: You must enter an employee in **Issued To** and/or **Other**.

Phone No.
Enter the employee's phone number.

Fleet Customer
Specify the fleet customer with which to associate the vehicle ticket. The system automatically populates **Fleet Customer Org.**

Ticket Class
Specify the class of the ticket.

Issued Fuel Level
Specify the amount of fuel in the vehicle at the time it is issued. The system retrieves the amount from the last ticket, if available.

Issued Parking Location
Specify the location of the vehicle at the time it is issued. The system retrieves the location from the last ticket, if available.

Issued Mileage
Specify the mileage of the vehicle at the time it is issued. The system retrieves the mileage from the greater of the last ticket or meter reading.

Issued Date/Time
Specify the date and time that the vehicle is issued.
Note: **Issued Date/Time** cannot be after the system date/time or the **Returned Date/Time**.

Est. Return Date/Time
Specify the estimated date and time that the vehicle is expected to be returned.

Use the following fields for returning previously issued vehicles:

Returned Fuel Level
Specify the amount of fuel in the vehicle at the time it is returned.

Returned Parking Location
Specify the location of the vehicle at the time it is returned.

Returned Mileage
Specify the mileage of the vehicle at the time it is returned.

Returned Date/Time
Specify the date and time that the vehicle is returned. The system automatically populates **Hours Used** and **Mileage Used**.

Hours
Specify the number of hours for which to bill the vehicle.

Mileage
Specify the number of miles for which to bill the vehicle.

4 Click **Save Record**. The system automatically populates **Ticket**, **Issued Date/Time**, and**Issued By**. The system also automatically populates the **Billing Code** and **Markup Code** associated with the **Vehicle**, **Class**, **Category**, **Type**, and the **Fleet Customer**.

Note: If exceptions have been associated with the vehicle ticket, **Exceptions** is selected.

Upon saving a vehicle ticket with a status of Returned, the system automatically populates **Returned To**, **Hours Cost** and the currency, **Mileage Cost** and the currency, **Exceptions Cost** and the currency, **Total Cost**and the currency, and **Period End Date**.

Upon saving a vehicle ticket with a status of Completed, the system automatically populates **Completed Date/Time**.

Click **Assignment Billing** to view billing details for each period in which the assignment ticket has been billed.

Associating billing exceptions with vehicle tickets

Associate billing exceptions with vehicle tickets. For example, associate an exception code that charges customers an additional fee for low amounts of fuel in returned vehicles with the vehicle ticket.

Note: You cannot associate billing exceptions with completed vehicle tickets.

To associate billing exceptions with vehicle tickets:

1 Select **Work > Fleet > Fleet Vehicle Tickets**.
2 Select the vehicle ticket for which to associate billing exceptions, and then click the **Exceptions** tab.
3 Click **Add Exception**.
4 Specify this information:

Exception
Specify the exception with which to associate the vehicle ticket. The system automatically populates the exception description, **Exception Org.**, and **Amount**.

Date
Specify the current date.

Exception Type
Select the type of exception.

Extra Charge
Select to include this exception in the vehicle ticket billing costs.

Amount
Specify the amount of the additional fee for the exception.

Exception Comments
Enter any additional comments.

5 Click **Submit**.

Note: Click **Create WO** to create a new work order for the vehicle ticket exception combination. The system populates Work Order with the new work order number. If a standard work order is associated with the exception, the standard work order can be used to create the work order.

See Creating work orders on page 391.

Viewing billing adjustments for vehicle tickets

To view billing adjustments for vehicle tickets:

Note: The system checks the vehicle **Ticket Type** on the vehicle ticket header and displays billing adjustments based on the **Ticket Type**. Assignment adjustments are displayed differently than pool and loaner adjustments.

1 Select **Work > Fleet > Fleet Vehicle Tickets**.
2 Select the vehicle ticket for which to view billing adjustments, and then click the **Billing Adjustments** tab.
3 View the billing adjustments for the vehicle ticket.

Viewing fleet bills

View fleet bills that are generated by the billing process.

To view fleet bills:

1 Select **Work > Fleet > Fleet Bills**.
2 View the fleet bill information.

Modifying fleet bills

Modify fleet bills that are generated by the system.

Note: You cannot delete fleet bills.

To modify fleet bills:

1 Select **Work > Fleet > Fleet Bills**.
2 Select the fleet bill to modify, and then click the **Record View** tab.

The system automatically populates **Fleet Bill**, the fleet bill description, **Fleet Customer**, **Fleet Customer Org.**, **Period End Date**, **Total**, **Billed Date**, and **General Ledger**.

3 Specify this information:

Class
Specify the class to which the fleet bill belongs. The system automatically populates **Class Org.**

Paid Date
Specify the date that the fleet bill was paid.

4 Click **Save Record**.

Note: Click **Regenerate Bill** to regenerate the bill. The system generates and displays a new fleet bill number and deletes the original bill from the system. The new bill will include all transactions that were originally billed as well as any new transactions that are within the billing period that are not billed. **Billed Date** is populated with the current system date.

You cannot regenerate the bill if the bill you want to regenerate is not the latest bill or if the bill has been sent to a general ledger.

If the bill is regenerated, the system deletes the old bill.

Viewing billing details for fleet bills

View billing details for specific fleet bills. Fleet bill charges are summarized to the unique fleet customer cost code and vehicle level. Charges are displayed by the following categories: Usage, Mileage, Maintenance, Non-maintenance, Fuel, Insurance, and Exceptions. The system also displays a total charge for each bill line, a subtotal, which summarizes the charges for all bill lines by category, an adjustment line, which summarizes all adjustments entered for previous bills that are included in the selected bill, grand totals of each of the charge categories, and a total bill charge.

Note: When filtering the billing details, **Subtotals** and **Totals** may change; they are relative to the specific fleet bill lines in the grid. Adjustments totals will not change, as they are related to the entire bill.

To view billing details for fleet bills:

1 Select **Work > Fleet > Fleet Bills**.
2 Select the fleet bill for which to view billing details, and then click the **Billing Details** tab.
3 View the billing details.

Viewing fleet bill transactions

View individual transaction information for specific billing categories. For example, select Usage as the Category, and then click View Transactions. The system displays the specific usage transactions that make up the usage total for the selected bill line. This includes usage charges and usage markup charges.

To view fleet bill transactions:

1 Select **Work > Fleet > Fleet Bills**.
2 Select the fleet bill for which to view fleet bill transactions, and then click the **Billing Details** tab.
3 Select the fleet bill line for which to view fleet bill transactions.

Note: You must select a bill line to view fleet bill transactions.

4 Specify this information:

Category
Choose one of the following options:

Usage
Select to show usage charges only.

Mileage
Select to show mileage charges only.

Maintenance Labor
Select to show maintenance labor charges only.

Maintenance Parts
Select to show maintenance parts charges only.

Non-maintenance Labor
Select to show non-maintenance labor charges only.

Non-maintenance Parts
Select to show non-maintenance parts charges only.

Fuel
Select to show fuel charges only.

Insurance
Select to show insurance charges only.

Exceptions
Select to show exception charges only.

5 Click **View Transactions**.
6 View the charges for the specific transaction category.

Viewing fleet bill adjustment transactions

View individual adjustment transaction information for specific billing categories. For example, select Usage as the **Category**, and then click **View Adjustment Transactions**. The specific usage adjustment charges that make up the entire bill are displayed. This includes usages adjustment charges and usage markup charges. All adjustments related to the bill and category are always displayed.

To view fleet bill adjustment transactions:

1 Select **Work > Fleet > Fleet Bills**.
2 Select the fleet bill for which to view fleet bill adjustment transactions, and then click the **Billing Details** tab.
3 Choose one of the following options for **Category**:

Option	Description
Usage	Select to show usage charges only.
Mileage	Select to show mileage charges only.
Maintenance Labor	Select to show maintenance labor charges only.
Maintenance Parts	Select to show maintenance parts charges only.
Non-maintenance Labor	Select to show non-maintenance labor charges only.
Non-maintenance Parts	Select to show non-maintenance parts charges only.
Fuel	Select to show fuel charges only.
Insurance	Select to show insurance charges only.
Exceptions	Select to show exception charges only.

4 Click **View Adjustment Transactions**.
5 View the charges for the specific adjustment transaction category.

Creating pool and loaner adjustments for fleet bills

Create an adjustment to vehicle ticket charges that have already been billed. The adjustments will be reflected on the subsequent fleet bill. You can make changes to billing category amounts or cost codes. To enter specific pool or loaner adjustments for hours charges, hours markup charges, mileage charges, mileage markup charges, and/or exceptions charges, specify the pool or loaner adjustment amount in the corresponding field. These assignment adjustment amounts can be negative (a credit) or positive (a debit).

Note: You can only make adjustments to pool and loaner vehicle tickets on this form.

You cannot update a pool or loaner adjustment after the adjustment is billed.

To create pool and loaner adjustments for fleet bills:

1 Select **Work > Fleet > Fleet Bills**.
2 Select the fleet bill for which to create a pool or loaner adjustment, and then click the **Pool/Loaner Adjustments** tab.

   The system automatically populates **Created By** and all currency fields in the **Adjustment Details** section.

3 Click **Add Adjustment**.
4 Specify this information:

   Ticket
   Specify the vehicle ticket for which to add a pool/loaner adjustment. The system automatically populates **Vehicle**, the vehicle description, **Issued Date/Time**, **Created Date/Time**, **Period End Date**, **Returned Date/Time**, **Cost Code**, **Hours Billed** and the currency, **Hours Markup Billed** and the currency, **Mileage Billed** and the currency, **Mileage Markup Billed** and the currency, and **Exceptions Billed** and the currency.

New Cost Code
Specify a new cost code to correct a ticket that was billed to an incorrect cost code.
Note: You cannot adjust cost code values and pool or loaner adjustment amounts on the same fleet bill. If you enter a **New Cost Code**, the system protects all other fields except **Ticket** and **Comments**. If you clear the **New Cost Code**, the system re-enables all of the protected fields. If you enter pool and loaner adjustment amounts, the system protects **New Cost Code**. If you clear the pool or loaner adjustment amounts, the system re-enables **New Cost Code**.

Hours Adjustment
Specify the adjustment amount for hours charges.

Hours Markup Adjustment
Specify the adjustment amount for hours markups.

Mileage Adjustment
Specify the adjustment amount for mileage charges.

Mileage Markup Adjustment
Specify the adjustment amount for mileage markup charges.

Fuel Markup Adjustment
Specify the adjustment amount for fuel markup charges.

Exceptions Adjustment
Specify the adjustment amount for exceptions charges.

Exception
Specify the exception for which to add pool or loaner adjustment. The system automatically populates **Exceptions Adjustment**.

Comments
Enter any comments about the pool or loaner adjustment.

5 Click **Submit**.

Note: You cannot delete a pool or loaner adjustment after the adjustment is billed.

Creating assignment adjustments for fleet bills

Create an adjustment to vehicle ticket charges that have already been billed. The adjustments will be reflected on the subsequent fleet bill. To correct a ticket that was billed to an incorrect cost code, enter a **New Cost Code**. To enter specific assignment adjustments for period charges, period markup charges, mileage charges, mileage markup charges, fuel markup charges, insurance charges, insurance markup charges, and/or exceptions charges, specify the assignment adjustment amount in the corresponding field. These assignment adjustments amounts can be negative (a credit) or positive (a debit).

Note: You can only make adjustments to assignment vehicle tickets on this screen.

You cannot update an assignment adjustment after the adjustment is billed.

To create assignment adjustments for fleet bills:

1 Select **Work > Fleet > Fleet Bills**.

2 Select the fleet bill for which to create an assignment adjustment, and then click the **Assignment Adjustments** tab. The system automatically populates **Created By** and all currency fields in the **Adjustment Details** section.

3 Click **Add Adjustment**.

4 Specify this information:

Ticket
Specify the vehicle ticket for which to add an assignment adjustment. The system automatically populates **Vehicle**, the vehicle description, **Issued Date/Time**, **Created Date/Time**, **Period End Date**, **Returned Date/Time**, **Cost Code**, **Period Charge Billed** and the currency, **Period Markup Billed** and the currency, **Mileage Billed** and the currency, **Mileage Markup Billed** and the currency, **Fuel Markup Billed** and the currency, **Insurance Billed** and the currency, **Insurance Markup Billed** and the currency, and **Exceptions Billed** and the currency.

New Cost Code
Specify a new cost code to correct a ticket that was billed to an incorrect cost code.
Note: You cannot adjust cost code values and assignment adjustment amounts on the same fleet bill. If you enter a **New Cost Code**, the system protects all other fields except **Ticket** and **Comments**. If you clear the **New Cost Code**, the system re-enables all of the protected fields. If you enter assignment adjustment amounts, the system protects **New Cost Code**. If you clear the assignment adjustment amounts, the system re-enables **New Cost Code**.

Period Charge Adjustment
Specify the adjustment amount for period charges.

Period Markup Adjustment
Specify the adjustment amount for period markups.

Mileage Adjustment
Specify the adjustment amount for mileage charges.

Mileage Markup Adjustment
Specify the adjustment amount for mileage markup charges.

Fuel Markup Adjustment
Specify the adjustment amount for fuel markup charges.

Insurance Adjustment
Specify the adjustment amount for insurance charges.

Insurance Markup Adjustment
Specify the adjustment amount for insurance markup charges.

Exceptions Adjustment
Specify the adjustment amount for exceptions charges.

Exception
Specify the exception for which to add an assignment adjustment. The system automatically populates **Exceptions Adjustment**.

Comments
Enter any comments about the assignment adjustment.

5 Click **Submit**.

Note: You cannot delete an assignment adjustment after the adjustment is billed.

Infor EAM Microsoft Project interface

Installing the Infor EAM MS Project interface

Note: You must install Infor EAM and MS Project 2003 or MS Project 2010 before you install the Infor EAM MS Project Interface.

See the *Infor EAM Installation Guide* and the MS Project 2003, 2010 documentation.

You must also install the `MS .NET Framework Version 1.1` before you install the Infor EAM MS Project Interface. The `MS .NET Framework` is included on the Infor EAM MS Project Interface CD, and is called `DOTNETFX.EXE`. You must run `DOTNETFX.EXE` before `SETUP.EXE` if the `MS .NET Framework` is not already installed on the machine.

To install the Infor EAM MS Project Interface:

1 Insert the Infor EAM MS Project Interface CD into the proper drive.
2 Choose the folder specific to your version of MS Project:

MS Project 2003-2007
Select this folder if you have MS Project 2003 or 2007 installed on your machine.

MS Project 2010
Select this folder if you have MS Project 2010 installed on your machine.

3 Execute the SETUP.EXE file. The system displays the Language Installation dialog box.

Note: If you would like to use English as the language for the installation, execute the msproject.msi file. The installation wizard will skip the language selection option in step #4 and display the Welcome dialog box.

4 Select the language to be used in the installation, and then click **OK**.
5 Click **Next**.
6 Click **I accept the terms in the License Agreement**, and then click **Next**.
7 Enter the folder in which to install the Infor EAM MS Project Interface.
8 Click **Next**.
9 Click **Install**.
10 Wait for the system to complete the installation, and then click **Finish**.
11 Click **Close**.

Choosing a Language for the Infor EAM MS Project Interface

After the installing the Infor EAM MS Project, choose a language for the interface.

To choose a language for the Infor EAM MS Project Interface:

1. Select **Infor > Infor EAM MS Project Interface > Choose Language**.
2. Select the language to be used in the Infor EAM MS Project Interface, and then click **OK**.

Setting up connection information

Before completing tasks within the system, you must first set up the appropriate connection information. Use this information each time you log in to the system.

Note: The connection information is also used to establish privileges to Infor EAM records within the system. Therefore, you can only create and maintain one user record per client machine.

To set up connection information:

1. Open MS Project.
2. Select **Infor > Infor EAM**.
3. Click **Set connection information**.
4. Specify this information:

   Host Name
   Enter the URL for the Infor EAM server.

   Username
   Enter the user code used to log in to Infor EAM. If necessary, include the tenant after the user code, e.g., user@tenant.

   Password
   Enter the password used to log in to Infor EAM.

5. Click **Save**.

   Note: Click **Test** to test the connection information.

Associating Infor EAM priority codes with MS Project priority codes

After defining work priority codes in Infor EAM, associate those codes with the priority codes in MS Project.

To associate Infor EAM priority codes with MS Project priority codes:

1. Select **Administration > Setup > MS Project Priority Mappings**.
2. Click **Add Mapping**.
3. Specify this information:

Infor EAM Priority
Select the Infor EAM work priority code to associate with an MS Project priority code.

MS Project Priority
Specify the MS Project priority code to associate with the Infor EAM priority code.

4 Click **Submit**.

Creating scheduling sessions in Infor EAM

Create batches of work orders to import into MS Project by creating scheduling sessions in Infor EAM. You can also send resource information to MS Project with the scheduling session.

Note: To return to a previous side-pane while creating a new scheduling session, click the appropriate Go back to button.

To create scheduling sessions in Infor EAM:

1 Open MS Project.
2 Select **Infor > Infor EAM**.
3 Set the connection information for the Infor EAM MS Project Interface.
4 Click **Create new scheduling session**.
5 Specify this information:

Description
Specify a description of the session.

Organization
Specify the organization with which to associate the session if you use multi-organization security.

Include Header Task
Select the check box to display both the work order header tasks and work order activity sub-tasks.

Set Task Duration To Est. Hours
Select the check box to populate **Duration** of the activity task to the estimated hours of the Infor EAM work order activity.

6 Click **Save and go to Step 2**.
7 Specify this information:

From
Specify the beginning date of the work order activity start dates included in the session.

To
Specify the ending date of the work order activity start dates included in this session.

8 Click **Save and go to Step 3**.
9 Choose one or more of the following criteria for filtering work orders to include in the session:

- **Project**
  Click **Project**, and then select the projects to include in the list of work orders.

- **Department**
  Click **Department**, and then select the departments to include in the list of work orders.

- **WO Type**
  Click **WO Type**, and then select the work order types to include in the list of work orders.

- **WO Status**
  Click **WO Status**, and then select the work order statuses to include in the list of work orders.

- **Priority**
  Click **Priority**, and then select the priorities to include in the list of work orders.

- **Trade**
  Click **Trade**, and then select the trades to include in the list of work orders.

- **Equipment**
  Click **Equipment**, and then enter the first letter(s) in the spelling of the pieces of equipment to include in the list of work orders. Click **Refresh**. Select the pieces of equipment to include in the list of work orders.

- **Equipment Class**
  Click **Equipment Class**, and then select the equipment classes to include in the list of work orders. The selected criteria is displayed in the preview-pane.

- **Assigned By**
  Click **Assigned By**, and then select the supervisors to include in the list of work orders.

10. Click **Display Results**. A list of unlocked work order activities that matches the activity start date range and the criteria you selected is displayed. Select the work order activities to include in the new scheduling session.

    Note: Check **Select** to select all of the work order activities.

    You cannot select work order activities that are associated with existing open sessions.

    You cannot select work order activities with Estimated Hours equal to 0.

11. Click **Save and go to Step 4**.
12. Choose one or more of the following criteria for filtering employees to include in the session:

    - **Department**
      Click **Department**, and then select the departments to include in the list of employees.

    - **Trade**
      Click **Trade**, and then select the trades to include in the list of employees.

- **Class**
  Click **Class**, and then select the classes to include in the list of employees. The system displays the selected criteria in the preview-pane.

13. Click **Display Results**. A list of employees that matches the criteria you selected is displayed. Select the employees to include in the new scheduling session.

    Note: Check **Select** to select all of the employees.

14. Click **Save and go to Step 5**.
15. Choose one or more of the following criteria for filtering suppliers to include in the session:

    - **Class**
      Click **Class**, and then select the classes to include in the list of suppliers.

16. Click **Display Results**. A list of suppliers that matches the criteria you selected is displayed. Select the suppliers to include in the new scheduling session.

    Note: Check **Select** to select all of the suppliers.

17. Click **Save and go to Step 6**.
18. Choose one or more of the following criteria for filtering maintenance equipment to include in the session:

    - **Department**
      Click **Department**, and then select the departments to include in the list of maintenance equipment.

    - **Class**
      Click **Class**, and then select the classes to include in the list of maintenance equipment.

    - **Category**
      Click **Category**, and then select the categories to include in the list of maintenance equipment.

19. Click **Display Results**. A list of maintenance equipment that matches the criteria you selected is displayed. Select the maintenance equipment to include in the new scheduling session.

    Note: Check **Select** to select all of the maintenance equipment.

20. Click **Save and go to Step 7**.
21. Click **Class** to select the classes to include in the list of tools.
22. Click **Display Results**. A list of tools that matches the criteria you selected is selected. Select the tools to include in the new scheduling session.

    Note: Check **Select** to select all of the tools.

23. Click **Save and Finish**.

    Note: When saving the record, the work order activity and resource (employee, supplier, maintenance equipment, and tool) records are also imported for the session into MS Project.

Creating and adding work orders and activities to scheduling sessions

Create a work order or a work order activity and then add it to an existing scheduling session.

Creating a work order and adding it to an existing scheduling session

To create a work order and add it to an existing scheduling session:

1. Open the MS Project file that contains the open scheduling session for which to add a work order.

   Note: You must first create or import a scheduling session in order to add a work order.

2. Click **Create work order**.
3. Specify this information:

   Equipment
   Specify the equipment on which to perform work. The system automatically populates **Equipment Description** and **WO Org.**

   WO Description
   Specify a description of the work needed.

   Status
   Specify the status of the work order.

   Type
   Specify the type for the work order.

   Priority
   Specify the priority of the work order.

   Standard WO
   Specify the standard work order.
   Note: If you enter a **Standard WO**, the system creates the new work order, any activities, any child work orders, and related activities. Only standard work orders and child work orders with activities are added to the current scheduling session.

   Parent WO
   Specify the code identifying the parent work order.

   Class
   Specify the class of the work order.

   Department
   Specify the department.

   Location
   Specify the location of the work to be completed.

   Problem Code
   Specify the code to identify the problem.

Cost Code
Specify the cost code of the work order.

Sched. Start Date
Specify the starting date for the work order.

Sched. End Date
Specify the ending date for the work order.

Assigned To
Specify the person responsible for the work order.

Reported By
Specify the employee requesting the work.

Assigned By
Specify the supervisor who assigned the work order.

Project-Budget
Specify the project budget for the work order.

Trade
Specify the trade required to perform the activity.

Task
Specify the task code for the activity.

Material List
Specify the material list code for the material list containing the parts needed for the work order.

Activity Start Date
Specify the beginning date for the activity.

Activity End Date
Specify the ending date for the activity.

Estimated Hours
Specify the number of estimated hours for the activity.

People Required
Specify the number of people required to perform the activity.

4 Click **Submit**.

Note: Click **Custom Fields** to display all custom fields associated with the work order.

Enter a priority for the work order. The system converts the Infor EAM Priority to the appropriate MS Project Priority before creating the scheduling session.

Creating a work order activity and adding it to an existing scheduling session

To create a work order activity and add it to an existing scheduling session:

1. Open the MS Project file that contains the open scheduling session for which to add a work order activity.

   Note: You must first create or import a scheduling session in order to add a work order activity.

2. Select the work order for which to add an activity, and then click **Create work order activity**. **Work Order**, **Work Order Description**, and **WO Org.** are automatically populated.
3. Specify this information:

   Activity
   Specify an activity.

   Trade
   Specify the trade required to perform the activity.

   Task
   Specify the task code for the activity.

   Material List
   Specify the material list code for the material list containing the parts needed for the work order.

   Activity Start Date
   Specify the starting date for the activity.

   Activity End Date
   Specify the ending date for the activity.

   Estimated Hours
   Specify the number of estimated hours for the activity.

   People Required
   Specify the number of people required to perform the activity.

4. Click **Submit**.

Exporting sessions from MS Project to Infor EAM

Export scheduling sessions from MS Project after scheduling work or modifying schedules.

To export sessions from MS Project to Infor EAM:

1. Open the MS Project file that contains the open scheduling session that you want to export to Infor EAM.

   Note: You must first create or import a scheduling session in order to export a scheduling session.

2. Click **Export scheduling session**.
3. Click **Export Session**.

   Note: Infor EAM updates the resources assigned, **Activity Start Date**, **Activity End Date**, **Estimated Hours**, and **Percent Complete**, and sets **Assigned By** of the work order equal to **Assigned By** in MS Project.

Click **Cancel** to close the Export Scheduling Session side-pane without exporting any records to Infor EAM.

Work order activities deleted in MS Project are not deleted in Infor EAM, and new work order activities created in MS Project will not be exported back to Infor EAM.

Canceling sessions

Cancel an existing scheduling session.

Note: Canceling the session will not delete the work order activities and resource (employee, supplier, maintenance equipment, and tool) records from the current project, but after canceling the session, you cannot export the updated tasks back to Infor EAM.

To cancel sessions:

1. Open the MS Project file that contains the open scheduling session that you want to cancel.

   Note: You must first create or import a scheduling session in to order cancel a scheduling session.
2. Click **Cancel scheduling session**.
3. Click **Cancel Session**.

Asset management services

Creating customer contracts

Create contracts for commercial service customers to specify how time, material, and labor costs are charged to a customer for maintenance work.

Customers are defined for use with service requests and asset management services.

See Creating Customers on page 910.

To create customer contracts:

1. Select **Work > Asset Management Services > AMS-Customer Contracts**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the customer contract belongs if you use multi-organization security.

   Customer Contract
   Specify a description of the customer contract in the adjacent field. After you save the record, a customer contract number will be assigned.

Status
Select the contract status. Changing the status of a customer contract may affect additional system checks and field changes as follows:

Option	Description
Unfinished	All fields are editable. However, when you save the customer contract with Unfinished status, **Organization** is protected.
Approved	All fields are protected except **Status** and **End Date**. Approved status indicates that payments can be approved and work orders can be processed.
Finished	All fields are protected except **Status**. Finished status indicates that payments and work order charges can still be invoiced, but no new work order charges will be processed for a finished contract.
Cancelled	All fields are editable except **Organization**. Cancelled status indicates that the customer contract has been cancelled and can only be selected if no invoiced payments or work order charges exist.

Note: You cannot modify the status of customer contracts if there are any existing approved or invoiced fixed charges, or if there are any existing calculated work orders. A calculated work order is a work order that is associated with a customer contract for which customer charges have been calculated.

See Understanding the Calculation of Customer Charges on page 1130.

Class
Specify the class of the contract. The classes shown belong to the AGR entity.

Customer
Specify the customer to whom to charge the work.

Pricing Schedule
Specify the pricing schedule for time and material costing.

Choose one of the following options:

Option	Description
Apply the contract to equipment	Specify the **Equipment** for which to apply the contract. The contract also applies to any child equipment, unless the cost rollup attribute is set for the child equipment.

Option	Description
Apply the contract to a project	Specify the**Project** to which the contract applies. The contract also applies to any child projects.
Apply the contract to an event	Specify the **Work Order** to which the contract applies. **Note:** MEC work orders are not displayed in the **Work Order** lookup.

Start Date and End Date
Specify the date on which the contract period begins and the expiration date of the contract. If you do not enter a date, there is no time limitation on the contract.
Note: If the contract has a fixed charge due date, the **Start Date** must be on or before the fixed charge due date, and the **End Date** must be on or after the fixed charge due date.

4 Click **Save Record**.

Creating fixed charge schedules for customer contracts

Create fixed charge schedules for customer contracts to create a set price to be added to a customer invoice based upon a specified due date.

When generating costs for a customer contract, the system uses fixed charges in the place of any work order charges and creates the fixed charges via the customer invoice.

See Understanding the Calculation of Customer Charges on page 1130.

If a work order is created with a cost for a customer contract, the system bypasses the work order when calculating costs, and the cost for the customer will be the specified fixed charges.

To create fixed charge schedules for customer contracts:

1 Select **Work > Asset Management Services > AMS-Customer Contracts**.
2 Select the customer contract for which to create fixed charges and then click the **Fixed Charges** tab. The system automatically populates and protects **Start Date** and **End Date** with the date(s) from the customer contract header. The system populates **Currency** with the currency of the **Organization** of the contract header.
3 Click **Add Fixed Charge**.
4 Specify this information:

Line
Specify a description of the fixed charge in the adjacent field. Modify the sequence number of the fixed charge as necessary. The next incremental line number is automatically assigned based on the setting of the INCRLINO installation parameter.
Note: You can only edit the **Line** number when inserting a record. After the record is saved, **Line** is protected.

Status
Select the status of the fixed charge. Changing the status of a fixed charge may affect additional system checks and field changes as follows:

Option	Description
Unfinished	All fields are editable. However, when you submit the fixed charge with Unfinished status, the system protects **Line**. Select Unfinished if the fixed charge or the customer contract is not approved.
Approved	The system protects all fields except **Status**. Select Approved to create an invoice for this payment.
Cancelled	The system protects all fields except **Status**. Select Cancelled to cancel the invoice for this payment.
Due Date	Specify the date when records can be invoiced. Leave this field blank for the record to be invoiced every time invoices are generated.
Price	Specify the gross price (not including tax) in internal currency units.

5 Click **Submit**.

Creating pricing schedules

Create pricing schedules to define time and material calculations, work orders, custom trade rates, and part-specific charges to be associated with customers and customer contracts.

To create pricing schedules:

1 Select **Work > Asset Management Services > AMS-Pricing Schedules**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the pricing schedule belongs if you use multi-organization security.

Pricing Schedule
Specify a unique code identifying the pricing schedule and then enter a description of the pricing schedule in the adjacent field.

Class
Specify the class of the pricing schedule. The classes shown belong to the ARR entity.

Labor Cost %
Specify the percentage of the work order labor costs that is charged to the customer.

Stock Items %
Specify the percentage of the work order costs for stock items that is charged to the customer.

Hired Labor %
Specify the percentage of the work order hired labor costs that is charged to the customer.

Direct Outs %
Specify the percentage of the work order direct material costs that is charged to the customer.

Tool Usage %
Specify the percentage of the work order tool usage costs that is charged to the customer.

Services %
Specify the percentage of the work order services costs that is charged to the customer.

Additional Charge
Specify an additional fee to associate with the pricing schedule. For example, if you assess a standard trip charge regardless of the work performed, enter that amount.
Note: Additional Charge is not displayed if the MULTIORG installation parameter is set to YES. If you are using multi-organization security, you must add additional charges for each organization on the **Additional Charges** page.

See Adding Additional Charges (MOS) on page 1128.

Time Rounding (min.)
Specify the number of minutes to round charged time of booked hours. For example, a value of 15 indicates rounding to quarters of an hour.

Minimum Time (min.)
Specify the minimum number of minutes to charge per labor booking.

Custom Trade Rates
Select to apply a markup for specific trade rates.
Note: If you enter **Labor Cost %**, you cannot select **Custom Trade Rates**.

Custom Part Charges
Select to apply part charges depending on the type of part used.
Note: If you enter **Stock Items %**, you cannot select **Custom Part Charges**.

4 Click **Save Record**.

Note: When you save the pricing schedule record, a record is also created on the **Custom Trade Rates**, **Custom Part Charges**, and **WO Criteria** pages based on the information entered for the pricing schedule.

Creating custom trade rates

Create custom trade rates for a pricing schedule. Custom trade rates are used to charge labor costs to customers based on rates defined for specific trades and hour types instead of a standard labor cost percentage entered on the Pricing Schedule header.

To create custom trade rates:

1. Select **Work > Asset Management Services > AMS-Pricing Schedules**.
2. Select the pricing schedule for which to create custom trade rates and then click the **Custom Trade Rates** tab.
3. Click **Add Rate**.
4. Specify the **Trade**, **Type of Hours**, and **Hourly Rate** to charge the customer.
5. Click **Submit**.

Creating custom part charges

Create custom prices for part charges for a pricing schedule. Custom part charges are used to charge material costs to customers based on rates defined for part classes instead of a standard stock item cost percentage entered on the Pricing Schedule header.

To create custom part charges:

1. Select **Work > Asset Management Services > AMS-Pricing Schedules**.
2. Select the pricing schedule for which to create custom part charges and then click the **Custom Part Charges** tab.
3. Click **Add Charge**.
4. Specify this information:

   Part Class
   Specify the part class for which to charge part prices to the customer.

   Charge %
   Specify the percentage of the part prices to charge to the customer.
   Note: To indicate that the exact cost is charged to the customer, enter 100. To create a surcharge for the part prices, enter a value greater than 100.

5. Click **Submit**.

Adding additional charges (MOS)

Add additional charges to a pricing schedule for specific organizations. Additional charges on a pricing schedule are added to every work order that is completed for a customer contract. The additional charges are not added or displayed on the work order when the work order is created. Instead, additional charges are added to the work order costs when the system calculates work order customer charges.

See Understanding the Calculation of Customer Charges on page 1130.

Note: You can only add additional charges for specific organizations if the MULTIORG installation parameter is set to YES.

To add additional charges (MOS):

1 Select **Work > Asset Management Services > AMS-Pricing Schedules**.
2 Select the pricing schedule for which to add additional charges and then click the **Additional Charges** tab.
3 Click **Add Charge**. The system automatically populates **Organization** with the organization of the logged-in user.
4 Specify this information:

   Additional Charge
   Specify an additional amount to add to invoices for the pricing schedule.
   Note: A fixed charge is per invoice; whereas, an additional charge is per work order.

   Organization
   Specify the organization for which to add the fixed or added price.

5 Click **Submit**.

Defining work order criteria

Define criteria to identify the work orders for which to charge for pricing schedules. The system uses the specified work order criteria for a pricing schedule to select the work orders for which to charge a customer when calculating work order costs.

After the system selects all of the existing work orders matching the work order criteria for a pricing schedule, it then calculates and compiles all the costs for the work orders, which will be used later during the assembly of charges for customer invoices.

See these topics:

- Understanding the Calculation of Customer Charges on page 1130
- Understanding Customer Invoice Generation on page 1134

To define work order criteria for pricing schedules:

1 Select **Work > Asset Management Services > AMS-Pricing Schedules**.
2 Select the pricing schedule for which to define work order criteria parameters and then click the **WO Criteria** tab.

   Note: When you create pricing schedules, the system automatically creates a WO Criteria record for the **Department**, **WO Type**, and **Equipment Class** using an asterisk (*) to represent all departments, work order types, and equipment classes.

   See Creating Pricing Schedules on page 1126.

3 Click **Add WO Criteria**.
4 Specify the **Department**, **WO Type**, and **Equipment Class** for the work being performed.
5 Click **Submit**.

Viewing invoices for AMS-Customers

View a list of invoices for a selected customer.

If you use multi-organization security, the system displays all invoices for a selected customer based on the query permissions established by the multi-organization security settings for the EVNT and INV entities.

To assemble/generate customer invoices, right-click on a form for which the customer invoice generation option is available, and then select **Create Customer Invoice**.

See Understanding Customer Invoice Generation on page 1134.

To view invoices for customers:

1. Select **Work > Service Request > AMS-Customers**.
2. Select the customer for which to view invoices and then click the **Invoices** tab.
3. View the customer invoice information.

Viewing AMS-customer contracts

View contracts associated with each customer.

Customers are defined for use with service requests and asset management services.

To view customer contracts:

1. Select **Work > Service Request > AMS-Customers**.
2. Select the customer for which to view contracts and then click the **Contracts** tab.
3. View the customer contract information.

Calculating and approving customer charges

The system calculates customer charges based on customer contracts, pricing schedules, and work orders associated with customer contracts.

Review customer charges and make corrections as necessary, and then approve and generate the customer charges to customer invoices.

Understanding the calculation of customer charges

The system calculates customer charges and locates the current work orders that are associated with a customer contract. View the customer charges on the **AMS-Approve Customer Charges** form.

The customer charge calculation process is initiated at different points within the system and includes work orders that match the following criteria:

- Work orders of event type JOB or PPM (or their user status equivalent)
- Work orders for which there is no Parent work order

- Work orders for which Continue Charging is not selected and are not associated with any customer charge records with a Status of Excluded from invoicing, Approved, or Invoiced
- Work order line types LAB, MAT, HIR, DMA, FIX, or TOOL

For all work orders that match the previously stated criteria, customer charges are then calculated. See the following list for additional information:

- First, the system determines which work orders are associated with a customer contract. To do so, the system checks the work order first, then the project of the work order (and child projects), then the equipment of the work order (and child equipment), and finally the location of the work order (and child locations).
- After making the association between a work order and a customer contract, the system then creates a customer charge record for the work order on the **AMS-Approve Customer Charges** form.
  Note: A work order must have some costs associated with it to generate a customer charge.

  If the system cannot find an approved contract that matches, the system generates an error message that can be viewed on the Comments page of the **AMS-Approve Customer Charges** form for the current work order charge record. Also, if there is an error message for the work order charge record, the Status of the record will always be changed to Data Error.

  If there are multiple, valid customer contracts associated with a work order, the system generates charges for the customer contract for which the most specific data is defined.

  If there is more than one valid customer contract, the system generates charges for the customer contract associated with a pricing schedule for which specific values are defined on the WO Criteria page of the Pricing Schedules form.
- Next, the system retrieves any additional charges for pricing schedules associated with the customer contract.
  Note: The system only adds the value of an additional charge to a work order once. It does not include any additional charges for which there are already existing charges on a work order, unless the value of the Additional Charge has been updated on the pricing schedule after a work order charge has been generated. If the Additional Charge has been updated, then the first work order charge record contains the original value of the Additional Charge, and the system generates a new work order charge for the difference between the values of the two additional charges.
- If Custom Trade Rates is selected for a pricing schedule associated with a customer contract, the system bypasses any trade rates and uses only the rates specified on the Custom Trade Rates page of the Pricing Schedules form.
- If Custom Part Charges is selected for a pricing schedule associated with a customer contract, the system calculates charges using the values specified for Charge % on the Custom Part Charges page of the Pricing Schedules form to calculate charges rather than the value specified for Stock Items Charge %.
- If there are existing labor hours on a work order, the system rounds the hours based on the values specified for Time Rounding (min) and Minimum Time (min) on the pricing schedule.
  Note: The system does not track which transactions belonging to a work order have already been billed. Therefore, if you re-generate work order charges for a customer contract, the system simply calculates the total work order charges again and subtracts the values that have already been approved or invoiced to calculate the necessary charges for the new work order charge record.

Approving and generating customer charges

Approve customer charges after reviewing and correcting the results of time and material calculations.

After approving the customer charges, generate invoices from all customer charges. The system generates customer charges for all work orders, not just the work order selected on the **List View** page.

To approve and generate customer charges:

1 Select **Work > Asset Management Services > AMS-Approve Customer Charges**.

2 Select the work order for which to approve customer charges and then click the **Record View** tab. The system automatically populates **Charge Number**, **Run Date**, **Customer**, **Originator**, and **Customer Contract**.

Note: Charge Number is used to associate several invoices with the same work order.

3 Specify this information:

Status
Specify the status of the customer charges. See the following for a description of the possible customer charge statuses:

Option	Description
Approved	Work order charge will be invoiced. All fields are protected except **Status**.
Data Error	System generated status. Work order charge will not be invoiced. You can update **Status**, **Continue Charging**, and **Corrections** as necessary.
Exclude from invoicing	Work order charge will not be invoiced. You can update **Status**, **Continue Charging**, and **Corrections** as necessary.
Invoiced	System generated status indicating that the charges are invoiced. All fields are protected. After you generate the invoice, the system automatically changes **Status** to Invoiced.
Unapproved	Default status of the calculations. You can update **Status**, **Continue Charging**, and **Corrections** as necessary.

Continue Charging
Select to enable the system to continue generating invoice charges for the same work order. If selected, the system creates a new **Charge Number** when generating customer charges, assigns a new incremental number to a newly calculated charge record, and displays the difference in price between the actual and the existing calculation(s).
Note: Continue Charging is automatically selected for calculations for non-completed work orders.

Comments
Enter comments related to the work order costs.

Corrections
Specify the amount to adjust the work order costs. Enter deductions as negative amounts.

4 Click **Generate All Customer Charges**.

5 Specify the **Organization**, **Work Order**, **Customer**, **Department**, **Equipment**, and **Project** for which to calculate work order charges.

6 Specify this information:

Released Work Orders
Select to only calculate work order charges for released work orders.

Print Report
Select to print a report of all the calculated work order charges.

Completed From and Completed To
Specify the work order completion date range for which to calculate work order charges.

Completed Work Orders
Select to calculate work order charges for only completed work orders.

7 Click **Calculate**.

Note: If you did not specify any generation criteria, charges for all work orders of type JOB or PPM with a status of Released or Completed will be generated. The system verifies that the work order(s) have no parent work order and that the customer charges do not have a **Status** of Approved, Excluded from invoicing, or Invoiced.

Viewing charges for AMS-Customers

View a list of calculated charges for a customer. Calculated customer charges are accrued from work orders for which charges are compiled for external invoicing purposes based on the terms of an established customer contract.

To view charges for customers:

1 Select **Work > Service Request > AMS-Customers**.

2 Select the customer for which to view charges and then click the **Charges** tab.

3 View the customer charges information.

Creating and generating customer invoices

Generate customer invoices to create and assemble accounts receivable invoices for asset management service customers, work order charges, and fixed payments.

Customer invoices are only related to asset management services and should not be confused with the invoice voucher functionality in the Purchasing Management module

See Recording Invoice Vouchers on page 700.

You can generate customer invoices several different ways:

- Calculate customer charges and create a single customer invoice using the Create Customer Invoice right-click option on the **Work Orders** form.

  See Creating Customer Invoices from Work Orders on page 1135.

- Generate customer invoices from the **Customer Invoices** form.

  See Generating Customer Invoices on page 1135.
- Create an invoice for a work order

Upon initiation of the invoice generation process, the system locates all customer charge records and fixed charge schedules for customer contracts. The system does not recalculate the invoice charge records.

See Understanding the Calculation of Customer Charges on page 1130.

The system adds the total price for the customer(s) based on the specified invoice generation criteria. The system changes the **Status** of all work orders on the **Approve Customer Charges** form to Invoiced.

Depending on the specified generation criteria, the system generates separate invoices for each customer, for which the invoice organization is the organization of the customer contract.

Note: If a single customer is referenced on more than one customer contract and the customer contracts are from different organizations, the system generates invoices for each of the customer contract organizations.

You can also generate invoices for customers that are marked as **Out of Service**.

Understanding customer invoice generation

When you generate a customer invoice, the system retrieves the charge records generated by the customer charge process and then creates customer invoices displaying the **Total Price** for each work order.

See Understanding the Calculation of Customer Charges on page 1130.

See the following list for additional information on the manner in which the system generates customer invoices:

- The system retrieves all customer charges and fixed charges for a customer contract.
- The system then generates the sum of the **Total Price** for the customer(s) based on the criteria specified on the Generate Invoices popup or the work order specified on the Create Invoice for WO popup.
- The system changes the status of all work orders on the **Approve Customer Charges** form to Invoiced.
- The system generates a separate invoice for each customer.
  Note: If a single customer is referenced on more than one customer contract and the customer contracts are in different organizations, the system generates separate invoices for each of the customer contract organizations.

  The system also enables you to generate invoices for customers that have been marked as Out of Service.

Creating customer invoices from work orders

Create a customer invoice from a work order to calculate customer charges and create a single customer invoice for a specific work order.

To create customer invoices from work orders:

1. Select **Work > Work Orders**.
2. Select the work order for which to create customer invoices and then click the **Record View** tab.
3. Enter or update any information on the work order as necessary.

   See Creating Regular Work Orders on page 775.
4. Right-click on the form and then choose **Create Customer Invoice**.

   Note: View the customer invoice created on the **Customer Invoices** form.

   See Viewing Invoices for Customers on page 1130.

Generating customer invoices

Generate customer invoices for all customers or for a single customer.

To generate customer invoices:

1. Select **Work > Asset Management Services > AMS-Customer Invoices**.
2. Select the customer invoice for which to generate invoices and then click the **Record View** tab.
3. Right-click on the form and then choose **Generate Invoices**.
4. Specify this information:

   Organization
   Specify the organization for which to generate invoices.

   Work Order
   Specify the work order for which to generate invoices. If you enter a work order, the system generates an invoice for only the specified work order.

   Customer
   Specify the customer for which to generate invoices. If you enter a customer, the system generates a single invoice that contains all the costs for the specified customer.
   Note: By default the system generates customer invoices for all customers on the **Customer Invoices** form unless you specify a specific customer. The system enables you to generate invoices for a single work order by using the **Create Customer Invoice** right-click option on the **Work Orders** form.

   See Creating Customer Invoices from Work Orders on page 1135.

   Approved Customer Charges
   Select to generate invoices for only those customer charges with a status of Approved.
   Note: Any corrections made on the **Approve Customer Charges** form are reflected on the invoice after it is generated.

   See Approving and Generating Customer Charges on page 1131.

Fixed Charges
Select to generate invoices for fixed charges. If you created a fixed charge schedule for a customer contract, you must select **Fixed Charges** to include the schedule on an invoice.

See Creating Fixed Charge Schedules for Customer Contracts on page 1125.

Original Invoice
Specify the customer invoice to recalculate. If you specify an invoice to recalculate, the system generates a new invoice with the latest customer charges.
Note: The system displays all customer invoices, including those with Cancelled status. You can use a wild card, such as "%", with partially-specified text strings anywhere within the field to retrieve strings containing the specified text.

The recalculate invoice functionality does not make corrections to the original invoice. The system generates an updated invoice.

Start Date and End Date
Specify the start and end dates for which to generate invoices.
Note: If no date range is specified, the system generates invoices for all Approved customer invoices.

The date range specified refers to the date on which the work order was completed. The date range does not apply to released work orders.

Unapproved Customer Charges
Select to generate invoices for customer charges with a status of Unfinished.

5 Click **Generate**.

Note: View details about the generated invoices on the **Customer Invoice Lines Overview** form.

See Viewing Customer Invoice Lines on page 1137.

Creating invoices for work orders

Note: Creating an invoice for a work order is only related to work performed for asset management services customers and should not be confused with the invoice voucher functionality in the Purchasing Management module. See Recording Invoice Vouchers on page 700 Chapter 4 "Purchasing Management."

To create invoices for work orders:

1 Select **Work > Asset Management Services > AMS-Customer Invoices**.
2 Click the **Record View** tab.

Note: Because the customer invoice is being generated for a work order, the **Create Invoice for WO** right-click option is not affected by the selected customer invoice record. Although the right-click option is only available from the **Record View** tab of the **Customer Invoices** form, the invoice is generated independently of the selected customer invoice record on the **Record View** page.

3 Right-click on the form, and then choose **Create Invoice for WO**.
4 Specify this information:

Work Order
Specify the work order for which to create an invoice.

5 Click **Submit**.

Viewing and changing the status of customer invoices

View and change the status of customer invoice records.

Note: To assemble/generate customer invoices, right-click on the form for which the customer invoice generation option is available, and then choose **Create Customer Invoice**.

See Understanding Customer Invoice Generation on page 1134.

To view and change the status of customer invoices:

1 Select **Work > Asset Management Services > AMS-Customer Invoices**.
2 Select the customer invoice for which to view or change the status and then click the **Record View** tab.
3 Specify the **Status** of the customer invoice.

   Note: The system displays all available statuses for the EIV entity, including any user-statuses created on the **Status Authorizations** form. However, the system does not allow some status changes regardless of the status authorizations created on the **Status Authorizations** form. The system allows the following status changes (and their user-status equivalents): Invoiced to Cancelled; Invoiced to Ready for Printing; Ready for Printing to Cancelled; and Ready for Printing to Invoiced.

4 Click **Save Record**.

Viewing customer invoice lines

View a list of all charge lines on a customer invoice.

To view customer invoice lines:

1 Select **Work > Asset Management Services > AMS-Customer Invoices**.
2 Select the customer invoice for which to view invoice lines and then click the **Lines** tab.
3 View the customer invoice line information.

Viewing an overview of customer invoice lines

View an overview of customer invoice lines to access detailed information about all the charges on customer invoices.

To view an overview of customer invoice lines:

1 Select **Work > Asset Management Services > AMS-Customer Invoice Lines Overview**.
2 View the customer invoice line information.

Budgets

Defining budget setup information

Calendar types, structures, terms, and groups are required before creating budgets.

Defining budget calendar types

Calendar types are used to determine the number of reporting periods in a budget term.

To define budget calendar types:

1. Select **Operations > Budgets > Budget Calendar Types**.
2. Click **New Record**.
3. Specify this information:

   Calendar Type
   Specify a name for the calendar type, and then enter a calendar type description in the adjacent field.

   Number of Periods
   Specify the number of periods for this budget calendar type, such as 12 for a monthly calendar, 4 for quarterly.

   Class
   Specify the class for the calendar type. The system automatically populates **Class Org.**

4. Click **Save Record**.

Defining budget structures

Budget structures define levels for cost reporting. There are six levels available, but only one is required. Budget structures can be used by multiple budgets in a specific organization.

To define budget structures:

1. Select **Operations > Budgets > Budget Structures**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the budget structure hierarchy belongs if you use multi-organization security.

   Budget Structure
   Specify a name for the budget structure, and then enter a budget structure description in the adjacent field.

Calendar Type
Specify the calendar type for the budget structure.

Level 1
Select the first level of the budget structure hierarchy.

Level 2
Select the second level of the budget structure hierarchy.

Level 3
Select the third level of the budget structure hierarchy.

Parent
Specify a parent for the budget structure hierarchy.
Note: If the chosen parent contains budget structure levels, the levels will be copied to the new budget structure.

Level 4
Select the fourth level of the budget structure hierarchy.

Level 5
Select the fifth level of the budget structure hierarchy.

Level 6
Select the sixth level of the budget structure hierarchy.

4 Click **Save Record**.

Defining budget terms

Budget terms consist of a calendar type defined by start and end dates. You can include a single budget term in multiple budgets.

To define budget terms:

1 Select **Operations > Budgets > Budget Terms**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the budget term belongs if you use multi-organization security.

Budget Term
Specify a name for the budget term, and then enter a budget term description in the adjacent field.

Calendar Type
Specify the calendar type for the budget term. The system automatically populates **Number of Periods**.

Start Date
Specify the start date for the budget term.

End Date
Specify the end date for the budget term.

4 Click **Save Record**.

Defining periods for budget terms

Periods for budget terms set the start and end dates for the terms. Default periods are created automatically when the budget term is saved. Periods can be changed or renamed as necessary.

To define periods for budget terms:

1 Select **Operations > Budgets > Budget Terms**.
2 Select the budget term for which to set the period, and then click the **Periods** tab.
The system automatically populates **Sequence Number**.
3 Specify this information:

Period
Specify a new name for the period, such as January, February, or First Quarter.

Start Date
Specify the start date for the period.

End Date
Specify the end date for the period.

4 Click **Save Record**.

Defining budget groups

Create budget groups for different entities. Budget groups include Departments, Systems, Equipment, WO Locations, Cost Code, WO Cost Type, WO Job Type, and Project. Using budget groups saves time by assigning a budget amount to a group of items rather than to many single items, e.g., define a budget group for the HVAC group containing all pieces of equipment associated with the HVAC system.

To define budget groups:

1 Select **Operations > Budgets > Budget Groups**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the budget group belongs if you use multi-organization security.

Budget Group
Specify a budget group name, and then enter a budget group description in the adjacent field.

Entity
Specify the entity for which to create a budget group. The system automatically populates entity description.

4 Click **Save Record**.

Assigning items to budget groups

Items can be combined to form budget groups. For example, you can define a budget group for the HVAC system to include all pieces of equipment associated with the system. A thermostat could be one item within the HVAC budget group. Items can belong to multiple budget groups.

To assign items to budget groups:

1 Select **Operations > Budgets > Budget Groups**.
2 Select the budget group for which to assign an item, and then click the **Items** tab.
3 Specify this information:

Item
Specify an item.

4 Click **Submit**.

Defining budgets

Create and update budgets on the **Budgets** form. The budget combines a specific budget structure and term. Set a current amount and a person responsible.

To define budgets:

1 Select **Operations > Budgets > Budgets**.
2 Click **New Record**.
3 Specify this information:

Budget Structure
Specify a budget structure. The system automatically populates budget structure description, **Organization**, **Calendar Type**, **Date Created**, and **Status**.

Budget Term
Specify the budget term.

Note: The budget **Calendar Type** should be the same as the budget structure **Calendar Type**.

Date Created
Change the creation date if necessary. **Date Created** can be in the past or future.

Status
Choose one of the following options:

Option	Description
In Process	Select for budgets not yet approved.
Temporary value	Select for budgets not yet approved.
Final value	Select for budgets not yet approved.
Approved/frozen	Select to approve or freeze the budget. You must create the Budget Details before you can select this status. See Defining budget details on page 1142. If you select **Approved/frozen**, the system automatically populates **Original Amount**, **Approved By**, and **Date Approved**. If the status changes from **Approved/frozen** to any other status, the above fields are not affected and updated the next time the **Budget** is approved. **Temporary value**, **Final value**, and **Approved/frozen** are available in update mode only.

Current Amount
Specify the current budget amount.

Person Responsible
Specify the name of the person responsible for the budget.

Total Sub-Budget Amount
If budget details exist, this value is the total amount set up for its level one sub-budgets.

4 Click **Save Record**.

Defining budget details

Using the **Details** page of the **Budgets** form, combine budget information and assign specific monetary amounts to each budget area. The **Details** page contains budgeted amounts for individual budget items or groups within the structure of a budget. Define budgets according to dollar amount for individual budget items or for budget groups.

To define budget details:

1 Select **Operations > Budgets > Budgets**.

2 Select the budget for which to view details, and then click the **Details** tab.

Note: In the budget tree, the item code and organization will be displayed with the budget amount if details already exist. Descriptions are hover text only.

3 Click **Add Budget**. The system enables the **Budget Details** section.

The system automatically populates **Current Budget**and **Calculated Budget**.

Note: If you click **Add Sub-Level Budget**, the fields will display in the same manner but appear beneath the main budget heading for the next lower level in the budget structure.

4 Enter information in the required fields.

Note: When adding budgets and sub-level budgets, the fields vary depending upon the levels set up in each budget structure. Complete the required fields as they display. For each budget, select an individual budget item or a budget group, and then assign a budget amount. All other fields are protected.

5 Specify this information:

Budget Amount
Specify the amount for the currently selected budget. The system automatically populates the budget amount currency.

6 Click **Submit**.

Calculating budgets

Calculate a budget to gather costs from work orders. Depending on the scope of the budget, you may want to run the calculation process during down times, such as in the evening or on the weekends.

Note: Budgets are not automatically updated when you incur costs.

To calculate budgets:

1 Select **Operations > Budgets > Budgets**.
2 Select the budget to calculate, and then click the **Record View** tab.
3 Right-click, and then select **Calculate Current Budget**.
The system automatically populates **Budget Structure**, budget description, **Budget Term**, and term description.
4 Specify this information:

From Period
Specify a starting period that corresponds to the Start Date of the Budget Term.

To Period
Specify an ending period that corresponds to the **End Date** of the **Budget Term**.

Note: If **From Period** and/or **To Period** are left blank, the system calculates budget amounts for the earliest and latest periods.

5 Click **Submit**.

Copying budgets

The copy budget feature copies a Budget structure and term, including all the lower-level budget details.

To copy budgets:

1 Create a budget.
2 Right-click, and then select **Copy Budget**. The system automatically populates **Budget Structure**, description, and **Budget Term**.
3 Specify this information:

To Budget Structure
Specify a new budget structure. The system automatically populates the **To Budget Structure** description.

To Budget Term
Specify a new budget term.

Copy Budgeted Amounts
Select to copy only budgeted amounts.

Copy Actual Costs
Select to copy actual costs for the budget.

Note: Click **Calculate Budget** before copying budgets to ensure that actual costs are up-to-date.

Plus or Minus %
Specify the amount to adjust the budget, such as 10% over last year's budgeted amount.

Calculate Zero-based Budget
Select to calculate a zero-based budget.

Reset Amounts to Zero
Select to set the copied term's actual non-PM costs plus expected PM costs for the term to which you are copying. Resetting amounts to zero will include all maintenance due next term as well as the same amount of breakdowns as occurred in the most recent term.

4 Click **Submit**.

Copying sub-level budgets

Copy a node in the budget details structure to include sub-level budgets and all lower-level budget details. Copying sub-level budgets allows you to copy various budget subsets, i.e., the same list of equipment for every month or the same cost codes for every department.

To copy sub-level budgets:

1 Select **Operations > Budgets > Budgets**.
2 Select the budget for which to copy a sub-level budget, and then click the **Details** tab.
3 Click **Copy Sub-Level Budget**.
The system automatically populates **From Budget** and its description.
4 Specify this information:

To Budget/To Budget Group
Specify the budget to which you want to copy the budget details or enter the budget group to which the new budget is copied. For example, if **From Budget** is **`January`**, you can copy it to a new budget for **`February`**. The system automatically populates **To Budget Group** and its description if **To Budget** is entered.

Copy Budgeted Amounts
Select to copy all budget amounts to the new budget.

Reset Amounts to Zero
Select to reset budget amounts to zero on all new records.

Plus or Minus %
Specify a percentage by which to adjust new values.

5 Click **Submit**.

Contracts

Defining purchasing contracts

Purchasing Contracts detail agreements with specific suppliers for certain parts.

To define purchasing contracts:

1 Open the **Purchasing Contracts** form.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the purchasing contract belongs if you use multi-organization security.

Purchasing Contract
Specify a description of the purchasing contract in the adjacent field. A purchasing contract number is assigned after you save the record.

Status
Select a status for the purchasing contract.

Option	Description
Unfinished	Select if the contract is editable and has not been approved. **Note:** While system status is Unfinished, all fields are editable except **Purchasing Contract**, **Organization**, **Supplier**, **Language**, **Currency**, **Printed**, and **Copy From**.
Approved/Active	Select if the contract has been approved. In order to be considered active, it is not required for the contract to be approved, however the system date must be in the range created by the start and end dates.
Cancelled	Select if the contract no longer effects purchase order changes.

Contract Class
Specify the contract class for the purchasing contract.

Supplier
Specify the supplier for the purchasing contract. **Supplier Org.**, **Language**, and **Currency** are automatically populated.

Language
Select the language for the purchasing contract.

Currency
Select the currency for the purchasing contract.

Store
Specify the store to which items on the purchasing contract should be sent.

Person Responsible
Specify the name of the employee responsible for the purchasing contract.

Start Date
Specify the starting date for the purchasing contract.

End Date
Specify the ending date for the purchasing contract.

Supplier Reference
Specify the reference number for the supplier.

Contact
Specify the name of the contact person for the purchasing contract.

Copy From
Specify an existing purchasing contract to copy.
Note: The **Copy From** contract must have the same **Currency** as the new contract.

Renewal Date
Specify the renewal date for the purchasing contract.

Own Contract
Select if the contract originated internally. Leave unselected if the contract originated externally (with the customer).

4 Optionally, select the **Printed** checkbox on this form, and then the **Printed** checkbox on the reports form will be selected to indicate that the contract has been printed.
5 Click **Save Record**.

Assigning parts to purchasing contracts

Add parts to purchasing contracts to define what is included in the contract.

To assign parts to purchasing contracts:

1 Select **Purchasing > Contracts > Purchasing Contracts**.
2 Select the contract for which to assign parts, and then click the **Parts** tab.
3 Click **Add Part**.
4 Specify this information:

Part
Specify the part to assign to the contract.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, **Condition** is automatically populated.

UOP
Specify the unit of purchase for the part.

Qty. per UOP
Specify the quantity per unit of purchase.

Supp. Catalog Reference
Specify the supplier catalog reference for the part.

Net Price
Specify the net price for the part.

Lead Time (Days)
Specify the number of days needed internally for inventory deliveries of the part, or transfers of the part to the store.

5 Click **Submit**.

Defining part discounts for purchasing contracts

Add, update, and delete part discounts on a purchasing contract.

To define part discounts for purchasing contracts:

1 Select **Purchasing > Contracts > Purchasing Contracts**.
2 Select the contract for which to define part discounts, and then click the **Part Discounts** tab.
3 Click **Add Part Discount**.
4 Specify this information:

Part
Specify the part for which to assign a discount. The system automatically populates the part description, **Part Org.**, **Purchase Price**, **UOP**, and **Supp. Catalog Reference**.

Condition
Specify the condition if the part is a condition tracked parent part. If the selected part is a condition tracked child part, the system will automatically populate **Condition**.

Discount %
Specify the percentage for the part discount.

5 Choose one of the following options:

Minimum Qty.
Specify the minimum quantity that must be purchased in order to receive the discount.

Minimum Value
Specify the minimum value for the discount.

6 Select **Apply to Each PO** to apply the discount to each individual PO.
7 Click **Submit**.

Defining order discounts for purchasing contracts

Add order discounts to purchasing contracts to indicate the manufacturer discounts available on specific orders.

To define order discounts for purchasing contracts:

1 Select **Purchasing > Contracts > Purchasing Contracts**.
2 Select the contract for which to define order discounts, and then click the **Order Discounts** tab.
3 Click **Add Order Discount**.
4 Specify this information:

Minimum Value
Specify the minimum value for the order discount.

Discount %
Specify the percentage amount for the order discount.

Apply to Each PO
Select to apply the order discount to each individual PO.

5 Click **Submit**.

Defining clauses for contract classes

Modify, add, and delete lists of purchasing clauses for an existing contract class.

To define clauses for contract classes:

1 Select **Purchasing > Contracts > Clauses of Contract Classes**.
2 Specify this information:

Contract Class
Specify the contract class for which to associate clauses. The system automatically populates the contract description and **Contract Class Org.**

3 Click **Add Clause**.

4 Specify this information:

Sequence
Specify the sequence number for the clause.

Clause
Specify the clause to associate with the contract class. The system automatically populates the clause description.

5 Click **Submit**.

Defining purchasing contract text

Purchasing contract text contains basic information about the contract. Text is predefined for the default contract class and contains such information as suppliers, timeframes, and buyer information. Purchasing contract text fields allow the user to change the text labels on the printed contract. Create and/or edit purchasing contract text to appear on the printed purchasing contract.

To define purchasing contract text:

1 Select **Purchasing > Contracts > Purchasing Contract Text**.

2 Specify this information:

Contract Class
Specify the contract class for which to define purchasing contract text. The system automatically populates the description and **Contract Class Org.**

3 Click **Add Record**.

4 Specify this information:

Language
Select the language of the purchasing contract text.

Contract
Specify the contractor.

Supplier
Specify the vendor.

Start Date
Specify the contract period start.

End Date
Specify the contract period end.

Clauses
Specify the contract terms.

Financial Conditions
Specify the text label for the financial conditions section of the printed purchasing contract.

Per Order
Specify the text label for the per order discount details section of the printed purchasing contract.

Period
Specify the period discount.

Minimum Order Value
Specify the minimum order value.

Part
Specify the part.

Minimum Quantity
Specify the minimum quantity.

Minimum Value of Parts
Specify the minimum order line value.

Discount %
Specify the discount percentage.

5 Click **Submit**.

Call Center

Understanding Call Center

The call center serves three main purposes: answering requests for information (information request), scheduling an action for requests (action request), and recording customer comments (comment).

Typically, customers call, email, or fax the call center with an issue. The call center employee responds by attempting to solve the customer's problem, handling it according to the request type.

Record each customer request to provide accurate reporting on request volume. As soon as the customer contacts the call center, click save to create a new record before you take any information. The type of request determines which sections of the form need to be filled in. Many call centers require employees to perform a KB search for each customer request so that standard procedures are followed (e.g., call scripts).

Information requests

Customers may contact the call center asking for information. Perform a search of the knowledge base for the requested information. The knowledge base is a database of articles created by supervisors of the call center to help facilitate the information request process.

A knowledge base article can consist of a call script or phone numbers to read to the customer, an external URL link that will answer the request, or a link to another KB article. Consult the article and

relay the requested information to the customer. Typically, information requests do not generate work orders. After the requested information is relayed to the customer, the call usually ends. However, if the customer requires any work to be performed after the information request, the call becomes an action request.

Action requests

Action requests usually involve a problem the customer has. To solve action requests, create a customer request, which typically becomes a work order, or link the customer request to an existing work order. Create a customer request for the problem, filling in the customer's information as needed. If this is the first report of the problem, create a work order. However, if the problem has already been reported, then create a customer request from the new customer and link it to the existing work order.

Departmental hierarchies

- **Departments**
  A department is the umbrella under which providers, service categories, and service problem codes fall. It is the top of the hierarchy. An example of a department is "Environmental Services."

- **Providers**
  Providers refer to the levels within a department directly above a service category that handles the service needed. An example of provider is "Solid Waste."

- **Service Categories**
  Service categories fall under a provider and help filter service problem codes. Service categories represent the service needed. An example of a service category is "Residential Garbage Pickup."

- **Service Problem Codes**
  Service problem codes identify specific problems and any information needed to provide solutions. A service problem code is required in order to create a work order from a customer request. An example of a service problem code is "Appliance Pickup." The appliance pickup problem is assigned a "code" that tells the system that a stove, washer, dryer, or other appliance needs to be picked up when that code is entered into the system. This service problem code has a standard work order for appliance pickup.

Comments

Occasionally, customers call with comments, but no desire for information or need for work performance. The comment may be about the new call center, an especially helpful employee, or other messages that require no follow-up or action. The call center employee records the comment.

Setting up basic Call Center information

To set up basic call center information, create service problem codes, associate layers with service problem codes, and create providers, service categories, departments, and knowledge base articles.

Entering contact information

Enter contact information for follow up and informational purposes.

Note: Each contact must have either a **Name**, **Address**, or **Employee Code** before the system saves the contact information.

To enter contact information:

1. Select **Operations > Call Center > Contact Information**.
2. Click **New Record**.
3. Specify this information:

   Name
   Specify a first name, middle initial, and last name for the contact.

   Company Name
   Specify the name of the company where the contact works.

   Employee
   Specify an employee code for the contact if applicable. The system automatically populates the employee name in the adjacent field.

   Address 1
   Specify an address for the contact.

   Address 2
   Specify an address for the contact.

   City
   Specify the city of the contact.

   State
   Specify the state of the contact.

   Zip Code
   Specify the zip code of the contact.

   Address Alias
   Specify a popular name for the address, e.g., Gwinnett Place Mall or Finley Park.

   Primary E-mail
   Specify a primary e-mail address for the contact.

   Secondary E-mail
   Specify a work e-mail address for the contact.

   Notes
   Specify any applicable notes for the contact.

   Organization
   Specify the organization to which the contact belongs.

Class
Specify the class to which the contact belongs.

Primary Phone
Specify a primary phone number for the contact.

Secondary Phone
Specify an alternate phone number for the contact.

Third Phone
Specify a third phone number for the contact.

Primary Fax
Specify a home fax number for the contact.

Secondary Fax
Specify a work fax number for the contact.

E-mail Fax
Specify the e-mail address for the contact if you use fax software that requires an e-mail address.

4 Click **Save Record**.

Optionally, click **Revoke** to remove the contact's record and all references to the record for GDPR compliance.

Note: This process is not reversible.

Associating equipment with contact information

For contacts with specific equipment, associate one or more pieces of equipment with the contact information record.

Note: Specific equipment can be a system, position, asset, or location.

To associate equipment with contact information:

1 Select **Operations > Call Center > Contact Information**.
2 Select the contact for which to associate equipment, and then click the **Equipment** tab.
3 Click **Add Equipment**.
4 Specify this information:

Equipment
Specify the equipment to associate with the contact.
Note: **Equipment** is multi-select to save time.

Type
Select the request type for the equipment.

5 Click **Submit**.

Creating service codes

Service problem codes identify requests, concerns, or problems that customers frequently experience. Create service problem codes that are specific to your customer needs. With any call type your employee can enter a specific service problem code to provide reporting on frequency of that type of call. The service problem code may also contain all the information needed to create a work order.

To create service problem codes:

1. Select **Operations > Setup > Service Codes**.
2. Click **New Record**.
3. Specify this information:

   Organization
   Specify the organization to which the service problem code belongs if you use multi-organization security.

   Service Code
   Specify a unique code identifying the service problem, and then enter a description of the service problem code in the adjacent field.

   WO Type
   Select a type of work order to create for the service problem code.

   Standard WO
   Specify the standard work order with which to associate the service problem code.

   Priority
   Select the priority for work orders created from this service problem code.

   Class
   Specify the class with which to associate the service problem code.

   Equipment
   Specify the equipment to associate with the service problem code.
   Note: Equipment can also be selected on the **Call Center** form or GIS map when processing an action request.

   Out of Service
   Select if the service problem code is not used.

   WO Class
   Specify the work order class with which to associate the service problem code.

   Temporary Fix Turnaround
   Specify the amount of time it will take for the problem to be fixed temporarily by entering in an amount, and then select the unit of time.

   Permanent Fix Turnaround
   Specify the amount of time it will take for the problem to be fixed permanently by entering in an amount, and then select the unit of time.

Note: Temporary Fix Turnaround and **Permanent Fix Turnaround** are used to calculate promise dates on the **Call Center** form when **Service Code** is selected.

Penalty Factor
Specify the penalty factor with which to associate the service problem code.

Equipment Usability
Specify the code identifying the equipment's usability.
Note: Equipment Usability is used in penalty reports when penalty amounts depend upon equipment usability.

4 Click **Save Record**.

Associating GIS map layers with service codes

For each service problem code you create, you can associate GIS map layers. Layers might include street lights, water lines, or other features to which a service problem code applies.

When the call taker opens the map for a particular address, the system displays the relevant equipment layer based upon the service problem code.

To associate GIS map layers with service problem codes:

1 Select **Operations > Setup > Service Codes**.
2 Select the service code for which to associate a layer, and then click the **Layers** tab.
3 Click **Add Layer**.
4 Specify this information:

Layer
Select a layer with which to associate the service code.

5 Click **Submit**.

Defining case tasks for service codes

Tasks defined on this screen will be copied to the **Tasks** tab of the **Case Management** screen, functioning as a template of sorts when the associated service code is selected on the **Case Management** screen.

To define case tasks for service codes:

1 Select **Operations > Setup > Service Codes**.
2 Select the service code for which to define a case task, and then click the **Case Tasks** tab.
3 Click **Add Case Task**.
4 Enter a description of the task.
5 Specify this information:

Sequence
Specify the sequential order in which this task is to be performed if there are more tasks to define for this case.

Step
Specify a sub-sequence for tasks that have the same sequential order.

Task Plan for Checklist
Specify an existing task plan checklist to attach to this task.

Estimated Costs
Specify the estimated costs of the task.

Priority
Specify the priority of the task.

6 Select the **Out of Service** check box to prevent this task from being copied to the task on the **Case Management** screen.
7 Specify the tracking details information.
8 Specify the follow-up work order details information if a work order is typically related to this task.
9 Click **Submit**.
A unique code identifying the **Task No.** is assigned.

Defining sales prices for service codes

Sales prices can be defined for specific service codes to create invoice lines using a fixed sales price rather than use the actual work order costs tracked by the system, like part issues, time sheets, tool costs, etc.

To define sales prices for service codes:

1 Select **Operations > Setup > Service Codes**.
2 Select the service code for which to define sales prices, and then click the **Sales Prices** tab.
3 Click **Add Record**.
4 Specify this information:

Organization
Specify the organization of the service code.

Sales Price
Specify the sales price for the service code.

Date Effective
Specify the date the sales price will become effective for the service code.

5 Click **Submit**.

Creating providers

Providers facilitate knowledge base searches in the call center and provide additional levels of reporting for a department.

To create providers:

1 Select **Operations > Call Center > Providers**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization to which the provider belongs.

Provider
Specify a unique code identifying the provider, and then enter a description of the provider in the adjacent field.

Address 1
Specify an address for the provider.

Address 2
Specify an address for the provider.

City
Specify the city of the provider.

State
Specify the state of the provider.

Zip Code
Specify the zip code of the provider.

Primary E-mail
Specify the primary e-mail address for the provider.

Secondary E-mail
Specify an alternate e-mail address for the provider.

Contact
Specify the contact person for the provider.

Preferred Method of Contact
Select the method by which the contact prefers to receive correspondence.

Class
Specify the class to which the provider belongs.

Out of Service
Select if the provider is not used.

Primary Phone
Specify the primary phone number for the provider.

Secondary Phone
Specify an alternate phone number for the provider.

Third Phone
Specify the third phone number for the provider.

Primary Fax
Specify the primary fax number for the provider.

Secondary Fax
Specify an alternate fax number for the provider.

E-mail Fax
Specify the e-mail address for the provider if you use fax software that requires an e-mail address.

4 Click **Save Record**.
5 Click **Convert to Supplier**to replace this provider with the specified supplier record across the system.

Creating service categories

Service categories facilitate knowledge base searches in the call center and provide additional levels of reporting for a department.

To create service categories:

1 Select **Operations > Call Center > Service Categories**.
2 Click **New Record**.
3 Specify this information:

Organization
Enter the organization to which the service category belongs.

Service Category
Enter a unique code identifying the service category, and then enter a description of the service category in the adjacent field.

Class
Enter the class of the service category.

Out of Service
Select if the service category is not used.

4 Click **Save Record**.

Adding service codes to service categories

1 Select **Operations > Call Center > Service Categories**.
2 Select the service category, and then click the Service Codes tab.
3 Click **Add Service Code**.

4 Specify this information:

Service Code
Specify the service code to add to the service category.

5 Click **Submit**.

Creating department structures

Create department structures consisting of providers, service categories, and service problem codes.

To create department structures:

Note: Add both a parent and child record at the same time. The system adds both to the structure.

1 Select **Equipment > Setup > Departments**
2 Select the department for which to create a structure, and then click the **Structure** tab.
3 Click **Add Record**.
4 Specify this information:

Provider
Enter the provider for this department.

Service Category
Enter the service category.

Service Problem Code
Enter the service problem code. The system automatically populates **Service Problem Code Org.**

5 Click **Save Record**.

Note: If you delete a parent record, the system deletes all of its child records. For example, deleting Provider 1 will also delete Category 1 and Service Problem Code 1 from the structure.

Creating service delivery matrixes for equipment

Create service delivery matrixes to filter **Department**, **Supplier**, **Service Category**, and **Service Code** lookups on the **Call Center** form and in the Knowledge Base based on the selected equipment.

See Selecting Options for the Call Center Form on page 1165.

Note: Service Delivery Matrix must be selected for **Service Code Validation** on the **Call Center Setup** form before a service delivery matrix can be created for selected equipment.

To create service delivery matrixes for equipment:

1 Select **Equipment > Assets**.
Select **Equipment > Positions**.
Select **Equipment > Systems**.

2 Select the asset, position, or system for which to create a service delivery matrix, and then click the **Service Delivery Matrix** tab.

Note: Service Delivery Matrix must be selected on the **Record View** tab of the selected asset to display the **Service Delivery Matrix** tab.

3 Click **Add Record**.

4 Specify this information:

Department
Specify the department that which is valid for the selected equipment.

All Departments
Optionally, select this check box to select all departments.

Supplier
Specify the provider that which is valid for the selected equipment.

All Suppliers
Optionally, select this check box to select all suppliers.

Service Category
Specify the service category that which is valid for the selected equipment

All Service Categories
Optionally, select this check box to select all service categories.

Service Code
Specify the service code that which is valid for the selected equipment.

All Service Codes
Optionally, select this check box to select all service codes.

5 Click **Submit**.

Note: To copy a service delivery matrix for child equipment, select the service delivery matrix, and then click **Copy to Every Child Matrix**. The service delivery matrix is copied to the **Service Delivery Matrix** tab of every child equipment with **Service Delivery Matrix** selected on its record in the service delivery matrix already.

To import a matrix, select the service delivery matrix to import to, and then click **Import Matrix**. Select the equipment from which to import the matrix, and then click **Submit**.

Defining calendar groups for equipment

Define a calendar group code for a group of equipment that share periods of availability, such as several school buildings in a school district.

To define calendar groups for equipment:

1 Select **Operations > Call Center > Calendar Groups**.

2 Click **New Record**.

3 Specify this information:

Organization
Specify the organization of the equipment.

Calendar Group
Specify the calendar group, and then specify a description in the adjacent field.

Class
Specify the class of the equipment.

Out of Service
Select if the calendar group is not used.

4 Click **Save Record**.

Defining calendar periods for calendar groups

Define periods of availability for calendar groups to calculate penalties and for reporting purposes.

To define calendar periods for calendar groups:

1 Select **Operations > Call Center > Calendar Groups**.
2 Select the calendar group for which to define periods, and then click the **Calendar Periods** tab.
3 Click **Add Calendar Period**.
4 Specify this information:

Calendar Period
Specify the name of the calendar period.

Start Date
Specify the date the calendar period starts.

End Date
Specify the date the calendar period ends.

Monday Start Time
Specify the start time for Mondays during the calendar period.

Monday End Time
Specify the end time for Mondays during the calendar period.

Tuesday Start Time
Specify the start time for Tuesdays during the calendar period.

Tuesday End Time
Specify the end time for Tuesdays during the calendar period.

Wednesday Start Time
Specify the start time for Wednesdays during the calendar period.

Wednesday End Time
Specify the end time for Wednesdays during the calendar period.

Thursday Start Time
Specify the start time for Thursdays during the calendar period.

Thursday End Time
Specify the end time for Thursdays during the calendar period.

Friday Start Time
Specify the start time for Fridays during the calendar period.

Friday End Time
Specify the end time for Fridays during the calendar period.

Saturday Start Time
Specify the start time for Saturdays during the calendar period.

Saturday End Time
Specify the end time for Saturdays during the calendar period.

Sunday Start Time
Specify the start time for Sundays during the calendar period.

Sunday End Time
Specify the end time for Sundays during the calendar period.

5 Select the **Internal Office Hours** check box to indicate the calendar period represents internal office hours for the calendar group.
6 Click **Submit**.

Creating knowledge base articles

Create knowledge base articles to reference when assisting customers. Knowledge base articles can contain instructions for call center employees, links to websites, or separate documents for the customer.

To create knowledge base articles:

1 Select **Operations > Call Center > Knowledge Base Articles**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization.

Knowledge Base Article
Specify a unique code to identify the article, and then enter a title for the article in the adjacent field.
Note: If AUTOKBNUM=YES the KB article is assigned a number. Contact your system administrator for more information.

Language
Select the language for the article text and information.

Status
Select the status for the article.
Note: Articles with an Obsolete status are not displayed during a knowledge base article search.

Department
Specify the department with which to associate the article.

Provider
Specify the provider with which to associate the article.

Service Category
Specify the service category with which to associate the article.

Service Problem Code
Specify a service problem code with which to associate the article. The system automatically populates **Service Problem Code Org.**
Note: **Department**, **Provider**, **Service Category**, and **Service Problem Code** are copied to the customer request when the article is selected from the knowledge base.

Keywords
Specify words that identify the article when performing KB searches.

Remarks
Enter remarks about the article.

Article Text
Enter the body text of the article. Within **Article Text** you can link documents, other knowledge base articles, and external web pages to the knowledge base article you are creating with the HTML Editor. Click **Hyperlink** to link a document, knowledge base article, or web address.
Note: Copy and paste from existing documents to save time.

4 Click **Save Record**.

Viewing associated service delivery matrixes and knowledge base articles

Each equipment record can have a service delivery matrix defined with allowable combinations of **Department**, **Provider**,**Service Category**, and **Service Problem Code**. When a knowledge base article is created with the referenced values for the department, provider, service category, and service problem code, the system creates a viewable record of the association.

To view associated service delivery matrixes and knowledge base articles:

1 Select **Operations > Call Center > Knowledge Base Articles**.
2 Select the knowledge base article for which to view an associated service delivery matrix, and then click the **Service Delivery Matrix Equipment** tab.
3 View the information.

Creating bulletin board notices

Create, edit, and view bulletin board notices from the **Call Center** form.

To create bulletin board notices:

1. Select **Operations > Call Center > Bulletin Board Notices**.
2. Click **New Record**. The system automatically populates **Created By** and **Date Created**.
3. Specify this information:

   Organization
   Enter the organization to which the bulletin board notice belongs.

   Language
   Select the language in which to create the notice.
   Note: To create a notice in more than one language, create separate bulletin board notices for each language.

   Importance
   Select the level of importance for the notice. The system displays icons on the bulletin board indicating the selected level of importance.

   Knowledge Base Article
   Enter the article to which a hyperlink should be displayed on the bulletin board.

   Start Date
   Enter the start date for displaying the notice on the bulletin board.

   End Date
   Enter the end date for displaying the notice on the bulletin board.
   Note: If you do not enter a **Start Date** and **End Date**, the system displays the notice on the bulletin board until an **End Date** is entered or the notice is deleted.

   Title
   Enter the title for the notice.

   Notice
   Enter the details of the notice.

4. Click **Save Record**. The system automatically populates **Bulletin Board Notice**.

Defining event log type filters

Define which event log types are selectable in the Event Log Type for combinations of Source (Call Center or WO), WO Type, and WO Class.

To define event log type filters:

1. Select **Operations > Call Center > Event Log Type Filter**.
2. Click **New Record**.
3. Specify this information:

Source
Select the screen for which the event log type will display.

Event Log Type
Select the type of event log to display for the **Source**, **WO Type**, and **WO Class**.

WO Type
Enter the work order type for which the event log type will display.

WO Class
Enter the work order class for which the event log type will display.

4 Click **Save Record**.

Setting up the Call Center form

Set up the **Call Center** form by selecting default values and the options to display on the form.

Selecting options for the Call Center form

Select the options for the **Call Center** form to expedite the incident request process.

To select options for the **Call Center** form:

1 Select **Operations > Call Center > Call Center**.
2 Select the organization for which to select options, and then click the **Record View** tab.
3 Specify this information:

Default Source
Select the source to display as the default source on the **Call Center** form.

Default WO Status
Select the default status to display when creating a work order on the **Call Center** form.

Default WO Org.
Specify the organization to display as the default work order organization when a work order is created and the system cannot determine the work order organization from the service problem code or equipment.

Default Type
Select the default request type.

Default Find Contact By
Select the default option to search by when searching for contact information.

Use Default Organization
Select to use the call taker's default organization on the **Call Center** form.
Note: If unselected, the call taker must pick an organization for each caller on the **Call Center** form.

Default Source from Portal
Specify the default source for the service request records created from the Service Request Portal.

Default Type from Portal
Specify the default type for the service request records created from the Service Request Portal.

Default Status from Portal
Specify the default status for the service request records created from the Service Request Portal.

Open Request Status when WO Closes
Select the status to assign to open incident requests when the work order to which they are linked is closed.
Note: This refers only to service requests that are open.

Option	Description
Open	Select to keep the service request open when the work order closes.
Follow-up	Select to flag the service request for follow up when the work order closes.
Closed	Select to close the service request when the work order closes.
Cancelled	Select to cancel the service request when the work order closes

Follow-up Request Status when WO Closes
Select the status to assign to follow-up service requests when the work order to which they are linked is closed:
Note: This refers only to service requests marked for follow-up.

Option	Description
Open	Select to open the service request when the work order closes.
Follow-up	Select to flag the service request for follow-up when the work order closes.
Closed	Select to close the service request when the work order closes.
Cancelled	Select to cancel the service request when the work order closes.

Note: You may define more statuses to meet your call center requirements. Contact your system administrator for more information.

Top Ten Lookback Days
Specify the number of days for which to calculate the top ten knowledge base articles. For example, enter 10 to view the top ten articles for the last 10 days, or enter 6 to view the top ten articles for the last 6 days.

Minimum Penalty
Specify the minimum penalty amount that must be met before a penalty can be deducted from the maintenance fee.

Service Code Validation
Select one of the following options:

Option	Description
Department Structure	Select to define a hierarchy of department, provider, service category, and service code on the **Department Structure** page of the **Departments** form. Equipment and service code do not restrict one another. For example, a service code for tree removal does not need to be linked to every possible parcel within a city. Call takers may select tree removal as the service code, and then select the property location for the problem.
Service Delivery Matrix	Select to configure a matrix of valid department, provider, service category, and service code combinations for equipment on the **Service Delivery Matrix** page of the **Equipment** form. If selected, only equipment with service delivery matrix flagged can be selected. **Note: Service Delivery Matrix** is very restrictive and requires more maintenance. The equipment must be flagged as Service Delivery Matrix in order for the lookups and KB search to be filtered on the equipment.
Simplified SDM	Select to configure a simplified matrix of valid service codes and suppliers for the equipment. This can be done on any level, e.g., campus, building, floor, room, or any other asset.

Event Log Type Filter
Select to restrict event types in the Event Log popup on the **Call Center** form.

See Defining Event Log Type Filters on page 1164.

Allow Request to be Closed while WO is Open
Select to allow the call taker to close the service request while the work order is open.
Note: If unselected, a status change to Closed on service requests linked to open work orders is not allowed.

Populate Customer Information on Unsuccessful Search
Select to always copy the information used to search for a contact. For example, copy contact name or phone number to the contact information section when the contact is not located through **Find Contact By**.

Allow New Contact to be Saved on Customer Request
Select to allow a new Contact Information record to be saved on the Service Request section of the **Call Center** form.
Note: Unselect if only authorized callers are allowed, or if only addresses are stored on the Contact Information record.

Use Department Structure Values Only Once
Select to use each value in the department hierarchy of provider, service category and service code only once.
Note: **Provider**, **Service Category**, and **Service Code** can appear in the department structure only once. If you select a service problem code, **Department**, **Provider**, **Service Category**, and **Service Code** are automatically populated based on the associated department structure. Unselect to use a service code for more than one department, service category, or provider.

To select options for the duplicate work order check on the Action Request section:

Enable Duplicate WO Check
Select to enable the system to check for duplicate work orders. The duplicate work orders are displayed in **Work Order** on the Work Orders popup on the **Call Center** form. When duplicate work orders exist, users can link to an existing work order or create a new one.

Days to Show Closed WOs
Specify the number of days to show a work order when the work order has closed.
Note: Specify the **Days to Show Closed WOs** to reduce the number of possible duplicate work orders to display for the equipment. Leave it blank to show only work orders that are still open. Enter 0 to show work orders that were closed today or enter 1 for yesterday, etc.

Days to Show Open WOs
Specify the number of days to show the work order after the work order was created. For example, enter `0` to show work orders created on the current date only, enter `1` to show work orders created one day prior to the current date, or leave it blank to include all open work orders.

WO Types
Specify the work order types to allow call takers to link to customer requests. For example, enter Breakdown and Repairable Spare to allow the call takers to select work orders of Breakdown and Repairable Spare type only. Enter null to allow call takers to link customer requests to all work order types.

WO Statuses
Specify the work order statuses of which to allow call takers to link customer requests.

Match WO Header Equipment Only
Select to display work orders when at least one equipment record on the **Call Center** form matches the WO header equipment.

Match Equipment on WO Header or Equipment Tab
Select to display work orders when at least one equipment record on the **Call Center** form appears on the WO header or the **Equipment** page of the **Work Orders** form.

Match Service Category
Select to display work orders when **Service Category** matches the service category of the customer request.

Match Service Problem Code
Select to display work orders when **Service Problem Code** matches the service problem code of the customer request.

To select options for the Knowledge Base popup:

KB Results Per Page
Specify the number of knowledge base articles to display per page after a knowledge base article search.

Show Service Category in Knowledge Base
Select to display the service category in the knowledge base.

Show Provider in Knowledge Base
Select to display the provider in the knowledge base.

To select options for the GIS Map Search popup:

Show Service Problem Code in Knowledge Base
Select to display the service problem code in the knowledge base.

Highlight on Map
Select to have the option to highlight addresses on the map.

Identify Features
Select to have the option to identify features on the map.

Show Children
Select to have the option to show child equipment on the map.

View Nearest Address
Select to have the option to view the nearest address on the map.

Schedule WOs
Select to have the option to schedule work orders from the map.

4 Click **Save Record**.

Specifying GIS attributes for the Call Center form

Select GIS layer attributes based on the customer address to display on the Additional Info popup of the **Call Center** form.

To specify attributes for the **Call Center** form:

1 Select **Operations > Call Center > Call Center**.
2 Select an organization, and then click the **GIS Attributes** tab.
3 Click **Add Attribute**. The system inserts a new Attribute Details record.
4 Specify this information:

Layer
Select the layer for which to choose attributes.

Attribute
Select the attribute to appear on the popup.

Alias
Enter an alias for the attribute. If your attribute name is PC_Parcid enter Parcel Number in Alias.

5 Click **Submit**.

Defining usability codes for equipment

Define usability codes for equipment to calculate penalties for facilities management reports. Use equipment usability codes such as Available for Use or Unavailable to determine equipment usability.

To define usability codes for equipment:

1 Select **Operations > Call Center > Call Center Setup**.
2 Click the **Equipment Usability Codes** tab.
3 Click **Add Equipment Usability Code**.
4 Specify this information:

Equipment Usability
Enter an equipment usability code, and then enter a description of the equipment usability code in the adjacent field.

Penalty Factor
Enter a penalty factor for the equipment usability code.

Out of Service
Select if the equipment usability code is out of service.

5 Click **Submit**.

Processing customer requests

Edit contact information, search a GIS map to retrieve equipment for a work order, create a new work order, link to an existing work order, record customer comments, query the knowledge base search, or view bulletin board notices.

Entering customer requests

To enter customer requests:

1 Select **Operations > Call Center > Call Center**.
2 Click **New Record**.
3 Specify this information:

Organization
Specify the organization of the request.

Status
Select the status for the request.

Source
Select the request source.

Type
Select the request type.

Class
Specify the class for the request linked to the work order from the service code.

Assigned To
Specify the Call Center employee assigned to the request.

4 Click **Save Record**.

See Viewing customer requests for work orders on page 913.

Performing a customer search

To perform a customer search:

1 Select **Operations > Call Center > Call Center**.
2 Click **New Record**.
3 Specify this information:

Find Customer By
Choose one of the following options to search for a customer:

Option	Description
Phone	Select to locate a customer by phone number in the system. The system searches all phone fields, not just the primary phone.
Employee Code	Select to locate call center employees by their codes.
Last Name	Select to locate customers by their last names.
First Name	Select to locate customers by their first names.
Employee Name	Select to locate call center employees by names.
Address	Select to locate customers by their address in the system.

that contains
Enter the data for which to search. For example, if you chose to search by Phone, enter the phone number for which to search.
Note: If exactly one match is found, the system populates the information in the **Customer Information** section.

If more than one match is found, select the correct match from the Customer Information lookup.

If no match is found, the system copies the search criteria information to the **Customer Information** section.

4 Click **Search** to begin the search process.

Entering customer information

To enter customer information:

1 Select **Operations > Call Center > Call Center**.
2 Click **Create New Call Center Record**.
3 Specify this information:

Name
Specify the customer's first name, middle initial, and last name.

Company Name
Specify the company where the customer is employed.

Employee Code
Specify the code for the employee.

Address 1/Address 2
Specify an address.
Note: Click **Copy to Work Address** to copy **Address 1** or **Address 2** to the work address on the action request.

Specify the customer's **City**, **State**, and **Zip Code**.

Specify the customer's **Primary Phone**, **Secondary Phone**, and **Third Phone** numbers.

Specify the customer's **Primary Fax** and **Secondary Fax** numbers, as well as the **Primary E-mail** and **Secondary E-mail** addresses.

Note: Click **Launch E-mail** to send an email message to the customer.

Address Alias
Specify a popular name for an address, e.g., Haywood Mall or Cleveland Park.

Notes
Enter notes specific to the customer.

4 Choose one of the following options to save:
- Click **Save as New** to save the customer information to a new contact information record.

  See Entering Contact Information on page 1152.

- Click **Save Changes** to save any changes made to this customer's information to the existing contact information record.

Note: Optionally, if you do not wish to save the information to a contact information record, leave the information added and navigate to another section. The new information is saved to the customer request, not to the contact information record.

Viewing additional information

View information based on the **GIS Attributes** page of the **Call Center Setup** form and Address 1 in the **Customer Information** section.

To view additional information:

1. Select **Operations > Call Center > Call Center**.
2. Select the customer request for which to view additional information, and then click the **Record View** tab.
3. Click **Additional Information**.
4. View the additional information.

   Note: If the system finds more than one address match, select the address for which to show attributes from the lookup, and then click **Next** to view the Additional Info popup.
5. Click **Close**.

Viewing the event log

View the progress of a customer request or work order.

To view the event log:

1. Select **Operations > Call Center > Call Center**.
2. Select the customer request for which to view the event log, and then click the **Record View** tab.
3. Click **Event Log**.
4. Click **Add Event**.
5. Specify this information:

   Date/Time
   Enter a date and time for the event.

   Event Log Type
   Select a type for the event.

   From Value
   Enter a value.

   To Value
   Enter a value.

Note: **From Value** and **To Value** are highly configurable and may represent any value of your choice, for example, **From Value** could represent the email address of a sender, and **To Value** could represent the email address of the recipient, etc.

6 Click **Close**. The system automatically populates **User** and **Field**.

Viewing the results of the knowledge base search

View the results of the knowledge base article search, your favorite articles, or your most recent search results.

Viewing the results summary

To view the results summary of a knowledge base search:

1 Perform a knowledge base search.

See Performing a Knowledge Base Search on page 1174.

2 Click **Total Articles Found** to view all articles from the search.

3 Click **Articles w/ Service Problem Codes** to view only the articles that have a service problem code.

Viewing my recent searches

To view my recent searches:

1 Perform a knowledge base search.

See Performing a Knowledge Base Search on page 1174.

2 Click the saved search to display the article.

Note: The system displays your 5 most recent searches during the period of login. The search is cleared when you log out.

Viewing my favorites

To view my favorites:

1 Perform a knowledge base search.

See Performing a Knowledge Base Search on page 1174.

2 Click the title of the article to display the article.

Note: If you log out, the system does not delete this list.

Performing a knowledge base search

To perform a knowledge base search:

1 Select **Operations > Call Center > Call Center**.

2 Click **New Record**.

3 Specify this information:

Search Criteria
Enter the words to search for in the knowledge base.

Choose one of the following to specify search criteria results:

Option	Description
Keyword Search	Select to search the knowledge base for articles with key words that match the criteria.
Full Text Search	Select to search the contents of the knowledge base for the search criteria entered.

Department
Enter a department to narrow the search.

Provider
Enter a provider to narrow the search.

Service Category
Enter a service category to narrow the search.

4 Click **Search**. The system automatically populates **Search Criteria**, **Keyword Search/Full Text Search**, **Department**, **Provider**, **Service Category**, and**Service Problem Code** with the information from the **Call Center** form.

5 Click the title of the article that closely matches your search.

Note: If you are familiar with an article and see the service problem code you need, click **Add Article to Customer Request** next to the article. The system adds the article to the customer request. The system adds the article, **Department**, **Provider**, **Service Category**, and **Service Problem Code** to the **Call Center** form.

Click **Add Article to Favorites** to add the article to My Favorites.

Click **Remove Article from Favorites** to remove the article from My Favorites.

Click **Print Article** to print the article.

Viewing the results of the knowledge base search

View the results of the knowledge base article search, your favorite articles, or your most recent search results.

Viewing the top 10 knowledge base articles

To view the top 10 knowledge base articles:

1 Select **Operations > Call Center > Call Center**.

2 Click the **Record View** tab.

3 Click **Expand/Collapse** on **Top 10 KB Articles**.

4 Click the title of the desired KB Article to display the article in the Knowledge Base.

Processing an action request

To process an action request:

1 Select **Operations > Call Center > Call Center**.
2 Click **New Record**.
3 Choose one of the following options:

Option	Description
Work Address	Specify the address or intersection where work is requested.
Landmark	Specify a popular landmark to retrieve an address if the exact work address is not known. **Note:** If you copied **Address 1** or **Address 2** from Customer Information, the address is inserted in Work Address. Click **Additional Information** to view additional information based on the **Work Address**. See Viewing Additional Information on page 1173.

4 Specify this information:

Equipment
Specify the equipment on which to perform work. **Equipment Org.** and **Equipment Description** are automatically populated.
Note: Click **View Customer Equipment** to view and select from equipment associated with this customer.

Click **Additional Equipment** to view and select from all equipment associated with this customer. **Multiple Equipment** is automatically populated if more than 1equipment is selected.

Service Problem Code
Specify the service problem code. **Service Problem Code** can be automatically populated for the work order based on the selected knowledge base article.

See Performing a Knowledge Base Search on page 1174.

Temporary Fix Promise Date
Specify the date by which the work will be fixed temporarily.

WO Class
Specify the class of the work order.

Equipment Usability
Specify the code identifying the equipment's usability.
Note: **Equipment Usability** is used in penalty reports when penalty amounts depend upon equipment usability.

Permanent Fix Promise Date
Specify the date by which the work will be fixed permanently.

5 Click **Perform Map Search**.

6 Perform a GIS map search.

See Performing a GIS map search (Infor EAM) on page 1083.

7 Choose one of the following options:

Option	Description
Return Equipment	Click to return equipment to the action request.
Return Work Order	Click to return a work order to the action request. The customer request is associated with this existing work order.
Close	Click to close the **GIS Map Search** page.
Associate Map	Click to attach the map to the customer request as a .PDF file.
Update Work Address	Click to update the work address on the **Call Center** form with the selected equipment. This is used when the equipment is a physical address.

Note: If you attach the map to the customer request, click the **Documents** tab to view it.

If your system does not have the GIS module, select **Equipment** from the list of values.

8 Specify linear reference information. Linear Reference Details are displayed only if the equipment record for which to create the work order is a linear equipment record.

See Defining regular work order headers on page 775.

9 Click **Create WO**.

10 Choose one of the following options:

Option	Description
Link work order to customer request	Select the Work Order, and then click **Link to Request**. **Work Order**, **WO Class**, **Work Order Org.**, and **WO Priority** are automatically populated, and the **Duplicate** checkbox is selected.
Generate a new work order	Click **Create New WO**. The new work order is created and **Work Order** is automatically populated.

11 Click **Save Record**.

Adding remarks to the customer request

To add remarks to the customer request:

1 Select **Operations > Call Center > Call Center**.

2 Click **New Record**.

3 Specify this information:

Remarks
Enter any remarks regarding the customer, work order, or request.

Copy to WO
Select to copy the remarks to the work order when you click **Create WO**.
Note: If **Copy to WO** is unselected, the system saves remarks made to the customer request only.

4 Click **Save Record**.

Viewing bulletin board notices

To view bulletin board notices:

1 Select **Operations > Call Center > Call Center**.
2 Click the **Record View** tab.
3 Click **Expand/Collapse** next to Bulletin Board.
4 Click **Expand/Collapse** next to the notices that have additional text to expand them. Notices with knowledge base articles have titles that are links to display the knowledge base articles.
5 View the bulletin board notice information.

Creating, updating and reviewing requests using the service request portal

Create a new service request to request maintenance on a piece of equipment or a location. Alternately, update open service requests when a work order or case is not already associated to the service request.

To create, update and review a request using the service request portal:

1 Click the URL provided to open the service request portal.
2 Choose one of the following options:

Option	Description
Create a new request	Click **Create Request**. See step #3.
Update an existing request	Select the service request record to update, and then double-click the record to open it. See step #4. **Note:** If a work order or case is already associated to the service requests, all fields are protected and no updates are allowed.
View request details	View the information, and then close the screen.

3 Click **Create Request**.
4 Specify this Location Details information:

Equipment
Specify the name of the equipment needing service.

Campus
Specify the name of the campus needing service.

Building
Specify the name of the building needing service.

Floor
Specify the name of the floor needing service.

Room/Unit
Specify the room or the unit needing service.

5 Specify this Request Details information:

Service Category
Specify the service category identifying the requested service.

Service Code
Specify the code identifying the requested service.

6 Specify the **`Request Details`**.
7 Specify the **First Name**, **Last Name**, **E-mail**, and **Phone** of the person at the site needing service or the person to contact.
8 Select the **Request Registration** check box if you are a guest user and would like to register, and use your e-mail address as your **Portal ID** for future log-in access.
9 Click **Submit**.

Note: If you are a guest user and selected the **Request Registration** check box, the service request is saved and you are logged out. Re-enter the portal with the e-mail address you specified as your **Portal ID**.

Creating customer surveys

Insert, update, or delete customer surveys used to assess customer satisfaction, responsiveness, etc.

To create a customer survey:

1 Select **Operations > Customer Surveys**.
2 Click **Add Record**.
3 Specify this information:

Customer Survey
Specify a unique code to identify the customer survey, and a description of the customer survey.

Effective
Specify the date to activate or make the survey available.

Discontinue
Specify the date after which to discontinue the survey to make it unavailable.

Survey Status
Specify A (Approved) status or U (Unfinished) status for the survey.

Survey Title
Specify a title for the survey.

Opening Message
Specify the message that will display when the customer survey is opened.

Closing Message
Specify the message that will display when the customer survey is completed and closed.

Logo URL
Specify the URL file path to the logo to be displayed for the customer survey.

From Email
Specify the email address from which the surveys will be sent.

Redirect URL
Specify the URL file path to which to redirect the users when they close the customer survey and the screen is not refreshed nor are they redirected after the set period specified in **Redirect Timer**.

Redirect Timer
Specify the time in seconds in which the user will be redirected to the specified URL in **Redirect URL** after the user completes the survey.

4 Click **Save Record**.

Adding questions to customer surveys

Add, edit, or delete questions on a customer survey.

To add a question to a customer survey:

1 Select **Operations > Customer Surveys**.
2 Select the customer survey for which to add questions, and then click the **Questions** tab.
3 Click **Add Question**.
4 Specify a description of the question.
5 Specify this information:

Sequence
Specify the sequential order the question will display in the customer survey.

Type
Specify the question type, e.g., **`Checkbox`** or **`Radio Button`**.

Question Text
Specify the text for the question. This is the actual question text the users will see.

6 Select the **Out of Service** check box to prevent the question from displaying in the customer survey.
7 Click **Submit**.
A **Question Code** is assigned to identify the question.

Adding answers to questions for customer surveys

1 Select **Operations > Setup > Customer Surveys**.
2 Select the customer survey for which to add answers to questions, and then click the **Questions** tab.
3 Select the question code for which to add answers, and then click **Add/Edit Survey Answers**.
4 Click **Add Survey Answer**.
5 Specify this information:

   Survey Answer
   Specify the answer to the question, and then enter a description of the answer.

   Answer Sequence
   Specify the sequential order the answer will display in the options when the question is answered on the survey.

6 Select the **Out of Service** check box to prevent the answer from displaying in the options of answers to the question.
7 Click **Submit**.

   An **Answer Code** is assigned to identify the answer.

8 Click **Close**.

Adding triggers to customer surveys

Add, updated, or delete triggers to be included in a customer survey.

To add triggers to a customer survey:

1 Select **Operations > Customer Surveys**.
2 Select the customer survey to which to add triggers, and then click the Triggers tab.
3 Click **Add Trigger**.
4 Specify this information:

   Entity Trigger
   Specify the entity trigger, e.g., **`Work Order`** or **`Call Center`**.

   Status Trigger
   Specify the status trigger.

   Email Source
   Specify the email source.

5 Click **Out of Service** check box to prevent the trigger from being included in the customer survey.
6 Click **Submit**.

Reviewing results of customer surveys

Review the results of customer surveys once they have been completed.

To review the results of a customer survey:

1. Select **Operations > Customer Surveys**.
2. Select the customer survey for which to review results, and then click the Results tab.
3. View the information.

Updating long translations for customer surveys

Update the translations of the customer survey questions and answers.

To update long translations for a customer survey:

1. Select **Operations > Customer Surveys**.
2. Select the customer survey for which update long translations, and then click the **Translations** tab.
3. Select the language for which to update long translations.
4. Specify this information:

   Translated Description
   Specify the translations.

5. Click the **Translated** check box to indicate the text is translated.
6. Click **Save Record**.

Completing customer surveys

Complete customer surveys by recording answers to the questions, and submitting the survey.

To complete a customer survey:

1. Select the URL provided in the request for survey completion.
2. Complete all of the survey questions.
3. Click **Complete Survey**.

Defining cases for case management

Create records for events which occur on the job that do not qualify as equipment and are thus not tracked by a work order. Examples of these types of events are environmental spills, accidents, or you may need to enter notes from your shift, or the history of non-work order equipment. Define these events as cases.

To define cases for case management:

1. Select **Operations > Case Management**.

2 Click the **Record View** tab.

3 Click **New Record**.

4 Specify a description of the case.

5 Specify this information:

Organization
Specify the organization of the case.

Equipment
Specify the equipment if related to the case.
Note: Equipment is required to generate a follow-up work order for the case.

Type
Specify the type.

Department
Specify the department responsible for the case.

Status
Specify the status of the case. Specify **Requested**, **Open**, **Closed**, or **Cancelled**.

6 Specify this case details information:

Class
Specify the class of the case.

Location
Specify the location of the event or case. If equipment is involved, specify the location of the equipment.

Service Code
Specify the service code to associate with the event or case.

Area
Specify the area in which the case occurred.

Priority
Specify the priority to handle the case.

Cost Code
Specify the cost code.

Event Start Date
Specify the date the case event occurred.

Event End Date
Specify the date the case event ended.

Total Estimated Costs
Specify the total estimated costs to fix the event.

7 Select the **Regulatory** check box to indicate this case event is a regulatory requirement or regulated event.
8 Select the **Follow-up Required** check box to indicate this case event requires follow-up details.
9 Select the **Hazardous Materials** check box to indicate this case event involves hazardous materials or an event related to hazardous materials.
10 Specify the follow-up work order details information if there is a related work order.
11 Specify the linear reference details information if the associated equipment is linear.
12 Specify this tracking details information:

Requested By
Specify the person requesting work on the case.

Date Requested
Specify the date work on the event was requested.

Responsible
Specify the identifying code of the employee responsible for the case event.

Responsible Name
Specify the name of the employee responsible for the work on the event.

Responsible E-mail
Specify the e-mail address of the person responsible for the work on the event.

Assigned To
Specify the person assigned to complete the work on the event.

Assigned To Name
Specify the name of the person assigned to complete the work on the event.

Assigned To E-mail
Specify the e-mail address of the person assigned to complete the work on the event.

Sched. Start Date
Specify the scheduled start date of the work on the event.

13 Click **Save Record**. A unique code identifying the **Case** is assigned.

Defining tasks for case management

Define tasks or activities related to a case that must be performed to complete the case.

To define a task for case management:

1 Select **Operations > Case Management**.
2 Select the case for which to define a task, and then click the **Tasks** tab.
3 Click **Add Task**.
4 Specify a description of the task.

The **From Service Code** check box is selected if this task originated from a case task associated to the service code entered on the **Case Management** page.

5 Specify this task details information:

Sequence
Specify the sequential order in which this task is to be performed if there are more tasks to define for this case.

Step
Specify a sub-sequence for tasks that have the same sequential order.

Task Plan for Checklist
Specify an existing task plan checklist to attach to this task.

Estimated Costs
Specify the estimated costs of the task.

Priority
Specify the priority of the task.

6 Specify the tracking details information.

7 Specify the follow-up work order details information if there is a related work order.

The **Calculated Costs Refresh Required** check box is selected if the **Refresh Cost Data** button must be selected to display the current actual costs of the follow-up work order associated with this task.

8 Click **Submit**. A unique code identifying the **Task No.** is assigned.

Viewing event logs for case management

Major events such as status changes that occurs during the lifecycle of a case are stored on the **Event Log** tab. View, update, or manually add events or remarks for a case.

To view the event logs for a case:

1 Select **Operations > Case Management**.

2 Select the case for which to view the event log, and then click the **Event Log** tab.

3 Perform one of the following actions:

Option	Description
View the event log	View the event log, and then close the screen.
Add a note to an existing record	Select the record, and then add the note. Proceed to step # 6.
Manually add an event	Click **Add Event**. Proceed to step # 4.

4 Specify this event details information:

Event Type
Specify the type of event.

Date/Time
Specify the date and time of the event.

5 Specify any notes related to the event.
6 Click **Submit**.

Completing task checklists for case management

Enter answers to checklist items associated with tasks of a case.

To complete a task checklist for case management:

1 Select **Operations > Case Management**.

   You may also complete task checklist items on the **Checklist** tab of the **Case Management Tasks** page.

2 Select the case for which to complete task checklists, and then click the **Checklist** tab.
3 Select the **Task Sequence** of the task for which you will answer checklist item questions.
4 Answer the checklist item questions.
5 Optionally, you may add, edit, or view documents attached to task checklist items on the **Checklist** tab. Click **Add/Edit Checklist Item Documents** for a selected checklist item to add or edit associated documents.
6 Click **Submit**.

Updating case management tasks

Update case management tasks or complete tasks assigned to you.

To update a case management task:

1 Select **Operations > Case Management Tasks**.
2 Select the case for which to update a task, and then click the **Record View** tab.
3 Specify the Tracking Details information:

   Start Date
   Specify the date the task was started.

   Percent Complete
   Specify the percentage of how close the task is to completion.

   Date Completed
   Specify the date the task was completed.

4 Select the **Ready to Start** check box to indicate that work on the task can be started.
5 Select the **Started** check box to indicate work on the task has started.
6 Select the **Completed** check box to indicate work is complete for the task.
7 Specify the Follow-up WO Details information.

8 Click **Save Record**.
9 Optionally, you may add, edit, or view documents attached to task checklist items on the **Checklist** tab. Click **Add/Edit Checklist Item Documents** for a selected checklist item to add or edit associated documents.

Completing task checklists for case management

Enter answers to checklist items associated with tasks of a case.

To complete a task checklist for case management:

1 Select **Operations > Case Management**.

   You may also complete task checklist items on the **Checklist** tab of the **Case Management Tasks** page.

2 Select the case for which to complete task checklists, and then click the **Checklist** tab.
3 Select the **Task Sequence** of the task for which you will answer checklist item questions.
4 Answer the checklist item questions.
5 Optionally, you may add, edit, or view documents attached to task checklist items on the **Checklist** tab. Click **Add/Edit Checklist Item Documents** for a selected checklist item to add or edit associated documents.
6 Click **Submit**.

Web service prompt execution

Executing web service prompts

Submit one or more transactions using one or more web services to execute the web service prompts.

To execute web service prompts:

1 Create a web service prompt.

   See the *Infor EAM System Administrator's Guide*.

2 Associate the new web service prompt with a user group menu.

   See the *Infor EAM System Administrator's Guide*.

3 Select a **Web Service Prompt** screen. The screen is displayed in insert mode, based on the underlying web service prompt field defined. The Web Service Prompt description is displayed as the screen name.

   Note: Each web service defined for the prompt is displayed in its own section. Each section contains a header containing the name of the web service for which the section is based, such as AddWorkOrder, AddActivity, and DeletePart.

   The prompt fields for each web service section header are displayed in ascending order by **Sequence**.

If a **Query Code** is defined for the prompt field, a lookup button for the field is displayed.

If the prompt field is Computed, the statement in **Computed Data** is used to populate the field value. These calculations are performed when the transaction is saved.

If the prompt field is a checkbox, a check box is displayed next to the **Field Label**.

If a **Pattern Match** is defined for a prompt field and you leave the field, the value entered in the field is guaranteed to match the defined pattern.

If **Use Previous Value** is checked for a prompt field and insert mode is entered, the field values from the previous record are automatically populated for any fields that have **Use Previous Value** checked on the web service prompt.

4 Enter values for the displayed prompt fields.

5 Click **Save**. The entered data is submitted through the web services related to the prompt. Web Services are processed by the Web Service Prompt Engine in ascending order by **Process Group**.

Executing a web service prompt containing an 'update' web service

To execute a web service prompt containing an 'update' web service:

1 Create a web service prompt.

See the *Infor EAM System Administrator's Guide*.

2 Associate the new web service prompt with a user group menu.

See the *Infor EAM System Administrator's Guide*.

3 Select a **Web Service Prompt** screen. The screen is displayed in insert mode, based on the underlying web service prompt field defined. The Web Service Prompt description is displayed as the screen name.

Note: Key fields defined in the 'update' web service prompt are displayed. These fields are used to uniquely identify a database record. For example, if updating equipment, you must enter the equipment code and organization.

4 Enter the key field data. When you tab out of the last key field or click **Save**, the key field information is used to retrieve the field data defined in the 'update' prompt definition. The key fields are protected by the system.

5 Update other fields as necessary.

6 Click **Save**.

Executing a web service prompt containing a 'delete' web service

To execute a web service prompt containing a 'delete' web service:

1 Create a web service prompt.

See the *Infor EAM System Administrator's Guide*.

2 Associate the new web service prompt with a user group menu.

See the *Infor EAM System Administrator's Guide*.

3 Select a **Web Service Prompt** screen. The screen is displayed in insert mode, based on the underlying web service prompt field defined. The Web Service Prompt description is displayed as the screen name.

   Note: Key fields defined in the 'delete' web service prompt are displayed. These fields are used to uniquely identify a database record. For example, if deleting equipment, you must enter the equipment code and organization.

4 Enter the key field data. When you tab out of the last key field or click **Save**, the key field information is used to identify the database record for deletion.

5 Click **Save**.

Selecting multiple fields for web service prompts

To select multiple fields for web service prompts:

1 Select **Administration > Web Service Prompt Engine > Web Service Prompts**.

2 Select the web service prompt for which to select to select multiple fields, and then click the **Fields** tab.

3 Select a **Process Group–Web Service**, and then click **Select Multiple Fields**.

4 Select the desired fields available in the web service, or click **Select All** to select all fields available in the web service.

5 Click **Submit**.

Reports

Configuring reports

Define new parameters for existing reports, modify parameters for existing reports, or create entirely new reports.

Note: This chapter describes Infor EAM functions that only a system administrator has rights to perform. For more information about basic reports functions, see Generating reports on page 1192.

Creating reports

Author users can create new reports by passing Infor EAM parameters to external report applications. Only system administrators should create new reports because the process involves modifying critical Infor EAM features.

After creating a report, define the report parameters and generate the authored report.

Note: Infor EAM reports do not support numbers with more than 16 digits.

To create reports:

1. Select **Administration > Setup > Reports**.
2. Click **New Record**.
3. Specify this information:

   Report
   Enter a unique code identifying the report, and then enter a description of the report in the adjacent field.

   Class
   Enter the class of the report.

   File Name
   Enter a name for the report definition file.

4. Click **Save Record**.

Defining report parameters

After creating a report, define new report parameters or modify the properties of system-supplied report parameters as necessary.

Note: Infor EAM reports do not support numbers with more than 16 digits.

To define report parameters:

1. Select **Administration > Setup > Reports**.
2. Select the report for which to define parameters, and then click the **Parameters** tab.
3. Click **Add Parameter**.
4. Specify this information:

   Line
   Enter the sequence number of the report parameter.

   Parameter
   Enter the parameter value for the report.

   Data Type
   Select the data type of the parameter, e.g., character, data, numeric, etc.

   Length
   Enter the maximum length of the parameter.

   System Screen
   Enter the code of the entity that corresponds to the report parameter.

   Type
   Enter the code of the type entity that corresponds to the report parameter.

Parameter Default/Radio Button Default
Enter the default value of the parameter.

Custom Label
Enter a custom name for the parameter to be used on the Report Parameters page.

Mandatory
Select to make the parameter mandatory.

Uppercase
Select to enforce uppercase characters for the parameter.

Remember
Select to carry over a remembered value (from a preceding screen) as a default value.

5 Click **Save Record**.

Defining text for reports

After creating a report, define text for form names, tab labels, and field labels.

To define text for reports:

1 Select **Administration > Setup > Reports**.
2 Select the report for which to define text, and then click the **Text** tab.
3 Select a text label from the grid. The system automatically populates the text details.
4 Specify this information:

Text
Enter a new text label.

5 Click **Submit**.

Generating authored reports

After creating a report and defining the report parameters, generate the authored report. Only Consumer and Author users can generate an authored report.

Note: Before generating an authored report, add the report to the system menu bar.
See "Setting up menus for user groups" in *Infor EAM User Guide*.

To generate authored reports:

1 Open the report to generate.
2 Specify the report parameter criteria for the report as necessary. The parameters displayed are those defined on the **Parameters** page of the **Reports** form.

Note: You must use the same parameter name on the report as is specified on the **Parameters** page of the **Reports** form. Otherwise, when running the report, the **Parameters** page will dispaly instead of generating the report.

3 Click **Print Record**.

Generating reports

Generate reports from the menu bar. For most reports, the system displays a Parameters page in which you enter selection criteria for the report. Some reports also include Fields and Group/Sort Order pages in which you specify the way reports appear, similar to the system's Dataspy.

Reports are available in Adobe Acrobat format (PDF). The Acrobat file provides a preview of the report before running and enables you to print to your local printer.

Note: Infor EAM reports do not support numbers with more than 16 digits.

Specifying report parameters

Select the basic report parameters, options, and date range criteria before generating reports.

To specify report parameters:

1 Open the report to generate.
2 Enter the Report Parameters, Report Options, and Date Range criteria for the report as necessary.
3 Select the **Mark Confidential** check box to print a confidential banner in the title of the report.
   Note: To preview the report without updating the database, click **Preview Report**.
4 Click **Print Record**.

Specifying report fields layout

Select the fields to display on the report, and then specify the order in which the fields will be displayed.

To specify report fields layout:

1 Open the report to generate.
   Note: This functionality is applicable to four reports only:
   - PO Status
   - Databridge Message Status
   - Databridge Message Status Summary
   - WO Statistics
2 Click the **Fields** tab.
   Available Fields lists all fields that are available but not visible in the report, while **Visible Fields** lists all fields currently displayed in the report.
3 See the following table when specifying the report layout:

Function	Procedure
Add a field	Select the field in **Available Fields**, and then click **Add a field**.
Remove a field	Select the field in **Visible Fields**, and then click **Remove a field**.
Add all fields	Click **Add all fields**.
Remove all fields	Click **Remove all fields**.
Reorder fields	Select the field in **Visible Fields**, and then click either **Reorder up** or **Reorder down** to move the field up or down in the order.

Specifying report sort order

Select the order in which to sort report information.

To specify report sort order:

1 Open the report to generate.
2 Click the **Group/Sort Order** tab.
3 Specify this information:

   1st
   Select the first field by which to sort the report.

4 Choose one of the following sort orders:
   - To sort records either alphabetically or numerically by the selected field (ascending)

     Click **Sort Ascending**.
   - To sort records in either reverse alphabetical or reverse numerical order by the selected field (descending)

     Click **Sort Descending**.

5 Enter additional fields by which to sort as necessary.

   Note: To remove sort criteria, choose the --No Sort-- selection from the drop-down list.

Specifying report group order

Select the order in which to group report information.

To specify report group order:

1 Open the report to generate.
2 Click the **Group/Sort Order** tab.
3 Specify this information:

1st
Select the first field by which to group the report.

4 Enter additional fields by which to group as necessary.
Note: To remove group criteria, choose the --No Grouping-- selection from the drop-down list.

Saving report parameters

Save parameters for any report in which you enter parameter, field layout, and group/sort order criteria.

Note: Infor EAM reports do not support numbers with more than 16 digits.

To save report parameters:

1 Open the report to generate.
2 Specify the report parameters, fields, and group/sort order criteria for the report as necessary.
Note: The values for **Mark Confidential** are not saved.
3 Click **Save**.
4 Choose one of the following options:
- To save the report parameters as the default parameters for the report
Specify the **Name** of the saved parameters, and then select **Default**.
- To save the report parameters without setting them as the default parameters for the report
Specify the **Name** of the saved parameters.

5 Click **Submit**.

Retrieving saved report parameters

Retrieve previously saved parameter, field layout, and group/sort order information for any report in which you entered selection criteria.

Follow these steps to retrieve saved report parameters.

1 Open the report to generate.
2 Click **Parameter List** to select the saved selection parameters. The system retrieves the saved selection criteria to the report screen.

Deleting saved report parameters

Delete previously saved parameter, field layout, and group/sort order information for any report in which you entered selection criteria.

To delete saved report parameters:

1 Open the report to generate.

2 Specify this information:

Parameter List
Select the saved selection parameters to delete. The system retrieves the saved selection criteria to the report screen.

3 Click **Delete**.

4 Click **Yes**.

Generating administrative reports

Generate reports related to administrative functions.

Access violations

Description

Displays a list of access violations per user during a given time period. Access violations occur when users enter incorrect passwords on the login page.

Menu Path

Administration > Reports > Access Violations

Parameters

Enter the **User ID** for whom to generate the report, or leave the field blank to generate the report for all users.

Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Audit log

Description

Displays a list of audited status changes.

Menu Path

Administration > Reports > Audit Log

Parameters

Table
Enter the table for which to generate the list of audited status changes. **Table** is a required field.

Key Field 1
Enter the field within the selected table. **Key Field 1** is a required field.

Key Field 2
Enter the field within the selected table.

Report Type

Consumer

Electronic records

Description

Displays a list of snapshots including the parent and child record.

Menu Path

Administration > Reports > Electronic Records

Parameters

Enter the **Organization**, **Entity**, and **Entity Code**.

Include Front Page
Select to print the front page with report parameters selected.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

GDPR Compliance - Caller

Description

Generate a GDPR Compliance report for a caller. Reports will include a list of all data records associated with a caller. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

Menu Path

Work > Reports > GDPR Compliance - Caller

Parameters

Specify the **Caller** and **Customer** for which to generate the report.

Report Type

Basic

GDPR Compliance - Contact

Description

Generate a GDPR compliance report for a contact. The report will include all details for the contact including name, address, phone number, and e-mail address. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

Menu Path

Administration > Reports > GDPR Compliance - Contact

Parameters

Specify the **Contact** for which to generate the report.

Report Type

Basic

GDPR Compliance - Employee

Description

Generate a GDPR compliance report for an employee. Report will include a list of all data records associated with an employee. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

Menu Path

Administration > Reports > GDPR Compliance - Employee

Parameters

Specify the **Employee** for which to generate the report.

Report Type

Basic

GDPR Compliance - Supervisor

Description

Generate a GDPR Compliance report for a supervisor. Reports will include a list of all data records associated with a supervisor. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

Menu Path

Administration > Reports > GDPR Compliance - Supervisor

Parameters

Specify the **Supervisor** for which to generate the report.

Report Type

Basic

GDPR Compliance - User

Description

Generate a GDPR compliance report for a user. Report will include a list of all data records associated with a user. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

Menu Path

Administration > Reports > GDPR Compliance - User

Parameters

Specify the **User** for which to generate the report.

Report Type

Basic

KPI/inbox usage

Description

Displays a list of KPI's and/or inbox codes with the associated SQL code and associated users/groups.

Menu Path

Administration > Reports > KPI/Inbox Usage

Parameters

Enter the **KPI** for which to generate the report.

Enter the **Inbox** for which to generate the report.

Enter the **User Group** and **User** for which to generate the report.

Select the **Include SQL Statement Text** check box to include the SQL statement text in the report.

List of documents

Description

Displays a list of documents and their information.

Menu Path

Administration > Reports > List of Documents

Parameters

Enter the **Organization**, **Document**, **Description**, **Class**, and **File Location** for which to view documents.

Report Type

Consumer

List of electronic records

Description

Displays a list of electronic signature records.

Menu Path

Administration > Reports > List of Electronic Records

Parameters

Enter the **Organization**, **Entity**, and **Entity Code**.

Include Front Page
Select the check box to print the front page with report parameters selected.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

List of functions

Description

Displays a list of functions and their information.

Menu Path

Administration > Reports > List of Functions

Parameters

Enter the **Class** and **Function** for which to view function information.

Report Type

Consumer

List of Infor EAM codes

Description

Displays a list of Infor EAM entity codes.

Menu Path

Administration > Reports > List of Infor EAM Codes

Parameters

Enter the **Entity** for which to view Infor EAM code information.

Report Type

Consumer

List of tampered records

Description

List of records that have been altered abnormally or tampered.

Menu Path

Administration > Reports > List of Tampered Records

Parameters

Enter the **Organization** and **Entity**.

Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Print Flex business rules list

Description

Displays a list of all Flex SQL or business rules records.

Menu Path

Select **Administration > Reports > Print Flex Business Rules List**.

Parameters

Table
Enter the database table of the Flex SQL statements.

Show SQL Statement
Select the check box to display the SQL statement in the report.

Include Inactive
Select the check box to display Flex SQL records where **Active** is not selected.

Report Type

Consumer

Temperature analysis chart

Description

Before you can set the parameters to generate the temperature analysis chart, you must enter **Temperature Minimum** and **Temperature Maximum** on the **Actual Temperatures** and **Historical Temperatures** tabs.

Menu Path

Administration > Setup > Regions > Temperature Analysis Chart

Parameters

Specify the starting and ending dates for which to retrieve data.

Report Type

Consumer

User group configuration

Description

Displays a list of users in each user group and the screen or report permissions specified for the user group.

Menu Path

Administration > Reports > User Group Configuration

Parameters

Enter the **User Group** for which to view user and group information.

Screen/Report
Enter the screen or report for which to display permissions and field attributes.

Note: Enter % after the **Screen/Report** name to display permissions for the entire form, including all tabs on the form. For example, enter WSJOBS% to display permissions for the **Work Orders** form, including the Activities, Book Labor, Schedule Labor, etc. tabs.

Show Permissions
Select the check box to display the general permissions for the screen or report.

Show Field Attributes
Select the check box to display all components of the screen or report and the attributes for each.

Show Status Authorizations
Select the check box to display the status change authorizations for the users in the user group.

Show WO Authorizations
Select the check box to display the work order authorizations per work order type.

Report Type

Consumer

Generating asset reports

Generate reports related to asset functions.

Annual energy reduction comparison

Description

Print the annual energy reduction comparison report.

Menu Path

Equipment > Reports > Asset Sustainability > Annual Energy Reduction Comparison

Parameters

Enter **Equipment**, **Organization**, and **Ending Year (YYYY)** for the report.

Note: The starting year for the report is always the year preceding **Ending Year (YYYY)**.

Report Type

Consumer

Annual energy use

Description

Displays the annual energy usage report for a number of years as specified in the report parameters.

Menu Path

Equipment > Reports > Asset Sustainability > Annual Energy Use

Parameters

Enter the **Equipment** and **Organization**.

No. of Years
Enter the number of years for which to run the report.

Report Type

Consumer

Asset failures by service life

Description

Print the asset failures by service life report.

Menu Path

Equipment > Reports > Asset Failures by Service Life

Parameters

Specify **Equipment**, **Organization**, **Class**, **Category**, **Primary Closing Code**, and **Secondary Closing Code**.

Plot Points Time Frame
Choose one of the following options:

- **Month**
  Select to group the asset records by Service Life % month.

- **Year**
  Select to group the asset records by Service Life % year.

Report Type

Basic

Calibration equipment

Description

Displays a list of all equipment that requires calibration and has been configured for calibration. The report includes all equipment that is defined as a loop, instrument, or standard if any one of these requires calibration. Standards are either parts tracked by asset or parts tracked by lot. The system only prints part standards that are tracked by asset, because you do not have to associate a piece of equipment with parts tracked by lot.

The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), e.g., SYS1/SYS2/SYS3.

Additionally, if the equipment tolerance is a percentage rather than an absolute, the system designates the tolerance as a percentage by printing a percent sign (%) following the devices to and from tolerance.

Menu Path

Equipment > Reports > Calibration Equipment

Parameters

Enter the **Organization**, **Department**,**System**, **Class**, **Category**, **Equipment Criticality**, and **Status**.

Select one or more of the following options:

- **Include in Service**
  Select to print a list of all calibration equipment that is currently in service.

- **Include Out of Service**
  Select to print a list of all calibration equipment that is currently out of service.

- **Include Withdrawn**
  Select to print a list of calibration equipment that is withdrawn.

- **Include Calibration Specifications**
  Select to print the calibration specifications entered for each piece of calibration equipment on the **Calibration** page and Test Points page of the Assets, Positions, and Systems forms.

  Order By
  Select to order by**Department** or **Equipment**.

Report Type

Consumer

Calibration history

Description

Displays a list of calibration work order results for calibration work orders for which the completion date falls within the specified start and end date. The results shown for each work order will be related to test points having the greatest deviation from the standard.

The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), e.g., SYS1/SYS2/SYS3.

Additionally, if more than one standard is used for the work order, the system prints each standard and its due date or lot expiration date on a separate line.

Menu Path

Equipment > Reports > Calibration History

Parameters

Enter the**Organization**, **Equipment**, **Department**, **System**, **Class**, **Category**, and **Equipment Criticality**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data. **End Date** is a required field.

Report Type

Consumer

Capital performance evaluation

Description

Displays for the selected equipment the outstanding capital request values for the selected period and for the future period and, if applicable, the GAS (Global Asset Sustainability) index for the equipment. This report also displays the correlation between the GAS index and the capital request.

Menu Path

Equipment > Reports > Capital Performance Evaluation

Parameters

Enter the **Organization**, **Equipment Code**, **Class**, **Category**, **Request Priority**, **Request Amount Minimum**, **Reporting Currency**, **Request Status**, and **GAS Index Evaluation Period (Days)**.

Note: Request Amount Minimum selects requests where the estimated material cost plus the estimated labor cost is greater than the minimum entered.

GAS Tracked Equipment
Select to include GAS-tracked equipment in this report.

Green Related Request
Select to include green-related requests in this report.

Sort By
Select to sort by **GAS Cost**, **Return Amount**, or **Return %**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Basic

CO2 analysis

Description

Displays CO2 reduction for equipment calculated for a specific date range. The reduction calculation can be based on the equipment efficiency (design versus actual) or on a comparison with last year's data.

Menu Path

Equipment > Reports > CO2 Analysis

Parameters

Specify the **Organization**, **Commodity**, **Equipment**, **Class**, and **Category**.

Max No. of Records
Specify the maximum number of equipment records to display.

Min Reduction %
Specify the minimum reduction percentage. The system displays the reduction % greater than or equal to this value.

Max Reduction %
Specify the maximum reduction percentage. The system displays the reduction % less than or equal to this value.

Bill Level Only
Select to include equipment for which **Bill Level** is checked.

Reduction % Based on Previous Year
Select to calculate the reduction percentage based on the previous year. The previous year can only be calculated if the selection period is equal to or less than one year.

Sort By
Select to sort by **Best** or **Worst**.

Start Date
End Date
Specify the starting and ending dates for which to retrieve data.

Report Type

Basic

CO2 emissions

Description

Displays equipment (in graphical form) in best and worst order based on CO2 emissions for the selected year and compares the data with the previous two years

Menu Path

Equipment > Reports > CO2 Emissions

Parameters

Enter the **Organization**, **Equipment**, **Commodity**, and **Reporting Year**.

Report Type

Basic

CO2e emissions by greenhouse gas

Description

Print the CO2e emissions by greenhouse gas report.

Menu Path

Equipment > Reports > Asset Sustainability > CO2e Emissions by Greenhouse Gas

Parameters

Enter **Equipment**, **Organization**, and **Commodity**.

Select **Start Date** and **End Date** for the calendar year of the report.

Report Type

Consumer

Cost of WOs per equipment

Description

Displays a list of work order costs per piece of equipment.

Menu Path

Equipment > Reports > Cost of WOs Per Equipment

Parameters

Enter the **Organization**, **Type**, **Equipment**, **Department**, and **Reporting Currency**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Degree day analysis

Description

Displays a list of degrees for a specified date range and degree codes. Select the **Include History** field when generating the report to display all historical data from the **Historical Temperature** page. This feature compares the actual temperature data against the historical temperature data.

Menu Path

Administration > Reports > Degree Day Analysis

Parameters

Enter the **Region**, **Date From**, **Date To**, and **Organization**.

Include History
Select to include historical data to allow a comparison between the actual temperature data vs. the historical temperature data.

Report Type

Consumer

Downtime tracking

Description

Displays a list of all work orders and/or equipment where **Downtime Costs** or **Hours** exist on the header.

Menu Path

Equipment > Reports > Downtime Tracking

Parameters

Enter the **Equipment**, **Department**, **Assigned To**, **Priority**, and **Organization**.

Specify the **Start Date** and **End Date** for which to begin and end tracking the downtime for the equipment.

Report Type

Basic

Energy Star ratings chart

Description

Print the energy star ratings chart report.

Menu Path

Equipment > Assets > Energy Star Ratings Chart

Equipment > Positions > Energy Star Ratings Chart

Equipment > Systems > Energy Star Ratings Chart

Parameters

Enter the **Equipment** and **Organization**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Consumer

Equipment costs by ranking chart

Description

Displays equipment costs by Risk Priority Number, Ranking Score; Condition Score, or Facility Condition Index.

Menu Path

Equipment > Reports > Equipment Costs by Ranking Chart

Parameters

Specify the **X-Axis** and **Y-Axis** categories for the chart. You can select Risk Priority Number, Ranking Score, Condition Score, or Facility Condition Index for either axis of the chart.

Select **Include WOs** to specify which equipment costs to include in the report.

Specify the **Min. Cost Included**to set the minimum equipment work order costs to include with this report.

Specify the **Start Date** and **End Date**.

Specify **Max. Records Ranked** to specify the maximum number of equipment records included in the report.

Specify **Rank By** to select how the **Rank Category** records are ranked. Select **Top**to display equipment records with the highest values or **Bottom** to display equipment records with the lowest values.

Report Type

Basic

Equipment depreciation

Description

Displays a report of the total equipment depreciation expense and book value through the **End Date**.

Depending on the selection criteria entered, the system includes all equipment records with a depreciation schedule of the selected **Depreciation Type** for which an **Original Cost** is specified that does not have a **Transfer Date**.

If a piece of equipment is sold/scrapped, the system determines whether the **Sold/Scrapped Date** is prior to the report **End Date**. If so, then the system displays the depreciation expense for the equipment through the **Sold/Scrapped Date** and a **Book Value** of zero.

If you specify a future date as the **End Date** for the report, the system generates a report of the actual depreciation expense/book value through the current system date, as well as the projected depreciation expense/book value through the specified **End Date**.

If the depreciation method for a piece of equipment is units of output, the system generates a report of the most recent depreciation expense/book value that is presently available based on the current system date and units of output entered.

Menu Path

Equipment > Reports > Equipment Depreciation

Parameters

Specify the**Organization**, **Equipment**, **Type**, **Equipment Class**, **Category**, **Department**, **Profile**, **Status**, **Location**, **Assigned To**, **Cost Code**, **Reporting Currency**, and **Depreciation Type**.

Sort By
Select to sort by **Organization**, **Department**, or **Equipment Class**.

End Date
Specify the ending date for which to retrieve data.

Report Type

Consumer

Equipment details

Description

Displays the equipment details report.

Menu Path

Equipment > Reports > Equipment Detail

Parameters

Specify the **Organization**, **Type**, **Equipment**, **Status**, **Class**, **Category**, **Department**, **Location**, and **Position** for which to generate the report.

Specify this Report Options information:

Include Front Page
Select to include a front page with the report parameters selected.

Mark Confidential
Select to print a confidential banner in the title of the report.

Include User Defined Fields
Select to print user defined fields added to the equipment.

Include Custom Fields
Select to print custom fields added to the equipment.

Include Tracking Details
Select to print the tracking details added to the equipment.

Include Part Association
Select to print parts associated with the equipment.

Include Variables
Select to print variables associated with the equipment if it is a position or system.

Include Contract and Rental Details
Select to print the contract and rental details associated with the equipment.

Include Call Center Details
Select to print the call center details associated with the equipment.

Include RCM Details
Select to print the risk control matrix details associated with the equipment.

Include Hierarchy
Select to print the equipment hierarchy details.

Include GIS Details
Select to print the GIS details associated with the equipment.

Include Linear Reference Details
Select to print the linear reference details associated with the equipment.

Include Facility Details
Select to print the facility details associated with the equipment.

Include Reliability Ranking Details
Select to print the reliability ranking details associated with the equipment.

Include Energy Performance
Select to print the energy performance details associated with the equipment.

Print Attachments
Select to print document attachments associated with the asset entity.

Print Images
Select to print all images associated with the equipment.

Report Type

Basic

Equipment hierarchies

Description

Displays a list of equipment hierarchies.

Menu Path

Equipment > Reports > Equipment Hierarchies

Parameters

Enter the **Organization**, **Parent Equipment Type**, **Parent Equipment**, and **Child Equipment Type**.

Report Type

Consumer

Equipment history

Description

Details the date and reason work was performed on a piece of equipment or an equipment type.

Menu Path

Equipment > Reports > Equipment History

Parameters

Enter the **Organization**, **Equipment Type**, **Equipment**, **Location**, **Problem Code**, **Failure Code**, **Cause Code**, **Action Code**, and **Work Order**.

Show Costs
Select to show work order costs.

Show MEC Details
Select to display MEC work order details for multiple equipment work orders.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Equipment history drilldown

Description

Displays a list of work orders and activities for a specific piece of equipment. Drill down to the list of parts or labor records and reasons for repairs for each piece of equipment on the work orders and activities.

Menu Path

Equipment > Reports > Equipment History Drilldown

Parameters

Specify the **Organization**, **Equipment**, and **Period** for which to generate the report.

Report Type

Basic

Equipment performance by cost chart

Description

Displays a graph that calculates the top 10 equipment with the greatest total work order costs for the selected dates.

Menu Path

Equipment > Reports > Equipment Performance by Cost Chart

Parameters

Enter **Organization**, **Department**, **Class**, **Category**, and **Cost Code**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Consumer

Equipment performance by downtime chart

Description

Print the equipment performance by downtime chart.

Menu Path

Equipment > Reports > Equipment Performance by Downtime Chart

Parameters

Specify the **Department**, **Assigned To**, **Priority**, and **Organization**.

Downtime By
Specify one of the following options:

Hours
Select to group the asset records by downtime hours.

Cost
Select to group the asset records by downtime costs.

Start Date
End Date
Specify the starting and ending dates for which to retrieve data.

Report Type

Consumer

Equipment planning

Description

Prints a linear calendar listing work orders, PMs, and maintenance patterns for specific scheduled start dates.

Menu Path

Equipment > Reports > Equipment Planning

Parameters

Specify the **Organization**, **Equipment**, **Department**, **PM**, **Assigned To**, and **Maintenance Pattern** for which to generate the report.

Enter the **Start Date** and **End Date** for which to generate the report.

Report Type

Basic

Equipment reservations detail

Description

Displays report of details for equipment reservations.

Menu Path

Equipment > Reports > Equipment Reservations Detail

Parameters

Optionally, specify the **Organization**, **Reservation ID**, **Status**, **Work Order**, and **Equipment**.

Optionally, select **Include Reservation Details**, **Include Rental Details**, or **Include User Defined Fields** to include these details in the report.

Optionally, select the **Start Date** and **End Date**.

Report Type

Basic

Equipment transfer log

Description

Displays an overview of transferred equipment. If the transferred equipment has any child equipment, the system also prints an overview of the child equipment.

Menu Path

Equipment > Reports > Equipment Transfer Log

Parameters

Enter the **Transfer No.**

Report Type

Consumer

Expired warranties

Description

Displays a list of all warranties that have expired.

Menu Path

Work > Reports > Expired Warranties

Parameters

Enter the **Organization**, **Type**, **Equipment**, and **Location**.

Near Threshold
Select to include warranties that are near their threshold.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Fault trend analysis

Description

Details how often a piece of equipment failed and why.

Menu Path

Equipment > Reports > Fault Trend Analysis

Parameters

Enter the **Organization**, **Class**, **Category**, **Location**, **Type**, **Equipment**, **Number of Months**, **Problem Code**, **Action Code**, **Cause Code**, and **Failure Code**.

Show Faults By
Select to sort by **Problem Code**, **Action Code**, **Cause Code**, or **Failure Code**.

Start Date
Enter the starting date for which to retrieve data.

Report Type

Basic

GAS index analysis

Description

Displays the GAS (Global Asset Sustainability) index and the energy efficiency of equipment over a selected period of time and reports how much money was spent on each commodity (electricity, gas, water, etc.) consumed by that equipment.

Menu Path

Equipment > Reports > GAS Index Analysis

Parameters

Enter the **Organization** and **Equipment**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Basic

Heating and cooling degree days vs. energy consumption type analysis

Description

Displays the relationship between the heating and cooling degree days and energy consumption type.

Menu Path

Administration > Reports > Heating and Cooling Degree Days vs. Energy Consumption Type

Parameters

Enter the **Region**, **Date From**, **Date To**, **Commodity**, and **Organization**.

Report Type

Consumer

Heating and cooling degree days vs. energy costs analysis

Description

Displays the relationship between the heating and cooling degree days and energy costs.

Menu Path

Administration > Reports > Heating and Cooling Degree Days vs. Energy Costs

Parameters

Enter the **Region**, **Date From**, **Date To**, **Commodity**, and **Organization**.

Report Type

Consumer

Hazard chart

Description

Print the hazard chart.

Menu Path

Equipment > Assets > Reliability Calculations

Note: You may also access this report on the **Reliability Calculations** tab of the **Positions** page.

Parameters

Specify **H** for **Type** to print the hazard chart.

Specify the **Problem Code**, **Failure Code**, **Cause Code**, **Action Code**, **Sequence Number**, **Start Day**, and **Scale Multiplier**.

Report Type

Consumer

Key list-detail

Description

Displays a list of keys.

Menu Path

Equipment > Reports > Key List-Detail

Parameters

Specify the **Organization**, **Key**, **Access Level**, **Parent Key**, **Supplier**, and **Employee**.

Unselect the **Show Totals** check box to remove the **Subtotal** and **Grand Total** fields from the report.

Report Type

Basic

Key management per equipment structure

Description

Display the keys associated with the selected equipment structure.

Menu Path

Equipment > Reports > Key Management Per Equipment Structure

Parameters

Specify the **Organization** and **Equipment**.

Optionally, specify the **Max. Levels** to determine how many levels in an equipment's hierarchy will be displayed on the report.

Report Type

Basic

Key transactions

Description

Displays a report for transactions of keys and their associated locks for a specified period of time.

Menu Path

Equipment > Reports > Key Transactions

Parameters

Optionally, specify the **Organization**, **Key/Ring**, **Access Level**, **Parent Key**, **Employee**, **Transaction Type**, **Start Date**, and **End Date**.

Optionally, unselect the **Show Totals** check box to remove the **Subtotal** and **Grand Total** fields from the report.

Report Type

Basic

List of categories per class

Description

Displays a list of equipment categories per class.

Menu Path

Equipment > Reports > List of Categories Per Class

Parameters

Enter the **Organization**, **Class**, and **Category**.

Report Type

Consumer

List of classes

Description

Displays a list of classes.

Menu Path

Equipment > Reports > List of Classes

Parameters

Enter the **Organization**, **Entity**, and **Class**.

Report Type

Consumer

List of equipment

Description

Displays a list of equipment.

Menu Path

Equipment > Reports > List of Equipment

Parameters

Enter the **Organization**, **Type**, **Equipment**, **Description**, **Class**, **Category**, **Location**, **Status**, **Department**, and **Assigned To**.

Select to sort by **Equipment**, **Class**, or**Location**.

Report Type

Consumer

List of equipment details

Description

Displays a list of equipment details.

Menu Path

Equipment > Reports > List of Equipment Details

Parameters

Specify the **Organization**, **Type**, **Equipment**, **Status**, **Class**, **Category**, and**Location**.

Report Type

Basic

List of nonconformities

Description

Displays a list of nonconformities.

Menu Path

Equipment > Reports > List of Nonconformities

Parameters

Optionally, specify the **Organization**, **Nonconformity**, **Status**, **Equipment**, **Observation Status**, **Type**, **Severity**, **Intensity**, **Size**, and **Importance**.

Select **Show Observations** to show observations of the nonconformity.

Optionally, unselect the **Show Totals** check box to remove the **Subtotal** and **Grand Total** fields from the report.

Report Type

Basic

Mean time between failures

Description

Displays the average time between failures.

Menu Path

Equipment > Reports > Mean Time Between Failures

Parameters

Enter the **Organization**, **Class**, **Category**, **Equipment Type**, **Equipment**, and **Location**.

Show Faults By
Select to sort by **Problem Code**, **Action Code**, **Cause Code**, or **Failure Code**.

Date From
Date To
Enter the starting date and ending date for which to retrieve data.

Report Type

Basic

Mean time between failures per equipment

Description

Details why a piece of equipment needed work and the average time between failures.

Menu Path

Equipment > Reports > Mean Time Between Failures Per Equipment

Parameters

Enter the **Organization**, **Class**, **Category**, **Equipment Type**, **Equipment**, **Location**, **Problem Code**, **Action Code**, **Cause Code**, and **Failure Code**.

Show Faults By
Select to sort by **Problem Code**, **Action Code**, **Cause Code**, or **Failure Code**.

Date From
Date To
Enter the starting date and ending date for which to retrieve data.

Report Type

Basic

Meter history

Description

Displays meter information and meter readings by piece of equipment.

Menu Path

Equipment > Reports > Meter History

Parameters

Enter the **Organization**, **Class**, **Category**, **Location**, **Type**, **Equipment**, **Status**, and **Department**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

OEE metrics

Description

Shows the overall efficiency of equipment based on the availability, performance, and quality of the equipment.

Menu Path

Equipment > Assets > OEE Metrics

Equipment > Positions > OEE Metrics

Equipment > Systems > OEE Metrics

Note: You must first select the record, and then click the OEE Metrics tab.

Parameters

Enter the **Type**, **Availability**, **Performance**, **Quality**, **Red Max. Limit (%)**, **Yellow Max. Limit (%)**, **Green Max. Limit (%)**.

Enter the **Start Date** and **End Date** for which to generate the report.

Report Type

Basic

PM repair costs chart

Description

Prints the PM work order repair costs chart report.

Menu Path

Equipment > Assets > PM Repair Costs Chart

Note: You may also access this report on the **PM Repair Costs Chart** tab of the **Positions** and **Systems** pages.

Parameters

Specify the **Equipment** and **Organization**.

Specify the **Start Date** and **End Date** for which to retrieve the data.

Report Type

Consumer

Print maintenance pattern

Description

Print a maintenance pattern record.

Menu Path

Work > Reports > Print Maintenance Pattern

Parameters

Enter **Organization**, **Timeline Start Date**, **Timeline End Date**, **Maintenance Pattern**, **Class**, **Equipment**, **Equipment Type**, **Department**, **Equipment Class**, **Category**, **Cost Code**, and **Assigned To**.

Select **Include Sequence** to include sequence details in the report.

Select **Include Timeline** to include timeline details in the report.

Select **Include User Defined FIelds** to include user defined fields in the report.

Report Type

Consumer

Print notebook report

Description

Print the notebook report with details about the notebook records.

Menu Path

Equipment > Reports > Print Notebook Report

Parameters

Specify the **Notebook**, **Created By**, **Equipment**, **Nonconformity Class**, **Nonconformity Severity**, **Nonconformity Type**, **Level 1**, **Level 2 Level 3**, **Level 4**, **Start Date**, and **End Date**.

Include Reference Details
Select to include reference details in the notebook report.

Include Email Details
Select to include email details in the notebook report.

Include User Defined Fields
Select to include user defined fields in the notebook report.

Include Custom Fields
Select to include custom fields in the notebook report.

Report Type

Basic

Print reliability survey

Description

Print the reliability survey report.

Menu Path

Equipment > Reports > Print Reliability Survey

Parameters

Reliability Ranking
Enter the reliability ranking for which to print survey reports.

Report Type

Consumer

Printing temperature analysis chart

Before you can set the parameters to generate the temperature analysis chart, you must enter **Temperature Minimum** and **Temperature Maximum** on the **Actual Temperatures** and **Historical Temperatures** tabs.

To print temperature analysis chart:

1. Select **Administration > Setup > Regions**.
2. Select the region for which to generate the temperature analysis chart, and then click the **Temperature Analysis Chart** tab.
3. Specify this information:

   Start Date
   Specify the starting date for which to retrieve data.

   End Date
   Specify the ending date for which to retrieve data.

4. Click **Submit**.
5. Click **Print**.

RCM equipment at risk

Description

Print the RCM (Reliability Centered Maintenance) Equipment at Risk report. This report shows assets that have a certain minimum risk level and do not have preventative maintenance planned.

Menu Path

Equipment > Reports > RCM Equipment At Risk Report

Parameters

Organization
Select the organization for which to print the RCM equipment at risk report.

Equipment
Select the equipment to include in the report.

RCM Project
Select the RCM project associated with the equipment.

Minimum Risk Level
Specify the minimum risk level for the equipment you want to view.

Report Type

Basic

RCM potential yearly savings

Description

This report displays equipment or non-critical assets up to a certain risk level with PM and maintenance pattern cost information attached. The costs are converted to an annual budget and provide data on potential savings in the case where preventive maintenance is not performed on non-critical assets.

Only assets with the maximum risk level or lower threshold risk levels are selected and displayed.

Menu Path

Work > Reports > RCM > RCM Potential Yearly Savings

Parameters

Specify the **Organization**, **RCM Project**, **Maximum Risk Level**, and **Equipment**.

Years Included in Avg.
Specify the number of years to include in the average costs per PM or maintenance pattern.

Include Children
Select to include the children of the selected equipment in the report.

Report Type

Basic

RCM risk levels

Description

Print the RCM Risk Levels report for equipment. The RCM (Reliability Centered Maintenance) Risk Levels report shows the output of a RCM risk assessment or risk analysis. The report includes risk matrix set-up records where **Type** is **Risk Level**.

You can sort the report by **Risk Level** or **Risk Priority Number**.

Menu Path

Equipment > Reports > RCM Risk Levels

Parameters

Specify the **Organization**, **Equipment**, **RCM Project**, **Minimum Risk Level**, and the **RCM Level**.

Include Children
Select this check box to include the children of the selected equipment in the report.

Include Functions
Select this check box to include the list of functional failures for the selected equipment.

Include Failure Modes
Select this check box to include the list of failure modes for the selected equipment.

Risk Assessment
Select this check box to show all records that have a risk level of risk assessment.

Risk Analysis
Select this check box to show all records that have a risk level of risk analysis.

Report Type

Basic

Reliability calculations

Description

Print the reliability calculations chart.

Menu Path

Equipment > Assets > Reliability Calculations

Note: You may also access this report on the **Reliability Calculations** tab of the **Positions** page.

Parameters

Specify the **Type**, **Problem Code**, **Failure Code**, **Cause Code**, **Action Code**, **Sequence Number**, **Start Day**, and **Scale Multiplier**.

Report Type

Consumer

Reliability chart

Description

Print the reliability chart.

Menu Path

Equipment > Assets > Reliability Calculations

Note: You may also access this report on the **Reliability Calculations** tab of the **Positions** page.

Parameters

Specify the **Type**, **Problem Code**, **Failure Code**, **Cause Code**, **Action Code**, **Sequence Number**, **Start Day**, and **Scale Multiplier**.

Report Type

Consumer

Reliability growth

Description

Print the reliability growth chart.

Menu Path

Equipment > Assets > Reliability Growth Equipment > Positions > Reliability Growth

Parameters

Enter the **Equipment**, **Organization**, **Calculation Method**, **Action Code**, **Cause Code**, **Failure Code**, **Problem Code**, **Sequence Number**, **Start Day**, and **Multiplier**.

Report Type

Consumer

Ring list-detail

Description

Displays a list of key rings.

Menu Path

Equipment > Reports > Ring List-Detail

Parameters

Specify the **Organization**, **Ring**, **Key**, and **Employee**.

Unselect the **Include Totals** check box to remove the **Subtotal** and **Grand Total** fields from the report.

Report Type

Basic

Risk matrix

Description

Print the risk matrix report. The risk matrix report shows records where **Type** is equal to **Consequence Category**. The report also uses probability and risk level records.

Menu Path

Work > Reports > RCM > Risk Matrix

Parameters

Specify **RCM Project**, **Consequence Category**, **Consequence**, **Probability**, **Equipment**, and **Organization**.

Include Children
Select to include the children of the selected equipment in the report.

Show Equipment
Select to display the number of equipment records for each consequence category.

Show Failure Modes
Select to display the number of failure mode records for each consequence category.

Note: If you select the **Show Equipment** or **Show Failure Modes** check boxes, each cell of the risk matrix may contain a hyperlink that opens a separate report that displays the equipment or failure mode records that make up that count.

Show Legend
Select to display the legend in the report.

Report Type

Basic

Table of equipment with custom fields

Description

Displays a table of the technical details of equipment.

Menu Path

Equipment > Reports > Table of Equipment with Custom Fields

Parameters

Enter the **Organization**, **Type**, **Equipment**, **Description**, **Class**, **Category**, **Location**, **Custom Field**, **Value**,**Text**, and **Department**.

Report Type

Consumer

Temperature analysis chart

Description

Before you can set the parameters to generate the temperature analysis chart, you must enter **Temperature Minimum** and **Temperature Maximum** on the **Actual Temperatures** and **Historical Temperatures** tabs.

Menu Path

Administration > Setup > Regions > Temperature Analysis Chart

Parameters

Specify the starting and ending dates for which to retrieve data.

Report Type

Consumer

Top 10 equipment breakdowns

Description

Displays a pie chart representing the top 10 most commonly occurring work order types requested for selected equipment. The reports will display donut charts of the following:

- top 10 work order types
- top 10 service problem codes
- top 10 action codes
- top 10 failure codes
- top 10 cause codes
- top 10 problem codes

Menu Path

Equipment > Assets > Top 10 Breakdowns

Equipment > Positions > Top 10 Breakdowns

Equipment > Systems > Top 10 Breakdowns

Parameters

Enter the **Equipment**, **Organization**, **Department**, and **Type** for which to retrieve data.

Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Total annual energy use

Description

Displays the annual energy usage report for one year as specified in the report.

Menu Path

Select **Equipment > Reports > Asset Sustainability > Total Annual Energy Use**.

Parameters

Enter the **Equipment** and **Organization**.

Year (YYYY)
Enter the specific year for which to retrieve the data.

Report Type

Consumer

Unreliability chart

Description

Print the unreliability chart.

Menu Path

Equipment > Assets > Reliability Calculations

Note: You may also access this report on the **Reliability Calculations** tab of the **Positions** page.

Parameters

Specify **U** for **Type** to print the unreliability chart.

Specify the **Problem Code**, **Failure Code**, **Cause Code**, **Action Code**, **Sequence Number**, **Start Day**, and **Scale Multiplier**.

Report Type

Consumer

Warranty claims

Description

Displays a list of claims filed against an equipment warranty.

Menu Path

Equipment > Reports > Warranty Claims

Parameters

Enter the **Organization**, **Claim**, **Supplier**, **Equipment**, **Status**, **Warranty**, **System Level**, **Assembly Level**, and **Component Level**.

Summary
Select to print the warranty summary.

Settlement Details
Select to print closing details.

Filed Date
Select to print the filed date.

Activities
Select to print work order activities.

Sort By
Select to sort by**Supplier**, **Equipment**, or **Warranty**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Warranty claim vs. settlement chart

Description

Before you can set the parameters to generate the warranty claim vs. settlement chart, you must update the system Status of the warranty claim to Response Received. The system does not display this status as an option until the warranty claim has been given a system Status of Approved.

Menu Path

Equipment > Warranty > Warranties > Warranty Claim vs. Settlement Chart

Parameters

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Consumer

Weekly booked hours by department

Description

Print equipment details for a piece of equipment, with the option to print a list of work orders, PM schedules and parts associated to the equipment.

Menu Path

Work > Reports > Weekly Booked Hours by Department

Parameters

Enter the **Department**, **Employee**, and**Organization**.

Enter the **Start Date** for the report.

Report Type

Consumer

Work order repair costs chart

Description

Prints the work order repair costs chart report.

Menu Path

Equipment > Assets > Work Order Repair Costs Chart

Note: You may also access this report on the **Work Order Repair Costs Chart** tab of the **Positions** and **Systems** forms.

Parameters

Enter the **Equipment** and **Organization**.

Enter the **Start Date** and **End Date** for which to retrieve the data.

Report Type

Consumer

Workspace moves and associations list

Description

Displays a report of all workspace moves and their associations.

Menu Path

Equipment > Reports > Workspace Moves and Associations List

Parameters

Optionally, specify the **Organization**, **Workspace Move**, **Status**, **From Workspace**, and **To Workspace**.

Report Type

Basic

WO cost by equipment

Description

Includes a list of work order costs per piece of equipment.

Menu Path

Equipment > Reports > WO Cost by Equipment

Parameters

Enter the **Organization**, **Type**, **Equipment**, **Department**, **Class**, **Category**, **Location**, **Minimum Cost**, and **Reporting Currency**.

Applicable Exchange Rate
Select one of the following options:

- **Actual**

  Select to calculate the conversion based on the exchange rate on the work order's creation date.
- **Current**

  Select to calculate the conversion based on the active exchange rate.

The system calculates the conversions on the printed report.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

WO cost by type, cost code, or dept

Description

Includes a list of work order costs by work order type, cost code, or department.

Menu Path

Equipment > Reports > WO Cost by Type, Cost Code, or Dept

Parameters

Enter the **Organization**, **Cost Code**, **Department**, and **WO Type**.

Show Costs By
Select to sort by **Department**, **Cost Code**, or **WO Type**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

WO cost of equipment per location

Description

Displays a list of equipment costs per location.

Menu Path

Equipment > Reports > WO Cost of Equipment Per Location

Parameters

Enter the **Organization**, **Location Class**, and **Location**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

WO cost summary

Description

Includes itemized and total cost information (labor, materials, services, and tool costs) by equipment for open and closed work orders.

Menu Path

Equipment > Reports > WO Cost Summary

Parameters

Enter the **Organization**, **Equipment Class**, **Category**, **Location**, **Type**, **Equipment**, **Department**, **Trade**, **Reporting Currency**, **WO Status**, **Cost Code**, **WO Class**, and **Include WOs**.

Current Exchange Rate
Select to calculate the conversion based on the active exchange rate. Otherwise, the system calculates the conversion based on the exchange rate on the work order's creation date. The system calculates the conversions on the printed report.

Show Child Equipment
Select to show work order costs for children of the selected **Equipment**. The system includes only the children for which costs roll up to the parent.

Note: You can select **Show Child Equipment** only if **Equipment** is entered.

Show Details
Select to display the work order details in addition to the work order cost information.

Group By
Select to group by **Location**, **Department**, **Cost Code**, **Equipment**, or **Trade**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

WO cost summary graph

Description

Displays a graph showing itemized and totaled cost information, such as labor, materials, services, and tool costs, by equipment (and related child equipment) for open and closed work orders.

Menu Path

Work > Reports > WO Cost Summary Graph

Parameters

Enter the **Organization**, **Equipment Class**, **Category**, **Location**, **Type**, **Equipment , Department**, **WO Class**, **Cost Code**, **Trade**, **Reporting Currency**, **WO Status**, **Include WOs**, and **Graph Type**.

Current Exchange Rate
Select to print the current exchange rate.

Include Service
Select to print service details.

Include Labor
Select to print labor details.

Include Material
Select to print materials details.

Include Tools
Select to print tools details.

Group By
Select to group by **Location**, **Department**, **Cost Code**, **Equipment**, or **Trade**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Generating asset management services reports

Generate reports related to asset management services functions.

Print customer charges

Description

Displays a list of work order charges that are the responsibility of the customer.

Menu Path

Work > Reports > Asset Management Services > Print Customer Charges

Parameters

Enter the **Organization**, **Work Order**, **Customer**, **Department**, **Equipment**, and **Project**.

Completed Work Orders
Select to include completed work orders only.

Released Work Orders
Select to include released work orders only.

Both
Select to include completed and released work orders.

Completed From
Completed To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Print customer contract

Description

Prints a contract for a specific customer.

Menu Path

Work > Reports > Asset Management Services > Print Customer Contract

Parameters

Enter the **Organization**, **Customer Contract**, and **Customer**.

Pricing Schedules
Select to display pricing schedules on the report.

Arranged WO Types
Select to display arranged work order types.

Custom Tariffs/Part Charges
Select to display custom tariffs and part charges if **Custom Trade Rates** and **Custom Part Charges** are selected on the related Pricing Schedule Record View page.

Related Customer Contracts
Select to display unfinished/approved related customer contracts on the report.

Fixed Payments
Select to display fixed payments on the report.

Calculated Work Orders
Select to display calculated work orders on the report.

Report Type

Consumer

Print invoice

Description

Prints an invoice for a specific customer and work order.

Menu Path

Work > Reports > Asset Management Services > Print Invoice

Parameters

Enter the **Organization**, **Invoice**, **Customer**, **Work Order**, and **Status**.

Report Type

Consumer

Generating budget reports

Generate reports related to budget functions.

Budget analysis

Description

Displays all work orders that are associated with the selected budget along with actual, estimated, and remaining parts, labor, and tool costs.

Menu Path

Operations > Reports > Budgets > Budget Analysis

Parameters

Specify the **Organization**, **Budget Structure**, **Budget Term**, **Cost Type**, **Cost Status**, **Period From**, **Period To**, **Department**, **Department Group**, **WO Location**, **WO Location Group**, **Equipment**, **Equipment Group**, **WO Type**, **WO Type Group**, **Cost Code**, **Cost Code Group**, **Project**, and **Project Group**.

Report Type

Basic

Budget position details

Description

Displays totals for each budget detail.

Menu Path

Operations > Reports > Budgets > Budget Position Details

Parameters

Specify the**Budget Structure**, **Budget Term**, **Period**, **WO Location**, **WO Location Group**, **Department**, **Department Group**, **Equipment**, **Equipment Group**, **WO Type**, **WO Type Group**, **Cost Type**, **Cost Type Group**, **Cost Code**, **Cost Code Group**, **Project**, and **Project Group**.

Show Total (Or Positions)
Select to display remaining planned and on-order amounts. Unselect to display actual planned and on-order amounts.

Free Budget
Select to sort by **Spent**, **On Order**, **Planned**, or **All**.

Report Type

Consumer

Budget summary

Description

Displays the calculated estimated, actual, and remaining costs for a selected budget.

Menu Path

Operations > Reports > Budgets > Budget Summary

Parameters

Enter the **Organization**, **Budget Structure**, and **Budget Term**.

Report Type

Basic

Budgets consistency control

Description

Tracks budget inconsistencies. Displays data for all structure levels.

Menu Path

Operations > Reports > Budgets > Budgets Consistency Control

Parameters

Enter the **Budget Structure** and **Budget Term**.

Report Type

Consumer

List of budget structure codes

Description

Displays the existing budget structures and a complete list of budget codes in the system.

Menu Path

Operations > Reports > Budgets > List of Budget Codes

Parameters

Enter the **Organization**.

Report Type

Consumer

List of budgets (lower level)

Description

Displays budget details for a particular budget.

Menu Path

Operations > Reports > Budgets > List of Budgets (Lower Level)

Parameters

Enter the **Budget Structure**, **Budget Term**, **Period**, **WO Location**, **WO Location Group**, **Department**, **Department Group**, **Equipment**, **Equipment Group**, **WO Type**, **WO Type Group**, **Cost Type**, **Cost Type Group**, **Cost Code**, **Cost Code Group**, **Project**, and **Project Group**.

Report Type

Consumer

List of budgets (top level)

Description

Displays an overview of the actual amounts for a budget period.

Menu Path

Operations > Reports > Budgets > List of Budgets (Top Level)

Parameters

Specify the **Budget Structure** and **Budget Term**.

Report Type

Consumer

Generating calibrations reports

Generate reports related to calibrations functions.

Calibration analysis

Description

Displays a list of completed calibration work orders by department that have resulted in the specified minimum number of consecutive or non-consecutive calibration statuses of pass or fail.

The report allows you to identify patterns in the results of calibration work orders to determine whether the frequency of calibration PMs should be adjusted, whether the equipment should be replaced, etc.

Using **Min. # of Calibrations**, the system determines the actual number of completed calibration work orders to retrieve for the report. If the actual number of completed calibration work orders is less than the value specified for **Min. # of Calibrations**, the system does not display any results. However, if the number of completed work orders is greater than or equal to the value of **Min. # of Calibrations**, the system displays all of the work orders.

Calibration work orders are considered consecutive if there are no other work orders for the equipment containing test points that were completed between the work orders in question.

Menu Path

Work > Reports > Calibrations > Calibration Analysis

Parameters

Enter the **Organization**, **Department**, **System**, **Equipment**, **Class**, **Category**, and **Equipment Criticality**.

Min. # of Calibrations
Enter the minimum number of work orders to retrieve for each piece of equipment based on the selection criteria. **Min. # of Calibrations** is a required field.

Select one or more of the following options:

- **Non-Consecutive**
  Select to print a list of all calibration work orders. If **Non-Consecutive** is unselected, the system only prints a list of consecutive work orders meeting the specified criteria.

- **Include Pass With Fail**
  Select to include all work orders with a calibration status of Pass, fail exists (PF).

- **Include Pass With Recal**
  Select to include all work orders with a calibration status of Pass, recal exists (PR).

- **Include Incomplete**
  Select to include all work orders with a calibration status of Incomplete.

- **Print Test Point Comments**
  Select to print comments entered for test points in the report output.

  Calibration Status
  Select one of the following options:

  Pass
  Select to include only work orders with a status of Pass (P).

  Fail
  Select to include only work orders with a status of Fail (F).

  Start Date
  End Date
  Enter the starting and ending date for which to retrieve data. **End Date** is a required field.

Report Type

Consumer

Calibration due

Description

Displays a list of all open calibration work orders containing test points for which the planned completion date is less than or equal to the **Due By** date.

The system calculates the planned completion date of a work order using the following formula:

```
Planned completion date = (Target date + Duration) - 1
```

If you select to include backlogged work orders, the system displays the number of days late for each work order in the report output. The system calculates the number of days late using the following formula:

```
Days late = System date – Planned completion date
```

The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy,

the system displays each parent and separates each code with a forward slash (/), e.g., SYS1/SYS2/SYS3.

Menu Path

Work > Reports > Calibrations > Calibration Due Report

Parameters

Specify the **Organization**, **Department**, **System**, **Equipment**, **Class**, **Category**, **Equipment Criticality**, and **Assigned To**.

No Backlog
Select to not print work orders whose planned completion date is less than today's date.

Show MEC Details
Select to display MEC work order details for multiple equipment work orders.

Sort By
Select to sort by **Planned Comp. Date** or **Equipment**.

Due By
Specify the due date for the calibration.

Report Type

Consumer

Calibration record

Description

Displays a calibration record that includes calibration header information, such as the work order and equipment. The body of the report is printed in a tabular format that includes the loop instruments, test points, standards used, potential standards, work order comments and custom fields, and any equipment custom fields for the calibration work order.

The report enables you to print a document to serve as a guide for the technician performing the calibration and also as a document on which to record the actual results of the calibration process. The report also provides an area on which to record performed by and approved by signatures.

After completing the calibration, transfer the information recorded on the document during the calibration process into the system to maintain an electronic record of the calibration, and then store the printed document in a secure location to keep a printed record of the equipment calibration.

Menu Path

Work > Reports > Calibrations > Calibration Record Report

Parameters

Specify the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Equipment**, **Type**, **Equipment Criticality**, **Location**, **Trade**, **Status**, **Assigned To**, **Assigned By**, **Person Responsible**, and **System**.

Select one or more of the following options:

- **Scheduled Date Range**
  Select to print a list of all calibration work orders for a scheduled date range.

- **Reprint**
  Select to reprint a list of all calibration work orders that have already been printed.

- **Include Activities**
  Select to include all work order activities for all the work orders included in the report output.

- **Work Order Custom Fields**
  Select to include all work order custom fields that have been set up to print on work orders for all the work orders included in the report output.

- **Equipment Custom Fields**
  Select to include all equipment custom fields for all the equipment on the work orders included in the report output.

- **By Person Responsible**
  Select to sort the report output by the person responsible.

- **Search MEC WOs**
  Select to search multiple equipment work orders.

  Start Date
  End Date
  Specify the starting and ending date for which to retrieve data.

Report Type

Consumer

Calibration reverse traceability

Description

Displays a list of calibration work orders, including all test points on the work order, for which a selected standard has been used to calibrate a piece of equipment. The completion date of the work orders must fall within the specified start and end date.

When the standard used for calibration is out of tolerance, it is necessary to identify the equipment that has been calibrated with the out of tolerance standard.

The system also enables you to print work orders for which test point deviations are greater than or equal to the specified deviation.

The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), e.g., SYS1/SYS2/SYS3.

Menu Path

Work > Reports > Calibrations > Calibration Reverse Traceability

Parameters

Enter the **Organization**, **Equipment**, **Part**, **Lot**, **Department**, **Deviation**, and **UOM**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data. **End Date** is a required field.

Report Type

Consumer

Generating Call Center reports

Generate reports related to call center functions.

Customer request

Description

Prints a copy of a customer request.

Menu Path

Operations > Reports > Call Center > Customer Request

Parameters

Enter the **Customer Request**, **Status**, **Assigned To**, **Customer**, **Employee**, **Department**, **Provider**, **Service Category**, **Service Problem Code**, and **Equipment**.

Customer Information
Select to display the customer's information on the report.

Action Requests
Select to include any action requests on the report.

Remarks
Select to print the customer's remarks on the report.

Custom/WO Custom Fields
Select to include all custom fields and work order custom fields on the report.

Request Date and Promise Date
Enter the requested date and the promised date for the customer's request.

Report Type

Consumer

Customer survey results

Description

Displays a list of all approved customer surveys and their results.

Menu Path

Work > Reports > Customer Survey Results

Note: This report is not included in the default menu. Contact your system administrator to modify the location of the report.

Parameters

Specify the **Organization** and **Customer Survey** for which to generate the report.

Report Type

Basic

Knowledge base articles

Description

Prints knowledge base articles for call center employees.

Menu Path

Operations > Reports > Call Center > Knowledge Base Articles

Parameters

Enter the **Organization**, **Knowledge Base Article**, **Status**, **Language**, **Department**, **Provider**, **Service Category**, and **Service Problem Code**.

Report Type

Consumer

Open service requests

Description

Displays the service requests with an **Open** status.

Menu Path

Operations > Reports > Call Center > Open Service Requests

Parameters

Specify the **Organization**, **Start Date**, and **End Date** for which to generate the report.

Report Type

Basic

Penalty deduction detail

Description

Displays penalty deduction details for work orders.

Menu Path

Operations > Reports > Call Center > Penalty Deduction Detail

Parameters

Enter the **Organization**, **Work Order**, **Equipment**, **Service Problem Code**, and **Provider**.

Include Work Order Custom Fields
Select to include work order custom fields in this report.

Include Service Problem Code Custom Fields
Select to include service problem code custom fields in this report.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Penalty deduction summary

Description

Displays a penalty deduction summary for equipment.

Menu Path

Operations > Reports > Call Center > Penalty Deduction Summary

Parameters

Enter the **Organization**, **Work Order**, **Equipment**, and **Service Problem Code**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Service request overview

Description

Displays a report of the total service requests for a specific organization, including graph, pie, bar, and area charts of the open service requests, service requests by type, service requests by status, service requests by service code, service requests by service category, service requests by department, service request status summary by type, and total service requests.

Menu Path

Operations > Reports > Call Center > Service Request Overview

Parameters

Specify the **Organization** of the service requests for which to generate the report.

Specify the **Start Date** and **End Date** for which to generate the report.

Report Type

Basic

Service request status summary by type

Description

Displays a bar chart graph of summaries of service request statuses by type when the type is selected on the bar chart.

Menu Path

Operations > Reports > Call Center > Service Request Status Summary by Type

Parameters

Specify the **Organization**, **Start Date** and **End Date** for which to generate the report.

On the chart, click the **Status** and **Type** combination for which to view service request details.

Report Type

Basic

Service requests

Description

Displays service request details regardless of status.

Menu Path

Operations > Reports > Call Center > Service Requests

Parameters

Specify the **Assigned To**, **Department**, **Employee**, **Supplier**, **Service Category**, **Service Problem Code**,**Status** and **Equipment** for which to generate the report.

Specify the **Request Date** and the **Promise Date** of the service request.

Select the **Customer Information** check box to include the customer's information in the report.

Select the **Action Requests** check box to to include the action requests information in the report.

Select the **Remarks** check box to include the remarks from the service request in the report.

Select the **Custom Fields** check box to include the custom fields in the report.

Select the **User Defined Fields** check box to include the user defined fields in the report.

Report Type

Basic

Service requests by department

Description

Displays service request information by the departments handling the service request.

Menu Path

Operations > Reports > Call Center > Service Requests by Department

Parameters

Specify the **Organization**, **Start Date** and **End Date** for which to generate the report.

On the chart, click the **Department** to view a list of service requests for that department.

Report Type

Basic

Service requests by service category

Description

Displays the service requests associated with a specific service category.

Menu Path

Operations > Reports > Call Center > Service Requests By Service Category

Parameters

Specify the **Organization** for which to generate the report.

On the chart, click the **Service Category** for which to view service request information, and then view the details.

Specify the **Start Date** and **End Date** for which to generate the report.

Report Type

Basic

Service requests by service code

Description

Displays a column chart and list report of service requests grouped by service codes.

Operations > Reports > Call Center > Service Requests by Service Code

Parameters

Specify the **Organization**, **Start Date**, and **End Date** for which to generate the report.

On the chart, click the **Service Code** for which to view service request information, and then view the details.

Report Type

Basic

Service requests by status

Description

Displays a chart representation of service requests by status.

Menu Path

Operations > Call Center > Reports > Service Requests By Status

Parameters

Specify the **Organization**, **Start Date** and **End Date** for which to generate the report.

On the chart, click the **Status** for which to view service request information, and then view the details.

Report Type

Basic

Service requests by type

Description

Displays a bar chart of the service requests by specific type.

Menu Path

Operations > Reports > Call Center > Service Requests by Type

Parameter

Specify the **Organization**, **Start Date** and **End Date** for which to generate the report.

On the bar chart, select the specific service request **Type** for which to view information.

Report Type

Basic

Top 10 call center requests

Description

Displays a pie chart representing the top 10 most commonly occurring service problem codes requested in the call center.

Menu Path

Operations > Reports > Call Center > Top 10 Call Center Requests

Parameters

Enter the **Organization**, **Equipment**, and **Department** for which to retrieve data.

Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Top 25 service requests-details

Description

Displays the top 25 most occurring service problem codes.

Menu Path

Operations > Reports > Call Center > Top 25 Service Requests-Details

Parameters

Specify the **Organization** and **Source** for which to generate the report.

Select the **Include Details** check box to include the details of the service requests in the report.

Specify the **Start Date** and **End Date** for which to generate the report.

Report Type

Basic

Total service requests

Description

Displays the total number of service requests.

Menu Path

Operations > Reports > Call Center > Total Service Requests

Parameters

Specify the **Organization**, **Start Date** and **End Date** for which to generate the report.

Menu Path

Basic

Generating contract reports

Generate reports related to contract functions.

Contract classes

Description

Displays a list of the different contract classes.

Menu Path

Purchasing > Reports > Contracts > Contract Classes

Parameters

Enter the **Organization**, **Contract Class**, and **Language**.

Report Type

Consumer

List of debit discounts

Description

Prints a list of the debit discounts to expect.

Menu Path

Purchasing > Reports > Contracts > List of Debit Discounts

Parameters

Enter the **Organization**, **Contract**, **Store**, **Supplier**, and **Status**.

Report Type

Consumer

List of existing contracts

Description

Prints an overview of current contracts.

Menu Path

Purchasing > Reports > Contracts > List of Existing Contracts

Parameters

Enter the **Organization**, **Supplier**, and **Store**.

Report Type

Consumer

List of purchases under contract

Description

Displays a list of open purchase order lines.

Menu Path

Purchasing > Reports > Contracts > List of Purchases Under Contract

Parameters

Enter the **Organization**, **Store**, **Supplier**, and **Contract**.

Select to include All Lines or only Open Lines.

Report Type

Consumer

Print contract

Description

Prints a copy of the contract.

Menu Path

Purchasing > Reports > Contracts > Print Contract

Parameters

Enter the **Organization**, **Contract**, **Supplier**, and **Store**.

Report Type

Consumer

Request discount based on purchases

Description

Prints a request to a supplier for the discount based on the purchase orders in the contract period.

Menu Path

Purchasing > Reports > Contracts > Request Discount Based on Purchases

Parameters

Enter the **Organization**, **Part**, **Description**, **For Store**, **Number of Months**, **Supplier**, and **Part Class**.

Report Type

Consumer

Generating fleet reports

Generate reports related to fleet functions.

Fleet billing

Description

Displays a list fleet customers and the corresponding bills for each.

Menu Path

Work > Reports > Fleet > Fleet Billing Report

Parameters

Specify the **Organization**, **Fleet Customer**, and **Bill**.

Include Details
Select to include detailed billing information.

Include Custom Fields
Select to include custom fields in this report.

Print No Charge Bills
Select to print bills that have no charges.

Start Date
End Date
Specify the starting and ending date for which to retrieve data.

Report Type

Consumer

Vehicle ticket

Description

Displays ticket information based on the fleet vehicle ticket.

Menu Path

Work > Reports > Fleet > Vehicle Ticket Report

Parameters

Specify the **Organization**, **Ticket**, **Status**, **Type**, **Fleet Customer**, **Vehicle**, **Received Vehicle**, **Issued To**, **Cost Code**, and **Ticket Class**.

Include PM Details
Select to print PM details.

Include Billing Details
Select to print billing details.

Print Custom Fields
Select to print custom fields.

Include Exceptions
Select to print exceptions.

Include Billing Adjustments
Select to print billing adjustments.

Print Attachments
Select to print document attachments associated with vehicle tickets in addition to the vehicle ticket.

Print Images
Select to print all images associated with the vehicle ticket.

Select Records By
Select to sort by **Issued Date**, **Returned Date**, or **Completed Date**.

Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.

Report Type

Consumer

VMRS activities

Description

Prints a list displaying activity details for VMRS work orders.

Menu Path

Work > Reports > Fleet > VMRS Activities

Parameters

Enter the **Organization**, **Equipment**, **Trade**, **Department**, **Work Order**, **Status**, **Reason for Repair**, **Work Accomplished**, **Technician Part Failure**, **Manufacturer**, **System Level**, **Assembly Level**, and **Component Level**.

Note: The values available for **Assembly Level** are based on the system-level code. The values available for **Component Level** are based on a combination of the system-level code and the assembly-level code.

Show MEC Details
Select to display MEC work order details for multiple equipment work orders.

Activity Start Date
Activity End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Generating healthcare reports

Generate reports related to healthcare functions.

Print healthcare work orders

Description

Includes details on equipment tracking, compliance, activities, and booked labor hours.

Menu Path

Work > Reports > Print Work Orders-Healthcare

Parameters

Enter **Organization**, **Work Order**, **Department**, **PM Schedule**, **Type**, **Equipment**, **WO Type**, **Trade**, **Equipment Criticality**, **Status**, **Assigned To**, **Assigned By**.

Start Date
End Date
Enter the starting date and ending date for which to print the report.

Include Instruction List
Select to include a list of instructions in the report.

Include Work Order Custom Fields
Select to include the custom fields from the work order in the report.

Include Work Order User Defined Fields
Select to include the user defined fields from the work order in the report.

Include Equipment Custom Fields
Select to include the custom fields from the equipment in the report.

Include Equipment User Defined Fields
Select to include the user defined fields from the equipment in report.

Include Equipment Tracking Details
Select to include the equipment tracking details in the report.

Include Work Order Compliance Details
Select to include the work order compliance details in the report.

Print Attachments
Select to print files attached to the work order with the report. Attached files may originate from the following sources: the associated work order, equipment, projects, departments, parent work orders, and locations.

Print Images
Select to print all images associated with the work order.

Booked Hours
Select to print the booked hours section details in the report.

Report Type

Consumer

Equipment list detail-healthcare

Description

Print the equipment list details report for healthcare assets, medical equipment, fire and safety equipment, and utility systems.

Menu Path

Equipment > Reports > Equipment List Detail- Healthcare

Parameters

Enter the **Organization**, **Equipment**, **Department**, **Status**, **Type**, and **Class**.

Include Totals
Select to calculate and include totals for all numeric fields in the report.

Report Type

Consumer

Labor productivity-healthcare

Description

Print the labor productivity healthcare report.

Menu Path

Administration > Reports > Labor Productivity- Healthcare

Parameters

Enter the **Organization**, **Employee**, **Trade**, and **Department**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Include Front Page
Select to include a front page with the report parameters selected.

Mark Confidential
Select to print a confidential banner in the title of the report.

Group By
Select to group the report data by **None**, **Day**, or **Week**.

Report Type

Basic

Medical equipment work orders by criticality

Description

Print the report detailing the work orders for medical equipment by criticality ratings. The report displays all work orders with **PPM** or **JOB** type.

Menu Path

Work > Reports > Medical Equipment Work Orders by Criticality

Parameters

Enter the **Organization**, **Criticality**, and **Equipment Class**.

Date From
Date To
Enter the dates for which to retrieve data.

Show Totals
Select to display subtotals and grand totals.

Report Type

Consumer

PM completion for life support equipment

Description

Print the report detailing the PM completion for life support equipment. The report displays all work orders with **PPM** type.

Menu Path

Work > Reports > PM Completion Report for Life Support Equipment

Parameters

Enter the **Organization**, **Equipment Class**, **Equipment Category**, and **Criticality**.

Date From
Date To
Enter the dates for which to retrieve data.

Show Totals
Select to display subtotals and grand totals.

Report Type

Consumer

Work order list-detail-healthcare

Description

Displays a list of all work orders where **RTYPE** is **JOB** or **PPM**. Multiple equipment child work orders are not displayed on this report.

Menu Path

Work > Reports > Work Order List-Detail

Parameters

Enter the **Organization**, **Work Order**, **WO Type**, **Department**, **Status**, **Equipment Type**, **Equipment Class**, **Equipment Category**, **Assigned To**, **Priority**, **Criticality**, **Action Code**, **Failure Code**, and **Problem Code**.

Date From
Date To
Specify the dates for which to retrieve data.

Show Totals
Select to display subtotals and grand totals.

Report Type

Basic

Generating hospitality reports

Generate reports related to hospitality functions.

Actual labor hours against estimated - hospitality

Description

Displays a list displaying how much time was spent, per trade, on work during a specified time period versus the original estimate.

Menu Path

Work > Reports > Actual Labor Hours Against Estimated-Hospitality

Parameters

Specify the **Property**, and **Profession**.

Group By
Select one of the following options:

- **None**
  Select to not group by day or week.
- **Day**
  Select to group by day.
- **Week**
  Select to group by week.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Annual energy use-hospitality

Description

Displays the annual energy usage report for a number of years as specified in the report parameters.

Menu Path

Equipment > Reports > Annual Energy Use-Hospitality

Parameters

Enter the **Equipment** and **Property**.

No. of Years
Enter the number of years for which to run the report.

Include Front Page
Select to include a front page with the report parameters selected.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

CO2e emissions-hospitality

Description

Displays equipment (in graphical form) in best and worst order based on CO2e emissions for the selected year and compares the data with the previous two years.

Menu Path

Equipment > Reports > Asset Sustainability > CO2e Emissions Chart

Parameters

Enter the **Property**, **Equipment**, **Commodity**, and **Reporting Year**.

Include Front Page
Select to include a front page with the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Display Graph in Gray Scale
Select to display the graph report in gray scale.

Report Type

Consumer

Capital performance evaluation-hospitality

Description

Displays for the selected equipment the outstanding capital request values for the selected period and for the future period and, if applicable, the GAS (Global Asset Sustainability) index for the equipment. This report also displays the correlation between the GAS index and the capital request.

Menu Path

Equipment > Reports > Capital Performance Evaluation-Hospitality

Parameters

Enter the **Property**, **Equipment**, **Request Priority**, **Request Amount Minimum**, **Reporting Currency**, **Request Status**, and **GAS Index Evaluation Period (Days)**.

Note: Request Amount Minimum selects requests where the estimated material cost plus the estimated labor cost is greater than the minimum entered.

GAS Tracked Equipment
Select to include GAS-tracked equipment in this report.

Green Related Request
Select to include green-related requests in this report.

Sort By
Select to sort by **GAS Cost**, **Return Amount**, or **Return %**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Consumer

Degree day analysis-hospitality

Description

Displays a list of degrees for a specified date range and degree codes. Select the **Include History** field when generating the report to display all historical data from the **Historical Temperature** tab. This feature compares the actual temperature data against the historical temperature data.

Menu Path

Administration > Reports > Degree Day Analysis-Hospitality

Parameters

Specify **Property** and **Region** .

Include History
Select to include historical data to allow a comparison between the actual temperature data vs the historical temperature data.

Start Date
End Date
Specify the starting date and ending date for which to generate the report.

Include Front Page
Select to include a front page with the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

GAS index analysis-hospitality

Description

Displays the GAS (Global Asset Sustainability) index and the energy efficiency of equipment over a selected period of time and reports how much money was spent on each commodity (electricity, gas, water, etc.) consumed by that equipment.

Menu Path

Administration > Reports > GAS Index Analysis-Hospitality

Parameters

Enter the **Property** and **Equipment**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Include Front Page
Select to include a front page with the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

Heating and cooling degree days vs. energy consumption type analysis-hospitality

Description

Displays the relationship between the heating and cooling degree days and energy consumption type.

Menu Path

Equipment > Reports > Degree Days vs. Energy Consumption Type-Hospitality

Parameters

Enter the **Property**, **Commodity**, **Region**, **Start Date**, and **End Date**.

Include Front Page
Select to include a front page with the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

Heating and cooling degree days vs. energy costs analysis-hospitality

Description

Displays the relationship between the heating and cooling degree days and energy costs.

Menu Path

Equipment > Reports > Degree Days vs. Energy Costs-Hospitality

Parameters

Enter **Property**, **Commodity**, and **Region**.

Start Date
End Date
Enter the starting date and ending date for which to generate the report.

Report Type

Consumer

Print hospitality work orders

Description

Includes details on equipment tracking, compliance, activities, and booked labor hours.

Menu Path

Work > Reports > Print Work Orders Healthcare

Parameters

Enter **Organization**, **Work Order**, **Department**, **PM Schedule**, **Type**, **Equipment**, **WO Type**, **Trade**, **Equipment Criticality**, **Status**, **Assigned To**, **Assigned By**.

Start Date
End Date
Enter the starting date and ending date for which to print the report.

Task Instructions
Select to include a list of instructions in the report.

Work Order Custom Fields
Select to include the custom fields from the work order in the report.

Work Order User Defined Fields
Select to include the user defined fields from the work order in the report.

Equipment Custom Fields
Select to include the custom fields from the equipment in the report.

Equipment User Defined Fields
Select to include the user defined fields from the equipment in report.

Equipment Tracking Details
Select to include the equipment tracking details in the report.

Work Order Compliance Details
Select to include the work order compliance details in the report.

Print Attachments
Select to print files attached to the work order with the report.

Print Images
Select to print all images associated with the work order.

Booked Hours
Select to print the booked hours section details in the report.

Report Type

Consumer

Incident response time chart-hospitality

Description

Displays a chart with calculations of the average response time for incident requests per problem code.

Menu Path

Work > Reports > Incident Response Time Chart

Parameters

Enter the **Property**, **From Status**, and **To Status**.

Enter the **Start Date** and **End Date** for which to retrieve the data.

Report Type

Consumer

Incident summary chart-hospitality

Description

Displays a chart with calculations of the number of incidents per property that occurred per month for the current year by selected groupings.

Menu Path

Work > Reports > Incident Summary Chart

Parameters

Enter the **Work Order**, **WO Priority**, **Status**, **Source**, **Room**, **Assigned To**, **First Name**, **Last Name**, **VIP Status**, **Problem Code**, **Incident Details**, and **Property**.

Select one of the following options by which to group the report details:

- **Problem Code**
  Select to group by problem code.
- **Incident Type**
  Select to group by incident type.
- **Room**
  Select to group by room.

Enter the **Start Date** and **End Date** for which to retrieve the data.

Report Type

Consumer

WO backlog hospitality

Description

Displays a list of backlogged work orders.

Menu Path

Work > Reports > WO Backlog Report-Hospitality

Parameters

Enter the **Property**, **Department**, **Profession**, **Type**, **Equipment**, **PM**, **Facility**, **WO Type**, **Priority**, **Equipment Criticality**, **Status**, **Assigned To**, and **Scheduling Group**.

Sort By
Select to sort by **Start Date**, **Equipment**, or **Location**.

Specify the **Start Date** and **End Date** for which to retrieve data.

Report Type

Basic

WO cost list-hospitality

Description

Displays the costs of a work order.

Menu Path

Work > Reports > WO Cost List-Hospitality

Parameters

Enter the **Property** and **Work Order**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

WO cost summary-hospitality

Description

Includes itemized and total cost information (labor, materials, services, and tool costs) by equipment for open and closed work orders.

Menu Path

Equipment > Reports > WO Cost Summary-Hospitality

Parameters

Enter the **Property**, **Type**, **Equipment**, **Profession**, **Reporting Currency**, **Current Exchange Rate**, **WO Status**, and **Include WOs**.

Current Exchange Rate
Select to calculate the conversion based on the active exchange rate. Otherwise, the system calculates the conversion based on the exchange rate on the work order's creation date. The system calculates the conversions on the printed report.

Show Child Equipment
Select to show work order costs for children of the selected **Equipment**. The system includes only the children for which costs roll up to the parent.

Note: You can select **Show Child Equipment** only if **Equipment** is entered.

Show Details
Select to display the work order details in addition to the work order cost information.

Group By
Select to group by **Equipment** or **Profession**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Generating inspection reports

Generate reports related to inspection functions.

Inspection route

Description

Displays the inspection sequences, aspects, conditions, and methods to examine during a specific route inspection. Use this report to register the results of an inspection for later data entry.

Menu Path

Work > Reports > Inspections > Inspection Route Report

Parameters

Specify the **Organization**, **Work Order**, **Type**, **Equipment**, **Location**, **Department**, **PM**, **Class**, **Category**, and **Route**.

Report Type

Consumer

List of inspection results

Description

Displays the results of an inspection for a particular piece of equipment.

Menu Path

Work > Reports > Inspections > List of Inspections Results

Parameters

Specify the **Organization**, **Class**, **Category**, **Equipment Type**, **Equipment**, **Aspect**, **Point Type**, **Point**, **Finding**, **Standard Work Order**, **Result**, **Minimum Value**, and **Maximum Value**.

Date From
Date To
Specify the starting and ending date by which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Consumer

List of points to be inspected

Description

Displays the inspection sequences, aspects, conditions, and methods to examine during a specific route inspection. Use this report to register the results of an inspection for later data entry.

Menu Path

Work > Reports > Inspections > List of Points to be Inspected

Parameters

Enter the **Organization**, **Equipment Type**, **Equipment**, **Location**, **Department**, **Class**, **Category**, **PM**, **Route**, and **Aspect**.

Date From
Date To
Enter the starting and ending date by which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Consumer

Status of inspection points

Description

Displays a list of inspection points and their statuses.

Menu Path

Work > Reports > Inspections > Status of Inspection Points

Parameters

Specify the **Organization**, **Route**, **Work Order**, **PM**, **Equipment Type**, **Equipment**, **Location**, **Department**, **Class**, **Category**, and **Route Status**.

Report Type

Consumer

Generating materials reports

Generate reports related to materials functions.

Average monthly usage analysis

Description

Displays part usage and demand information per store for the number of months requested.

Menu Path

Materials > Reports > Average Monthly Usage Analysis

Parameters

Enter the **Organization**, **Store**, **Part**, **Part Description**, **Number of Months**, **Preferred Supplier**, and **Stock Class**.

Report Type

Consumer

Consignment activity

Description

Displays a list of consignment activity.

Menu Path

Materials > Reports > Consignment Activity

Parameters

Enter the **Organization**, **Store**, and **Supplier**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Goods received note

Description

Displays a goods received note.

Menu Path

Materials > Reports > Goods Received Note

Parameters

Enter the **Organization**, **PO Receipt**, **Transaction Code**, **From**, **From Code**, **To**, **To Code**, **Purchase Requisition**, **Purchase Order**, and **Packing Slip**.

Printed
Select to print transactions that have been previously printed.

Date
Enter the date for which to retrieve data.

Report Type

Basic

Goods return note

Description

Displays for each supplier, the supplier address and the list of goods returned. Displays all the approved return transactions grouped by the supplier and sorted by the order number.

Menu Path

Materials > Reports > Goods Return Note

Parameters

Enter the **Organization**, **Return**, **Supplier**, and **Return Status**.

Reprint
Select to print a list of goods returned that have been printed previously.

Report Type

Basic

Inventory standard

Description

Displays a list of inventory items.

Menu Path

Materials > Reports > Inventory Standard

Parameters

Enter the **Organization**, **Part**, **Class**, **Manufacturer**, **Preferred Supplier**, **Tracking Method**, **Store**, **ABC Class**, **Reorder Qty.**, **UOM**, **Stock Method**, **Minimum Quantity**, **Maximum Quantity**, **Bin**, and **Reorder Level**.

Report Type

Consumer

Kit templates list

Description

Includes details on kit parts templates. Displays a list of parts where **Track as Kit** is selected.

Menu Path

Materials > Reports > Kit Template

Parameters

Enter **Organization**, **Kit Part**, **Part**, and **Store**.

Report Type

Consumer

List of expired kits

Description

Displays a list of expired kits determined by the specified lot expiration date.

Menu Path

Materials > Reports > List of Expired Kits

Parameters

Enter the **Organization**, **Kit Part**, **Store**, **Lot**, **Class**, and **Category**.

Lot Expiration Day
Select the date the lot expires.

Report Type

Consumer

List of kits

Description

Displays a list of kits parts determined by the **Track as Kit** checkbox on the part record.

Menu Path

Materials > Reports > List of Kits

Parameters

Enter the **Organization**, **Kit Part**, **Store**, **Lot**, **Class**, and **Category**.

Include Kit Content List
Select to include the contents of the kit in the report.

Include Kit Costs
Select to include the costs associated to the kit in the report.

Report Type

Consumer

List of outstanding requisition items

Description

Includes outstanding line items for requisitions where Status is not Cancelled.

Menu Path

Materials > Reports > List of Outstanding Requisition Items

Parameters

Enter the **Organization**, **For Store**, **From Store**, **From Supplier**, **Part**, **Requisition**, **Status**, **Originator**, **Buyer**, **Quotation Indicator**, **Cost Code**, and **Task**.

Req Items on Order
Select to print requisition items that are on order.

Requisitioned Items Not Yet Ordered
Select to print requisition items that have not been ordered.

All Requisition Items
Select to print all requisition items, regardless of the order status.

Date From
Date To
Enter the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Basic

List of stock

Description

Displays stock quantity, reorder level, reserved quantity, and quantity on order grouped by store and sorted by store, part, and part organization.

Menu Path

Materials > Reports > List of Stock

Parameters

Enter the **Organization**, **Store**, **Part**, **Part Class**, and **Supplier**.

Non-consignment
Select to print non-consignment items.

Consignment Item
Select to print consignment items.

Selection Options
Select one of the following options:

- **All Stock**

  Select to print all stock records.
- **Stock Below Reorder Level**

  Select to print stock that is below the reorder level.
- **Stock At/Below Minimum Level**

  Select to print stock this is at or below the minimum level.
- **Stock Requiring New Order**

Select to print stock requiring a new order.

Report Type

Basic

Monthly part usage chart

Description

The monthly part usage chart shows the part usage for the current month and the previous five months.

Menu Path

Materials > Parts > Monthly Part Usage Chart

Note: You must first select the record, and then click the Monthly Part Usage Chart tab.

Parameters

Specify the **Store**.

Report Type

Basic

Monthly usage trends

Description

Prints a report showing monthly usage trends.

Menu Path

Materials > Reports > Monthly Usage Trends

Parameters

Enter the **Organization**, **Store**, **Part**, and **Part Description**.

Month From
Month To
Enter the starting and ending month for which to retrieve data.

Report Type

Consumer

Parts currently reserved/allocated

Description

Displays a list of parts currently reserved/allocated.

Menu Path

Materials > Reports > Parts Currently Reserved/Allocated

Parameters

Enter the **Organization**, **Store**, **Department**, and **Part**.

Sort By
Select to sort by **Part**, **WO/Activity**, or **Store**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Part stockouts

Description

Print a list of stockouts (R5STOCKOUTS) for parts.

Menu Path

Material > Reports > Part Stockouts

Parameters

Enter the **Store**, **Part**, and**Class**.

Enter the **Start Date** and **End Date** for the report.

Report Type

Consumer

Physical inventory discrepancy

Description

Displays physical inventory parts and quantities grouped by store, part, and part organization.

Menu Path

Materials > Reports > Physical Inventory Discrepancy

Parameters

Enter the **Organization**, **Physical Inventory**, **Part**, **Store**, and **Status**.

Include Null Quantities
Select to include items with null quantities on the report.

Include Non-Discrepancy Items
Select to include items without any discrepancies on the report.

Group By
Select to group by **Store** or **Part**.

Report Type

Basic

Print build kit list

Description

Includes details on kit parts and kits built.

Menu Path

Materials > Reports > Print Build Kit List

Parameters

Session ID
Enter the session ID for which to generate the report.

Include Front Page
Select to print a confidential banner in the title of the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

Print kit restock list

Description

Includes details on the parts held for restocking once a kit is broken up and parts are returned to stock.

Menu Path

Materials > Kits > Breakup Kit

Parameters

Enter **Kit Part**, **Store**, and **Kit Lot**.

Click **Retrieve Parts**.

Enter **Store**, **Bin**, **Repair Bin** and relevant parts information.

Click **Print Kit Restock List**.

Report Type

Consumer

Print physical inventory list

Description

Displays a list of parts with physical inventory.

Menu Path

Materials > Reports > Print Physical Inventory List

Parameters

Enter the Physical Inventory.

Select one or more of the following options:

- **Print Quantity**
  Select to print the quantity.
- **Order By Bin**
  Select to sort by bin.
- **Print Assets**
  Select to print assets.
- **Discrepancies Only**
  Select to print stocktake discrepancies only. Stocktake discrepancies occur when there are discrepancies between **Expected Qty.** and **Physical Qty.** of inventory items.

Report Type

Basic

Print pick ticket

Description

Displays a list of parts needed to perform work on work orders or equipment. Only approved pick tickets are printed.

Menu Path

Materials > Reports > Print Pick Ticket

Parameters

Specify the **Organization**, **Work Order**, **Activity**, **From Pick Ticket**, **To Pick Ticket**, and **Store**.

Sort By
Select to sort by **Pick Ticket** or **Work Order**.

Date From
Date To
Specify the starting and ending date by which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Basic

Print requisition

Description

Select the originator, requisition type, requisition number, status and/or buyer to print a specific requisition. Otherwise, the report includes all requisitions. Includes option to convert totals to Euro currency.

Menu Path

Materials > Reports > Print Requisition

Parameters

Enter the **Organization**, **Originator**, **Requisition Type**, **Requisition**, **Status**, and **Buyer**.

Quotation
Select to print the quotation number if a quotation is associated with the requisition.

Date
Enter the requisition date for which to retrieve data.

Report Type

Basic

Purchase history per item/supplier

Description

Displays all parts and work orders associated with a given supplier.

Menu Path

Materials > Reports > Purchase History Per Item/Supplier

Parameters

Enter the **Organization**, **Supplier**, **Part**, **Work Order**, and **Task**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Return summary

Description

Displays comprehensive information, per purchase order, about approved returns to suppliers.

Menu Path

Materials > Reports > Return Summary

Parameters

Enter the **Organization**, **Supplier**, **Store**, **Part**, and **Purchase Order**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Stock issues history by part

Description

Displays part, stock values grouped by store, part sorted by store, part, and part organization.

Menu Path

Materials > Reports > Stock Issues History by Part

Parameters

Enter the **Organization**, **Store**, **From Part**, **To Part**, **Class**, and **Number of Months**.

Report Type

Basic

Stock transactions

Description

Lists all approved inventory transactions for a specified period of time.

Menu Path

Materials > Reports > Stock Transactions

Parameters

Enter the **Organization**, **Part**, **Part Class**, **Iss/Recv Entity**, **Iss/Recv Party**, **Counter Entity**, **Counter Party**, **Transaction Type**, and **Consignment Supplier**.

Non-Consignment
Select to print non-consignment items.

Consignment Item
Select to print consignment items.

Start Date
End Date
Enter the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.

Report Type

Basic

Stock value listing by part type

Description

Provides an overview listing all parts in a store and all bin locations for that part. The report is grouped primarily by store and secondarily by part. The report has two display modes for listing either stock parts or for repair parts. Quantities and values are calculated for each location and totaled for each part.

Menu Path

Materials > Reports > Stock Value Listing by Part Type

Parameters

Enter the **Organization**, **Part**, **Store**, **Part Class , Stock Class**, **Supplier**, **Commodity**, **Manufacturer Part Number**, **Manufacturer**, **Category**, **Currency**, and **Part Type**.

Non-Consignment
Select to print non-consignment items.

Consignment Item
Select to print consignment items.

Cumulative Total
Select to display the total value for each part.

Display Repair Qty.
Select to display the repair quantity and core value for each part.

Group By
Select to group by **Parts**, **Store**, **Stock**, **Supplier**, **Category**, or **Commodity**.

Report Type

Basic

Generating project reports

Generate reports related to project functions.

Cost summary by project and area

Description

Prints a summary of costs by project and area.

Menu Path

Work > Reports > Projects > Cost Summary By Project and Area

Parameters

Enter the **Organization** and **Project**.

Report Type

Consumer

List of WOs for project

Description

Displays a list of work orders created for a project.

Menu Path

Work > Reports > Projects > List of WOs for Project

Parameters

Enter the **Organization** and **Project**.

Note: If you are using multi-organization security (MOS), and you select a master **Project** in your selection criteria, the system only retrieves those work orders created in the specific organizations to which you have access.

Include Completed
Select to include completed work orders on the report.

Report Type

Consumer

Project budget code cost summary

Description

Displays a summary of project costs by budget code.

Menu Path

Work > Reports > Projects > Project Budget Code Cost Summary

Parameters

Enter the **Organization** and **Project**.

Report Type

Consumer

Project cost breakdown

Description

Displays an overview of cost per project per budget.

Menu Path

ReportsWork > Reports > Projects > Project Cost Breakdown

Parameters

Enter the **Organization**, **Project**, and **Budget Code**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Project cost summary

Description

Displays a summary of estimated, planned, ordered, actual, and total cost per project.

Menu Path

Work > Reports > Projects > Project Cost Summary

Parameters

Enter the **Organization** and **Project**.

Report Type

Consumer

Project POs

Description

Displays a summarized list of purchase orders created to procure materials and external services.

Menu Path

Work > Reports > Projects > Project POs

Parameters

Enter the **Organization** and **Project**.

Note: If you are using multi-organization security (MOS), and you select a master **Project** in your selection criteria, the system only retrieves those purchase orders created for work orders in the specific organizations to which you have access.

Include Completed
Select to include completed purchase orders on the report.

Report Type

Consumer

Project summary chart

Description

Displays a chart of costs associated with projects.

Menu Path

Work > Projects > Project Summary Chart

Note: You must select a project for which to generate the report, and then click the **Project Summary Chart** tab.

Parameters

Enter the **Organization** and **Project**.

Include Front Page
Select to include a front page with the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

Generating purchasing reports

Generate reports related to purchasing functions.

Approved POs awaiting delivery

Description

Displays a list of purchase orders that have been issued to suppliers but for which goods have not yet been received. The report includes the supplier, the date the purchase order was created, the related requisition, and purchase order numbers.

Menu Path

Purchasing > Reports > Approved POs Awaiting Delivery

Parameters

Enter the **Organization**, **Supplier**, **Cost Code**, **Purchase Order**, **Part**, **Store**, and **Task**.

Start Date
Enter the starting date for which to retrieve data.

Report Type

Basic

Blanket order list

Description

Prints a list of approved blanket orders and blanket order lines that includes the blanket order header and blanket order lines.

Menu Path

Purchasing > Reports > Blanket Order List

Parameters

Enter the **Organization**, **Supplier**, **Blanket Order**, **For Store**, and **Class**.

Comments
Select to print comments on the report.

Release Information
Select to include release information on the report.

Terms/Clauses
Select to include terms and clauses information on the report.

Custom Fields
Select to print custom fields on the report.

Approvers
Select to print information about the authorized approvers on the report.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

List of invoices

Description

Displays supplier invoice information.

Menu Path

Purchasing > Reports > List of Invoices

Parameters

Enter the **Organization** and **Supplier**.

Select to sort by **Date Approved**, **Matched**, or **Date Recorded**.

Start Date
Enter the starting date for which to retrieve data.

Report Type

Consumer

Pricing variance

Description

Displays a list of purchase orders where discrepancies exist between the purchase order and the invoice.

Menu Path

Purchasing > Reports > Pricing Variance

Parameters

Enter the **Organization**, **Supplier**, **Purchase Order**, **Buyer**, **Class**, and **Variance Type**.

Group By
Select to group the report data by **Purchase Order**, **Class**, **Supplier**, or **Buyer**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Print PO

Description

Includes a purchase order header and both part and service line items. By default, the report selects the current revision of purchase orders with a status of "Ready for printing" or "Approved" and those that do not have "Printed" selected. Print purchase orders that do not have a status of "Ready for printing" or "Approved," or those that already have "Printed" selected by specifying a purchase order number on the parameter form.

Menu Path

Purchasing > Reports > Print PO

Parameters

Enter the **Organization**, **Store**, **Purchase Order**, and **Buyer**.

Print Attachments
Select to print document attachments associated with purchase orders in addition to the purchase order.

Include All Revisions
Select to include all revisions to the purchase order.

Show Internal Part#
Select to include the internal part number.

Include Cost Code
Select to include the cost code.

Reprint
Select to print purchase orders that have been printed previously.

Note: The system prints only the requisition total in Euro currency.

Date
Enter the order date for which to retrieve data.

Print Images
Select to print all images associated with the purchase order.

Report Type

Basic

Purchase history per PO/supplier

Description

Displays all purchase orders for a given supplier.

Menu Path

Purchasing > Reports > Purchase History Per PO/Supplier

Parameters

Enter the **Organization**, **Supplier**, and **Status**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

PO cost summary

Description

Displays cost information for purchase orders.

Menu Path

Purchasing > Reports > PO Cost Summary

Parameters

Enter the **Organization**, **Class**, **Status**, **Supplier**, **Cost Code**, **Buyer**, **Project**, **Store**, **Currency**, and **PO Status**.

Include Details
Select to display the purchase order details.

Group By
Select to group the report data by **Store**, **Supplier**, **Cost Code**, **Buyer**, or **Project**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

PO status

Description

Displays a list of purchase order information including cost and receipt information with optional totals.

Menu Path

Purchasing > Reports > PO Status

Parameters

Enter the **Organization**, **Purchase Order**, **Status**, **Class**, **Supplier**, **Part**, **Trade**, and **Catalog Reference**.

Include Totals
Select to include the purchase order totals on the report.

Order Date
Enter the order date for which to display purchase orders.

Due Date
Enter the due date for which to displays purchase orders.

Report Type

Consumer

POs awaiting invoicing

Description

Displays a list of purchase orders for goods that have been received but not yet invoiced. The report includes the related requisition and purchase order numbers, the part or service ordered, the outstanding quantity, the unit of measure for the items, and the order price per unit for goods or services.

Menu Path

Purchasing > Reports > POs Awaiting Invoicing

Parameters

Enter the **Organization**, **Supplier**, **Purchase Order**, and **Store**.

Include Matched
Select to include invoices that have a status of **Matched**.

Report Type

Basic

Quotation summary

Description

Displays a summary of the quotations from all suppliers associated with an RFQ; allows you to easily compare all supplier responses received from quotations.

Menu Path

Purchasing > Reports > Quotes > Quotation Summary

Parameters

Enter the **RFQ**, **Quotation Status**, **Part**, **Supplier**, **Quotation**, **Trade**, **Task**, and**Organization**.

Show RFQs
Select to sort **Per Part/Service** or **Per Supplier**.

Report Type

Consumer

Request for quotation

Description

Printed form that is sent to suppliers to elicit part and service quotes. Data includes the quotation header, requested by, parts, services, and comments sections.

Menu Path

Purchasing > Reports > Quotes > Request for Quotation

Parameters

Enter the **RFQ**,**Quotation**, **Quotation Status**, **Part**, **Supplier**, **Trade**, **Task**, and **Organization**.

Include Quotation Comments
Select to include quotation comments in this report.

Include Part/Services Comments
Select to include part/services comments in this report.

Include Cancelled Quotations
Select to include cancelled quotations in this report.

Include Response Values
Select to include response values in this report.

Report Type

Basic

Request for quotation summary

Description

Displays all suppliers, parts, and services that are associated with an RFQ; displays additional awarded information for parts and services that have been awarded to a supplier.

Menu Path

Purchasing > Reports > Quotes > Request for Quotation Summary

Parameters

Enter the **RFQ**, **Status**, **Part**, **Supplier**, **Organization**,**Task**, and **Trade**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Consumer

Vendor lead time

Description

Print the vendor lead time report. The lead time report displays lead time information from all purchase orders related to the selected supplier.

Menu Path

Purchasing > Reports > Vendor Lead Time

Parameters

Enter the **Supplier**, **Organization**, **Purchase Order**, **Status**, and **Part**.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Consumer

Generating work reports

Generate reports related to work functions.

Actual labor hours against estimated

Description

Displays a list displaying how much time was spent, per trade, on work during a specified time period versus the original estimate.

Menu Path

Work > Reports > Actual Labor Hours Against Estimated

Parameters

Enter the **Organization**, **Trade**, and **Department**.

Group By
Select one of the following options:

- **None**
  Select to not group by day or week.

- **Day**
  Select to group by day.

- **Week**
  Select to group by week.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Batch work order generation summary

Description

Displays summary information of the work order generated from the **Generate/Release WOs** form. This report can only be printed from the **Generate/Release WOs** form.

Menu Path

Work > Process > Generate/Release WOs

Parameters

No parameters

Report Type

Basic

Booked labor by activity

Description

Display a graph that calculates the number of booked hours by activity per trade.

Menu Path

Work > Reports > Booked Labor By Activity

Parameters

Enter **Organization** and **Work Order**.

Report Type

Consumer

Call Center WO

Description

Displays a work order with fields commonly used by off-site call center contractors who do not have access to the system

Menu Path

Work > Reports > Print Work Orders > Call Center WO

Parameters

Enter the **Organization**, **Work Order**, **Status**, **Provider**, **Department**, **Service Problem Code**, **WO Type**, **Priority**, **Equipment**, **Location**, **Trade**, and **Date Range Type**.

Include Child Work Orders
Select to include child work orders on the report.

Include Custom Fields
Select to print custom fields on the report.

Print Attachments
Select to print attachments associated with the work order. Attached files may originate from the following sources: the associated work order, equipment, projects, departments, parent work orders, and locations.

Include MEC Work Orders
Select to include MEC work orders on the report.

Print MEC Attachments
Select to print MEC attachments.

Barcode
Select to print the barcode for the work order.

Include Customer Requests
Select to print customer requests associated with the work order.

Print Images
Select to print all images associated with the work order.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Cost summary by transaction date

Description

Prints a summary of costs by transaction date. The report includes summary counts, hours and costs for all pieces of equipment which appear on PPM and JOB type work orders.

Menu Path

Work > Reports > Projects > Cost Summary By Transaction Date

Parameters

Enter **Organization**, **Location**, **Department**, **Cost Code**, **Equipment**, **Equipment Type**, **Class**, **Reporting Currency**, **Status**, **Include WOs** and **Trade**.

Include Front Page
Select to include a front page on the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Show Details
Select to display the work order details in addition to the work order cost information.

Group By
Select to group the report by **Location**, **Department**, **Cost Code**, **Equipment**, or **Trade**.

Start Date
End Date
Enter the starting and ending date the costs were incurred for which to generate the report.

Report Type

Consumer

Customer contract

Description

Includes details on customer contracts and revisions.

Menu Path

Work > Reports > Customer Contract

Parameters

Enter **Organization**, **Customer Contract**, **Contract Revision**, **Customer**, and **Status**.

Select **Approved Revision Only**.

Note: If selected, the report displays only those contract revisions with an Approved status. If unselected, the report displays all revisions associated with the customer contract.

Enter the **From Date** and **To Date** for which to generate the report.

Report Type

Consumer

Customer invoice details

Description

Includes details on customer invoices such as charge categories, subcategories, charge levels, and adjustments.

Menu Path

Work > Reports > Customer Invoice Details

Parameters

Enter **Organization**, **Invoice**, **Customer**, **Contract**, **Status**, and **Contract Type**.

Enter **Created Start Date** and **Created End Date** for which to generate the report.

Select to generate the invoice details report on the **Charge Category Adjustments**, **Subcategory Adjustment** or **Both**.

Report Type

Consumer

Service request chart

Description

Displays a graph that calculates the number of service requests by various groupings.

Menu Path

Work > Reports > Call Center > Service Request Chart

Parameters

Enter **Type**, **Assigned To**, **Department**, **Employee**, **Supplier**, **Service Category**, **Service Problem Code**, and **Status**.

Request Date
Promise Date
Specify the requested date and the promised date for the service request.

Report Type

Consumer

Daily hours worked per employee

Description

Displays what type of work (normal, overtime, and holiday) a specific employee performed over a given period and the number of hours.

Menu Path

Work > Reports > Scheduling > Daily Hours Worked Per Employee

Parameters

Enter the **Organization**, **Employee**, and **Hour Type**.

If you leave **Employee** and **Hour Type** blank, the system retrieves all employee data working all types of hours.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Daily trade schedule

Description

Displays a daily trade schedule for a specific date or range of dates.

Menu Path

Work > Reports > Scheduling > Daily Trade Schedule

Parameters

Specify the **Organization**, **Trade**, and **Department**.

Date From
Date To
Specify the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Consumer

Delinquent PM summary

Description

Displays a list of employees that are assigned to past due PM work orders. Also displays the total count of past due PM work orders and total past due work hours.

Menu Path

Work > Reports > Delinquent PM Summary

Parameters

Enter the **Organization**, **Department**, and **Trade**.

Select **Include Details** to include work order details in the report.

Employee productivity

Description

Prints the employee productivity report.

Menu Path

Work > Reports > Scheduling > Employee Productivity

Parameters

Enter the **Organization**, **Employee**, **Department**, and **Trade** for which to generate the report.

Enter the **Start Date** and **End Date** for which to generate the report.

Include Details
Select to print the employee details with the report.

Report Type

Basic

Equipment profile

Description

Print details for a piece of equipment, or a list of work orders, or PM schedules associated to the equipment.

Menu Path

Work > Reports > Equipment Profile

Parameters

Enter the **Equipment**, **Organization**, **Type**, **Class**, **Category**, and **Cost Code**.

Enter the **Work History Start Date** and **Work History End Date**.

Select **Include Parts Associated** to include associated parts in the report.

Select **Include PM Schedules** to include PM schedules in the report.

Select **Include Work History** to include the work history in the report.

Expired warranties

Description

Displays a list of all warranties that have expired.

Menu Path

Work > Reports > Expired Warranties

Parameters

Enter the **Organization**, **Type**, **Equipment**, and **Location**.

Near Threshold
Select to include warranties that are near their threshold.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Future maintenance cost

Description

Displays estimated present and future maintenance costs for equipment for a selected period. Report is divided into four sections.

1 **Current Work Orders**
displays remaining estimated costs of open work orders

2 **Deferred Activities**
displays estimated costs of deferred maintenance

3 **Current PM**
displays remaining estimated costs of open PM work orders

4 **Forecasted PM**
displays estimated costs of PMs that will fall due within the specified date range

Menu Path

Work > Reports > Scheduling > Future Maintenance Cost

Parameters

Enter the **Organization**, **Equipment**, **Equipment Type**, **Equipment Class**, and **Department**.

Include Work Orders
Select to include work orders in this report.

Include Deferred Activities
Select to include deferred activities in this report.

Include PMs
Select to include PMs in this report.

Include PM Forecasting
Select to include PM forecasting in this report.

Start Date
End Date
Enter the starting and ending dates for which to retrieve data.

Report Type

Basic

Hours needed for task plans

Description

Displays a listing of work order task plans along with their estimated hours.

Menu Path

Work > Reports > Scheduling > Hours Needed for Task Plans

Parameters

Enter the **Organization**, **Department**, and **Task Plan**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Labor required per day or trade

Description

Displays a list of labor required for a particular day.

Menu Path

Work > Reports > Scheduling > Labor Required Per Day or Trade

Parameters

Specify the **Organization**, **Trade**, and **Department**.

Select one of the following options:

- **Per Day**
  Select to sort by day.
- **Per Trade**
  Select to sort by trade.

Start Date
End Date
Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.

Report Type

Basic

List of all PM schedules

Description

Displays a quick report list of PM schedules.

Menu Path

Work > Reports > List of PM Schedules

Parameters

Specify the **Organization**, **PM Schedule**, **Type**, **WO Type**, **Supervisor, Priority**, and **Nesting Reference** for which to generate the report.

Select the **Include Totals** checkbox to include the **Subtotal** and **Grand Total** fields.

Report Type

Basic

List of permit issues

Description

Displays which permits were issued for what work orders.

Menu Path

Work > Reports > Permits > List of Permit Issues

Parameters

Enter the **Organization**, **Permit**, **Work Order**, **Equipment**, and **Type**.

Include Inactive Permits
Select to include inactive permits in the report.

Sort By
Select to sort by **Equipment** or **Work Order**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

List of PM work orders

Description

Prints the list of maintenance work orders report.

Menu Path

Work > Reports > Scheduling > List of PM Work Orders

Parameters

Specify the **Organization**, **Department**, **PM**, **Maintenance Pattern**, **Equipment**, **Assigned To**, **Priority**, and **PM Type** for which to generate the report.

Specify the **Start Date** and **End Date** for which to generate the report.

Sort By
Select to sort the report records by **Due Date** of the PM work orders or **Scheduled Start Date** of the PM work orders.

Report Type

Basic

List of WOs bypassed due to nesting

Description

Displays a list of PM work orders that were bypassed because they were superseded by another PM work order.

Menu Path

Work > Reports > Scheduling > List of WOs Bypassed Due to Nesting

Parameters

Enter the **Organization** and **Department**.

Report Type

Consumer

List of work orders

Description

Displays a quick report list of work orders.

Menu Path

Work > Reports > List of Work Orders

Parameters

Specify the **Organization**, **Work Order**, **Department**, **Equipment**, **Status**, **Assigned To**, **Assigned By**, **Priority**, **PM Schedule**, **Location**, and **WO Type** for which to generate the report.

Specify the **Start Date** and **End Date** for which to generate the report.

Select the **Include Totals** checkbox to include the **Subtotal** and **Grand Total** fields.

Report Type

Consumer

Long term WO list

Description

Displays a list of work orders due over a longer period of time (six months, for example) in addition to projecting PM work orders that will be coming due.

Menu Path

Work > Reports > Scheduling > Long Term WO List

Parameters

Enter the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department**, **Location**, **PM**, **Work Order**, **Project**, **Type**, **Assigned To**, and **Assigned By**.

Search MEC WOs
Select to search multiple equipment work orders.

Start Date
End Date
Enter the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.

Report Type

Basic

Material requirements analysis

Description

Displays a list of stock materials needed to complete a specific work order.

Menu Path

Work > Reports > Scheduling > Material Requirements Analysis

Parameters

Enter the **Organization**, **Department**, **PM**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Location**, **Project**, **Type**, and **Work Order**.

Direct Purchase Due Date is After Start Date
Select to include stock items where the direct purchase date is after the work order start date.

Qty Required > Qty in Stock
Select to include stock items where the quantity required for the work order is greater than the quantity in stock.

Search MEC WOs
Select to include MEC work orders on the report.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Meter based PM due

Description

Displays a list of meter-based PMs due by a certain date.

Menu Path

Work > Reports > Scheduling > Meter Based PM Due Report

Parameters

Enter the **Organization**, **Equipment**, **PM**, **Meter UOM**, **WO Class**, and **Department**.

Sort By
Select to sort by **Equipment**, **PM**, or **Estimated Due Date**.

Due By
Enter the due date for which to print the report. **Due By** is a required field.

Report Type

Consumer

Monthly scheduling details

Description

Displays a row calendar showing monthly scheduling details such as scheduled employee labor, planned parts, scheduled tools, and daily employee exceptions.

Menu Path

Work > Reports > Monthly Scheduling Details

Parameters

Enter the **Organization** and **Department**.

Start Date
End Date
Specify the starting and ending dates for which to retrieve data.

Scheduled Labor
Select to display labor previously scheduled to work orders for the organization and department.

Employee Exceptions
Select to display employee labor exceptions for the department. Exceptions include days the employees cannot work due to employee time off and company holidays.

Planned Parts
Select to display parts planned for work orders for the organization and department.

Scheduled Tools
Select to display tools scheduled for work orders for the organization and department.

Report Type

Consumer

Part failures

Description

Displays the percentage of parts that failed versus parts that were issued. Data for this report comes from failures listed on the **Part Failures** page and the **Parts** page of the **Work Orders** form.

Menu Path

Work > Reports > Part Failures

Parameters

Enter the **Organization**, **Part**, **Asset ID**, **Problem Code**, **Failure Code**, **Action Code**, and **Cause Code**.

Date From
Date To
Enter the starting and ending dates for which to retrieve data.

Report Type

Consumer

Overdue vehicle issues and returns

Description

Displays all overdue vehicle rentals including vehicle issues and returns for customer rental contracts. Vehicles are considered overdue when they remain unreturned by the customer after the specified return date and time on the rental contract, or the vehicle has not been issued by the specified rental date and time on the rental contract.

Menu Path

Work > Reports > Contract Management > Overdue Vehicle Issue/Return List

Parameters

Enter the **Organization**, **Vehicle**, **Vehicle Type**, **Created By**, and **Location**.

Enter the **Date** for which to generate the report. All vehicles which have not been issued or returned by the estimated issue date and the estimated return date on the rental contract, after the date you enter here, are included in the report.

Select one of the following options for generating the report:

- **Overdue Issues**
  The report generated includes only overdue issue transactions.

- **Overdue Returns**
  The report generated includes only overdue return transactions.

- **Both**
  The report generated includes both overdue vehicle issues and overdue vehicle returns.

Report Type

Basic

Permits for WOs

Description

Displays copies of work permits for a particular work order.

Menu Path

Work > Reports > Permits > Permits for WOs

Parameters

Enter the **Organization**, **Permit Reference**, **Permit**, and **Work Order**.

Report Type

Consumer

PM compliance

Description

Includes compliance details for PM work orders.

Menu Path

Work > Reports > Scheduling > PM Compliance

Parameters

Enter **Organization**, **PM**, **Department**, **Equipment**, **Assigned To**, and **Assigned By**.

Start Date
End Date
Enter the starting and ending date for which to generate the report.

Report Type

Consumer

PM due overview

Description

Prints the PM due overview report.

Menu Path

Work > Reports > Scheduling > PM Due Overview

Parameters

Specify the **Organization**, **PM**, **Maintenance Pattern**, and **Equipment** for which to generate the report.

Include
Select to print the **Fixed and Variable**, **Meter**, **Duplicates**, **Maintenance Pattern**, and **Maintenance Pattern Meter** sections in the report.

Report Type

Basic

PM forecasting

Description

Displays a printed representation of a PM forecasting session similar to what is displayed on the actual PM Forecasting form.

Menu Path

Work > WO Planning > PM Forecasting

Parameters

None

Report Type

Basic

PM schedule profile

Description

Displays a list of PM schedule details and activity information along with optional task instructions and route information.

Menu Path

Work > Reports > Scheduling > PM Schedule Profile

Parameters

Specify the **PM Schedule**, **Organization**, **Type**, **Class**, **Trade**, and **Equipment**.

Select **Include Task Plan Instructions** to print with the report.

Select **Include Route Equipment** to print with the report.

Specify the **Start Date** and **End Date** for the report.

Report Type

Consumer

Print customer contract

Description

Prints a contract for a specific customer.

Menu Path

Work > Reports > Asset Management Services > Print Customer Contract

Parameters

Enter the **Organization**, **Customer Contract**, and **Customer**.

Pricing Schedules
Select to display pricing schedules on the report.

Arranged WO Types
Select to display arranged work order types.

Custom Tariffs/Part Charges
Select to display custom tariffs and part charges if **Custom Trade Rates** and **Custom Part Charges** are selected on the related Pricing Schedule Record View page.

Related Customer Contracts
Select to display unfinished/approved related customer contracts on the report.

Fixed Payments
Select to display fixed payments on the report.

Calculated Work Orders
Select to display calculated work orders on the report.

Report Type

Consumer

Print permit to work

Description

Report displays a list of all permits to work with **Status** of **Approved** or **Active**. Includes all comments for safety records and lockout/tagout records, user defined fields, lockout/tagout tags, and hazard rating system information.

Menu Path

Work > Reports > Print Permit to Work

Parameters

Enter the **Organization**, **Permit to Work**, **Equipment**, **PTW Type**, **Department**, and **Risk**.

Required Start Date
Required End Date
Enter the required starting and ending date for which to retrieve data.

Include Comments
Select to include the permit to work comments.

Include Safety Comments
Select to print safety comments for the permit to work.

Include LOTO Comments
Select to print lockout/tagout comments for the permit to work.

Include User Defined Fields
Select to print user defined fields added to the permit to work.

Include LOTO Tags
Select to print tags for lockout/tagout procedures implemented for the permit to work.

Include Hazard Rating System
Select to print health hazards, flammability, instability, and special hazard records for the permit to work.

Report Type

Basic

Print short WO cards

Description

Displays an abbreviated version of the Print Work Order report, including work order cost.

Menu Path

Work > Reports > Print Work Orders > Print Short WO Cards

Parameters

Enter the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Type**, **Equipment**, **Location**, **Priority**, **WO Type**, **Trade**, **Project**, **Equipment Criticality**, **Status**, **Customer**, **Property**, **Building**, **Floor/Unit**, **Assigned To**, **Assigned By**, **Person Responsible**, **From Point**, **To Point**, **Standard WO**, and **Manufacturer**.

Scheduled Date Range
Select to print the work order card for the scheduled date range.

Reprint
Select to reprint the work order card.

Include Child Work Orders
Select to include child work orders on the work order card.

Work Order Custom Fields
Select to print custom fields added for work orders on the work order card.

Equipment Custom Fields
Select to print custom fields added for equipment on the work order card.

Work Order User Defined Fields
Select to print user defined fields added for work orders on the work order card.

Equipment User Defined Fields
Select to print user defined fields for equipment on the work order card.

By Responsible Person
Select to print the work order activity details by the person responsible on the work order card.

Hide Cost Values
Select to hide cost values on the work order card.

Prevent Update Print Flag
Select to prevent users from marking the records returned printed.

Print Attachments
Select to print document attachments associated with work orders in addition to the work order card.

Print Images
Select to print images associated with work orders in addition to the work order card.

Note: You can only print document attachments that are Adobe Acrobat Portable Document Format (.PDF) files.

Print MEC Attachments
Select to print MEC document attachments associated with work orders in addition to the work order card.

Search MEC Work Orders
Select to search multiple equipment work orders.

Show Defer Maintenance Activities
Select to display all work order activities where **Defer Maintenance** is selected.

Include Actual Parts
Select to print parts added for work orders on the work order card.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Print work order

Description

Includes work order details, task listing, diagnostics, repair details, and related equipment information.

Menu Path

Work > Reports > Print Work Orders > Print Work Order

Parameters

Enter the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Type**, **Equipment**, **Location**, **Priority**, **WO Type**, **Trade**, **Project**, **Equipment Criticality**, **Status**, **Customer**, **Property**, **Building**, **Floor/Unit**, **Assigned To**, **Assigned By**, **Person Responsible**, **From Point**, and **To Point**.

Scheduled Date Range
Select to print work orders based on the **Target Date**.

Reprint
Select to print work orders that have been printed previously.

Include Child Work Orders
Select to print child work orders on the work order card.

Work Order Custom Fields
Select to print custom fields added for work orders on the work order card.

Equipment Custom Fields
Select to print custom fields added for equipment on the work order card.

Print Attachments
Select to print document attachments associated with work orders in addition to the work order card.

Note: You can only print document attachments that are Adobe Acrobat Portable Document Format (.PDF) files.

By Responsible Person
Select to group report data by the person responsible.

Barcode
Select to print the barcode on the work order card.

Include Linear Reference Details
Select to print linear reference details on the work order card.

Include MEC Work Orders
Select to print MEC work orders on the work order card.

Print MEC Attachments
Select to print MEC document attachments associated with work orders in addition to the work order card.

Print Attachments
Select to print files attached to the work order with the report. Attached files may originate from the following sources: the associated work order, equipment, projects, departments, parent work orders, and locations.

Print Images
Select to print all images associated with the work order.

Include Customer Requests
Select to print customer requests on the work order card.

Include Nonconformities
Select to print nonconformities on the work order card.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Print work order - comprehensive

Description

Includes comprehensive work order details, task listing, diagnostics, repair details, and related equipment information.

Menu Path

Work > Reports > Print Work Orders > Print Work Order - Comprehensive

Parameters

Enter the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Equipment Type**, **Equipment**, **Location**, **Priority**, **WO Type**, **Trade**, , **Equipment Criticality**, **Status**, , **Assigned To**, **Assigned By**.

Mark Confidential
Select to print a confidential banner in the title of the report.

Barcode
Select to print barcodes on the work order card.

Task Plan Instructions
Select to print task plan instructions on the report.

Work Order Custom Fields
Select to print custom fields added for work orders on the work order card.

Work Order User Defined Fields
Select to print user defined fields for work orders on the work order card.

Equipment User Defined Fields
Select to print user defined fields added for equipment on the work order card.

Booked Hours
Select to print booked hours on the work order card.

Print Attachments
Select to print files attached to the work order with the report. Attached files may originate from the following sources: the associated work order, equipment, projects, departments, parent work orders, and locations.

Note: You can only print document attachments that are Adobe Acrobat Portable Document Format (.PDF) files.

Reprint
Select to print work orders that have been printed previously.

Print Images
Select to print all images associated with the work orders.

Include Comments
Select to print the work order comments.

Include Task Plan Checklist
Select to print task plan checklist information on the work order card.

Include Nonconformities
Select to print nonconformities on the work order card.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Proof of delivery

Description

Displays proof that a work order was delivered or performed.

Menu Path

Work > Reports > Proof of Delivery

Parameters

Work Order
Enter the work order for which to run the report.

Include Front Page
Select to print a confidential banner in the title of the report.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

Qualification expiration

Description

Displays a list of qualification expirations and expiration dates for an employee based on the date range entered. Select to generate the report for a single employee or a group of employees.

Menu Path

Work > Reports > Qualifications > Qualification Expiration Report

Parameters

Enter the **Organization**, **Employee Code**, **Employee Class**, **Employee Type**, **Trade**, **Department**, **Qualification**, and **Qualification Class**.

Sort By
Select to sort by **Employee**, **Trade**, **Organization**, **Department**, or **Qualification**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Qualification requirement

Description

Displays a list of qualifications that are required for an employee to perform a trade or task for which they are not currently qualified. Select to generate the report for a single trade or task, or for a group of trades or tasks.

Menu Path

Work > Reports > Qualifications > Qualification Requirement Report

Parameters

Enter the **Organization**, **Employee**, **Employee Class**, **Employee Type**, **Trade**, **Trade Class**, **Task**, **Department**, and **Qualification**.

Report Type

Basic

Response time by department

Menu Path

Work > Reports > Response Time By Department

Description

Displays department response time to work orders.

Parameters

Specify the **Organization**, **Department**, **Wor Order Type**, **Start Date**, and **End Date**.

Select the **Include Details** check box to include work order details.

Select the **Include Chart** check box to display a bar chart.

Report Type

Basic

Resource load graph

Description

Displays a graph report listing resource data for the selected PM work orders.

Menu Path

Work > WO Planning > PM Forecasting > Forecasting tab

Parameters

None

Report Type

Basic

Safety review required

Description

Displays a list of all safety, permits to work, and lockout/tagout records where **Safety Review Required** is selected for PM schedules, equipment, parts, and standard work orders. The report retrieves the records that have not been previously reviewed.

Menu Path

Select **Work > Reports > Safety Review Required**.

Parameters

Enter **Organization**.

Start Date
End Date
Enter the starting date and ending date for which to retrieve data.

Include Safety Records
Select to print safety records.

Include Permit Records
Select to print permit records.

Include LOTO Records
Select to print lockout/tagout records.

Include Out of Service
Select to print all PM, equipment, standard work order, and part records marked **Out of Service**, but which meet the specified report criteria.

Report Type

Consumer

Safety work order

Description

Displays a list of all work orders where EVT_SAFETY is selected.

Menu Path

Select **Work > Reports > Safety Work Order**.

Parameters

Enter **Requested By**, **Assigned To**, **Priority**, **Department**, and **Organization**.

Choose to include safety work orders with the following statuses:

- **Released**
  Select to display safety work orders with a released status in the report.

- **Completed**
  Select to display safety work orders with a completed status in the report.

- **Both**
  Select to display safety work orders with a released and work orders with a completed status in the report.

Enter the **Start Date** and **End Date** for which to retrieve data.

Report Type

Consumer

Schedule attainment

Description

Displays a summary of scheduled activities. View the number of activities that were scheduled and worked on the same date, the number of activities that were scheduled but not started on the same date, the number of activities that were worked on and not scheduled on the same date, as well as the percentage of activities scheduled that were worked on the same date.

Menu Path

Work > Reports > Scheduling > Schedule Attainment

Parameters

Enter the **Organization**, **Trade**, **Department**, and **Person Responsible**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Scheduled activities

Description

Displays information for scheduled activities.

Menu Path

Work > Reports > Scheduling > Scheduled Activities

Parameters

Enter the **Organization**, **Work Order**, **Trade**, **Department**, **Maintenance Equipment**, and **Person Responsible**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Scheduled vs. actual - detail

Description

Displays detailed schedule activities. Depending on how you set up the report criteria, you can review the schedule date for scheduled work (but not started) on the same day, activities scheduled and worked on the same day, or work done but not scheduled on the same day. (You might have multiple lines for some activities.)

Menu Path

Work > Reports > Scheduling > Scheduled – Actual Detail

Parameters

Enter the **Organization**, **Trade**, **Department**, and **Person Responsible**.

Show Details of Activities Where
Select one of the following sort options: **Scheduled but Not Worked on the Same Date**, **Worked and Scheduled on the Same Date**, or **Worked but Not Scheduled**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Shift employee

Description

Displays a list of employees on a shift grouped by department.

Menu Path

Work > Reports > Scheduling > Shift Employee

Parameters

Specify the **Organization**, **Department**, **Trade**, and **Shift**.

Report Type

Consumer

Short customer invoice

Description

Includes short details on customer invoices.

Note: The report does not include details such as charge categories, subcategories, charge levels, and adjustments.

Menu Path

Work > Reports > Short Customer Invoice

Parameters

Enter **Organization**, **Invoice**, **Customer**, **Contract**, **Status**, and **Contract Type**.

Enter **Created Start Date** and **Created End Date** for which to generate the report.

Report Type

Consumer

Short term WO list (activities)

Description

Displays a list of work orders due within the near future, including their activities, starting and ending dates, and estimated labor hours.

Menu Path

Work > Reports > Scheduling > Short Term WO List (Activities)

Parameters

Enter the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department , Location**, **PM**, **Work Order**, **Project**, **Type**, **Equipment Criticality**, and **Status**.

Include Multiple Equipment
Select to include multiple equipment on the report.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Short term WO list (WOs)

Description

Displays a list of work orders due within a short period of time (a week, for example); does not project PM work orders.

Menu Path

Work > Reports > Scheduling > Short Term WO List (WOs)

Parameters

Enter the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department**, **Location**, **PM**, **Work Order**, **Project**, **Type**, **Equipment Criticality**, **Status**, **Assigned To**, and **Scheduling Group**.

Search MEC WOs
Select to search multiple equipment work orders.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

Standard work order frequency

Description

Displays the frequency of standard work orders.

Menu Path

Work > Reports > Scheduling > Standard WO Frequency

Parameters

Enter the **Organization**, **Equipment**, and **Department** for which to generate the report.

Enter the specific **Standard WO** if you would like to generate the report to display the frequency of that standard work order.

Enter the **Start Date** and **End Date** for which to generate the report.

Report Type

Basic

Tool usage

Description

Displays a list of work orders per tool.

Menu Path

Work > Reports > Tool Usage

Parameters

Enter the **Organization**, **Work Order**, **Department**, and **Tools**.

Date From
Date To
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

VMRS activities chart

Description

Displays the details of equipment records based on the VMRS codes on activities.

Menu Path

Work > Reports > VMRS Activities Chart

Parameters

Specify the options for which to generate the report.

Select the **Include Details** check box to include all of the details of the activity in the report.

Select the **Include Child Equipment** check box to include all child equipment in the report.

Specify the **Start Date** and **End Date** for which to generate the report.

Report Type

Basic

Vehicle rental history

Description

Displays the vehicle rental history.

Menu Path

Work > Reports > Contract Management > Vehicle Rental History

Parameters

Enter the **Organization**, **Vehicle**, **Vehicle Type**, **Class**, **Issue To**, **Created By**, **Customer**, **Location**, and **Status** for which to generate the report.

Enter the **Start Date** and **End Date** for which to generate the report.

Include
Select the type of records to include in the report, e.g., select **Overdue Transactions Only** or **All Transactions**.

Overdue Issue Buffer (Hours)
Specify number of hours after the estimated issue date before the issued rental is considered overdue. This applies to overdue transactions only.

Overdue Return Buffer (Hours)
Specify the number of hours after the estimated return date before the returned rental is considered overdue. This applies to overdue transactions only.

Include Customer Details
Select to print the customer details associated to the vehicle rental contract.

Group By
Select to group the report data by **Vehicle**, **Estimated Issue Date**, or **Estimated Return Date**.

Report Type

Basic

Vehicle ticket

Description

Displays ticket information based on the fleet vehicle ticket.

Menu Path

Work > Reports > Fleet > Vehicle Ticket Report

Parameters

Specify the **Organization**, **Ticket**, **Status**, **Type**, **Fleet Customer**, **Vehicle**, **Received Vehicle**, **Issued To**, **Cost Code**, and **Ticket Class**.

Include PM Details
Select to print PM details.

Include Billing Details
Select to print billing details.

Print Custom Fields
Select to print custom fields.

Include Exceptions
Select to print exceptions.

Include Billing Adjustments
Select to print billing adjustments.

Print Attachments
Select to print document attachments associated with vehicle tickets in addition to the vehicle ticket.

Print Images
Select to print all images associated with the vehicle ticket.

Select Records By
Select to sort by **Issued Date**, **Returned Date**, or **Completed Date**.

Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.

Report Type

Consumer

WO backlog

Description

Displays a list of backlogged work orders.

Menu Path

Work > Reports > WO Backlog Report

Parameters

Enter the **Organization**, **Department**, **Trade**, **Type**, **Equipment**, **PM**, **Location**, **WO Type**, **Priority**, **Equipment Criticality**, **Status**, **Assigned To**, and **Scheduling Group**.

Warranty
Select to display the equipment warranty associated with the work order.

Show MEC Work Orders
Select to display multiple equipment work orders.

Sort By
Select to sort by **Start Date**, **Equipment**, or **Location**.

Specify the starting and ending date for which to retrieve data.

Report Type

Basic

WO aging

Description

Provides counts of work orders, per work order type, that are 1-10, 11-30, 31-60, 61-90, or over 90 days overdue.

Menu Path

Work > Reports > WO Aging

Parameters

Enter the **Organization** and **WO Type**.

Report Type

Consumer

WO cost list

Description

Displays the costs of a work order.

Menu Path

Work > Reports > WO Cost List

Parameters

Enter the **Organization** and **Work Order**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Basic

WO cost summary graph

Description

Displays a graph showing itemized and totaled cost information, such as labor, materials, services, and tool costs, by equipment (and related child equipment) for open and closed work orders.

Menu Path

Work > Reports > WO Cost Summary Graph

Parameters

Enter the **Organization**, **Equipment Class**, **Category**, **Location**, **Type**, **Equipment , Department**, **WO Class**, **Cost Code**, **Trade**, **Reporting Currency**, **WO Status**, **Include WOs**, and **Graph Type**.

Current Exchange Rate
Select to print the current exchange rate.

Include Service
Select to print service details.

Include Labor
Select to print labor details.

Include Material
Select to print materials details.

Include Tools
Select to print tools details.

Group By
Select to group by **Location**, **Department**, **Cost Code**, **Equipment**, or **Trade**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

WO on-time delivery by trade

Description

Displays a summary or detailed report of on-time work order (released and completed) statistics by trade.

Menu Path

Work > Reports > Scheduling > WO On-Time Delivery by Trade

Parameters

Enter the **Organization**, **Trade**, **Task**, **Assigned To**, **Class**, **Requested By**, **Problem Code**, **Priority**, **Department**, **Work Order**, and **WO Type**.

Report Type
Select to print a **Summary**, **Detail**, or **Complete** version of the report.

Date From
Date To
Enter the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Consumer

WO statistics

Description

Displays statistical backlog information including the number of work orders: backlogged according to **Date From**; scheduled to begin within the date range; backlogged at **Start Date** but completed within the date range; and scheduled to begin within the date range and completed within the date range.

Menu Path

Work > Reports > WO Statistics

Parameters

Enter the **Organization** and **WO Type**.

Show Totals
Select to display the work order totals on the report.

Date From
Date To
Enter the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Consumer

WO on-time delivery by employee

Description

Displays a summary or detailed report of on-time work order (released and completed) statistics by employee.

Menu Path

Work > Reports > Scheduling > WO On-Time Delivery by Employee

Parameters

Enter the **Organization**, **Employee Code**, **Task**, **Class**, **Requested By**, **Problem Code**, **Priority**, **Department**, **Work Order**, and **WO Type**.

Report Type
Select to print a **Summary**, **Detail**, or **Complete** version of the report.

Date From
Date To
Enter the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.

Report Type

Consumer

Work by employee

Description

Displays a list of all work orders where booked labor for an employee has been applied.

Menu Path

Work > Reports > Scheduling > Work by Employee

Parameters

Enter the **Employee**, **Work Order**, **Equipment**, **Organization**, and **Status**.

Start Date
End Date
Enter the starting and ending date for which to retrieve data.

Report Type

Consumer

Glossary

ABC analysis

An inventory method that enables you to divide your stock inventory items into three groups or classes: A, B, and C. ABC class assignments are used as selection criteria for a number of material management functions, such as EOQ calculations, stock replenishment, repairable spares, and physical inventory counts.

absolute

Indicates the values entered in **Device Tolerance** should be processed as absolute values.

The range at which the work order will pass or fail is calculated based on the following equations:

Lower Work Order Device Tolerance = Standard - Lower Equipment Device Tolerance

Upper Work Order Device Tolerance = Standard + Upper Equipment Device Tolerance

For example, if the **Standard** is 25, and the **Device Tolerance** of the equipment is 5-5, the reading must fall within a range of 20 to 30 for the work order to pass.

active layer

The layer of a GIS map in which a search originates.

additional charge

Added to pricing schedules in a multi-organization environment. Additional charges are added to every work order that is completed for a customer contract.

address alias

A name (usually more popular name) for an address or place.

adjustment

Corrections made to charges invoiced to a customer. Adjustments can be in the form of an extra charge for a damaged vehicle or a fee for equipment returned late.

alert tolerance

Indicates a reading that is acceptable, but is closer to the device tolerance limits than desired. Alert tolerances fall within device tolerance limits and are always calculated as a percentage value.

The lower and upper alert tolerances are calculated based on the following equations:

Lower Work Order Alert Tolerance = Standard - [(Alert Tolerance / 100) * (Standard - Lower Equipment Device Tolerance)]

Upper Work Order Alert Tolerance = Standard + [Alert Tolerance / 100) * (Upper Equipment Device Tolerance - Standard)]

archive

The process in which the system will remove data from the viewable screens and into tables for keeping.

asset

A sub-category of equipment. An asset is any physical object for which you want to store data and create work orders, e.g., a pump, a car, an air conditioning unit, etc.

budget

Tools used to track expenses and set spending limits for specified time periods or items. Budgets coordinate with existing inventory. They also can be defined for predetermined time frames such as months, quarters, or years.

Important parts of a budget include budget calendar types, groups, terms, and structures.

buffer layer

The layer of a GIS map in which equipment for which you are searching resides if your search involves multiple layers.

building maintenance program (BMP)

One of many policies and procedure templates within Behavioral Health Environment of Care Manual written for the medical office, hospital, and other healthcare organizations. The policies cover: Joint Commission (JCAHO or TJC) • CMS • HIPAA • CDC • AAAHC and more.

bulletin board

A database of information posted for the benefit of call center employees that lists company-related information, or any information that the call center employee needs to know immediately.

bulletin board notice

An internal notice in the Call Center module.

calibration

The process of comparing the performance of a piece of equipment to a known standard of accuracy.

call center

A place where a customer calls, emails, faxes, or walks in, with a request for information. Call Centers are staffed with employees who are trained to handle the requests that customers have.

campaign

A list of jobs that may be performed on a given list of equipment as necessary to complete work.

campaign event

A survey of equipment or job to perform work on equipment.

change notice

Used when specifying defective equipment from vendors, which the vendors replace without charge to the customer for a certain period of time. Change notices can be recorded in forms once they are issued from the vendor.

charge definition

The specification of a type of charge and any adjustments to the charge that will be invoiced to a customer. The charges are defined on the customer and rental contracts.

checklist

The items listed are used to verify the progress or completion of tasks. The Checklist tab is on the Task, Work Order, and Permit to Work screens.

clause

A provision added to a customer contract and used on the customer contract definition.

confined space

Area determined as a confined space by OSHA regulations.

contract

Purchasing contracts are tools used to detail agreements for parts. Details include such information as suppliers, time-frames, and buyer facts as well as percentage discounts arranged for each contract according to order or duration.

contract item

A piece of equipment, project, or work order. The Contract Items screen specifies the equipment, project, or, work order included on the customer contract. Also provided are details of the item including the organization that will invoice, contract template, recommended exchange rate, and associated customer.

core part

A part you plan to repair on internal repair work orders, or send to a supplier to repair on external repair requisitions. Often referred to as repairable core parts.

customer charge

The costs calculated for all work performed for a customer contract. Customer charges include the costs of all labor, parts, fixed charges, and all information specified on a pricing schedule.

customer contract

An agreement with a customer detailing charge definitions, contract clauses, comments, and invoice data. The contract also lists a definition of the charges included and excluded, and applicable adjustments. Charges that can be invoiced are work order charges, sale of services, fuel charges, energy charges, and periodic or usage based lease or rental charges. A customer contract can involve a combination of multiple equipment, projects, and work orders.

customer contract - work

An electronic document/record created for commercial service (or asset management services) customers to specify how time, material, and labor costs are charged to a customer for maintenance work. A customer contract can include fixed charge schedules and pricing schedules for custom trade rates, part charges, additional charges, and the criteria by which the system will identify work orders for which to accumulate and bill charges when generating customer charges and invoices.

customer invoice

Generated/created to compile and assemble accounts receivable invoices for asset management service customers, work order charges, and fixed payments.

customer rental

A contract created when a customer rents equipment. The rental price is listed on the contract and is based on usage or a one-time charge. Customer invoices can be generated from Customer Rental records. Only one piece of rental equipment can be listed on the contract.

customer request

Any need that the customer has and contacts the Call Center for help/results. There are three types of customer requests:

1. Action Request (work order)
2. Information Request
3. Commenting on a service or new product/program

dataspy

A predefined view of a list of records or set of data.

decision tree

Created for an equipment ranking to calculate a ranking score. A decision tree is comprised of four levels which include a ranking level and up to three sub-levels, answers, formulas, and normalization values.

depreciation

The reduction of the value of an asset as the result of wear and tear, age, or obsolescence.

default set

The default set of calibration test points that apply to calibration work orders/PM work orders.

deviation

The difference between the **Device Reading** and the **Standard**.

device tolerance

The allowable deviation from the standard for the device being used to perform the calibration measurement. A specified device tolerance indicates the range of variation permitted in maintaining adherence to the standard for the device.

equipment

Entities for which you store data and create work orders. "Equipment" is a generic, all-encompassing term for assets, positions, systems, and locations, which form a hierarchy of equipment information:

1 Locations
2 Systems
3 Positions

For example, a motor, a line in a factory, a street, etc.

equipment ranking

A method by which users assess equipment criticality or risk to overall production.

fields to remember

This tab refers to the fields and their values that the system will remember and display as the user moves from screen to screen.

fixed charge

Can be added to customer contracts to create a set price to be added to a customer invoice based upon a specified due date.

GIS

An acronym for Geographical Information Systems.

hazard

A biological, chemical, physical, mechanical, environmental agent or situation that threatens life, health, property, or the environment. In EAM hazards typically refer to workplace hazards or potential hazards employees may encounter based on their workplace operations such as falling when working at heights, drowning when welding under water, or electrocution when working with high voltage equipment.

HIPAA confidentiality

A federal regulation protecting patient health information and the equipment that safeguard this confidential information.

incident request

A record created when a hotel guest or employee contacts the front desk to report a problem or to get information. Work orders can then be generated from these requests when it is necessary to take action.

increment

The increment specifies the numeric interval of which a device reading must be evenly divisible. For example, if you specify an **Increment** of 5, you must enter a **Device Reading** that is evenly divisible by 5, such as 0, 5, 10, 15, 20, 25, etc.

instrument type

A series of one or more instruments requiring and/or used for calibration that are linked together.

Standard applied to: An instrument to which a standard is applied during calibration.

Accessory: An instrument that is secondary or subordinate within a loop.

Reading taken from: An instrument from which a reading is taken during calibration.

isolation point

Indicates at which areas the equipment can be isolated from its energy sources to prevent injury from unexpected startup. Equipment should be isolated from its energy sources during the lockout/tagout procedure of the permit to work process. Examples of isolation points are circuit breaker, valve, or equipment switch.

kit

A collection created from a stock of parts within a store. When a kit is built, component parts are removed from inventory and the kit itself is added to inventory. Kits are individually identified by a unique Lot number.

knowledge base

A database of information from which call center employees can search for needed information, to solve a customer's problem or request. Within a knowledge base there are articles, links to websites that offer more information, and directions for call center employees to follow.

lockout box

A physical location for employees to safely store all the keys used for a lockout/tagout procedure during which mechanical equipment is disconnected from electricity. The keys are safely stored and locked to prevent unexpected startup of the equipment while employees are performing maintenance. The unexpected startup of equipment while maintenance is performed could cause bodily injury or death to employees performing the work. The keys are safely stored and locked during this time to prevent such injuries or fatalities.

lockout/tagout

OSHA regulations on lockout/tagout procedures for equipment, which require that machines are properly shut down and that they are not restarted until service or maintenance on the machine is completed. Tagging and locking out (e.g., securing that mechanical equipment is disconnected from to electricity)

while employees are performing required maintenance and work orders, prevents bodily injury and death by employees who might otherwise startup equipment while maintenance is being performed.

loop

A series of one or more instruments requiring and/or used for calibration that are linked together.

maintenance pattern

A schedule of predefined jobs used to perform a preventive maintenance cycle. A maintenance pattern tells how the system should generate work orders for the maintenance pattern, and whether the resulting PM work order generation is based primarily on a time interval (weekly, monthly, annually), or on a meter interval (ex. 3000 miles) or both.

nonconformity

A defect or deviant condition that affects an asset. Examples of nonconformities include decay, corrosion, cracks, and leaks.

normalization value

Acceptable value ranges for levels in the decision tree for which to determine equipment reliability rankings.

objective

A specific result that your organization plans to achieve. Objectives specify the expected results and expected result dates. For example, an objective can be to reduce electrical consumption by 10% in fiscal year 2014 at Greenville, SC plant.

OEM site/system ID

A site and/or system identification for service companies and original equipment manufacturer of an asset.

output

The reading or measurement produced by the calibration measurement at a calibration point.

The output can also be the expected reading if the output unit of measure is different from the input unit of measure.

output range

The allowable deviation from the standard for the output that indicates the range of variation permitted to adhere to the standard for the test point.

percentage

Indicates the system processes the values entered in **Device Tolerance** as percentages.

The range at which the work order will pass or fail is calculated based on the following equations:

Lower Work Order Device Tolerance = Standard - [Standard * Lower Equipment Device Tolerance / 100]

Upper Work Order Device Tolerance = Standard + [Standards * Upper Equipment Device Tolerance / 100]

For example, if the **Standard** is 25, and the **Device Tolerance** of the equipment is 5-5, the reading must fall within a range of 23.75 to 26.25 for the work order to pass.

permit to work

Details the hazards and precautions required to remove or prevent a potential hazard to your employee's safety.

policy

Guidelines created by your organization to record a corporate or enterprise-wide initiative. For example, this enterprise is committed to reducing energy consumption and thereby reducing its carbon footprint.

precaution

A measurement your operation or employees can take to prevent workplace hazards which have the potential to cause bodily injury and even death. Examples of precautions include wearing a safety

harness to prevent falling when working at heights, wearing proper equipment to prevent drowning, or switching off electricity to prevent electrocution.

precision

Indicates the maximum number of decimals allowed to the right of the decimal point for a reading.
Note: You can enter a number with fewer than the maximum number of decimals allowed to the right of the decimal point. The system assumes there are zeros at the end of the specified number.

The precision indicates the degree of refinement with which the calibration is performed or the calibration measurement is stated.

process range

The reading or measurement produced by the calibration measurement process at a calibration point.

process tolerance

The allowable deviation from the standard for the process that indicates the range of variation permitted to adhere to the standard for the test point.

QR code

QR code is an abbreviation of Quick Response Code. It resembles black squares arranged in a square grid on a white background. The image is read by an imaging device such as a camera, and links users to a specific URL.

ranking index

An index of a range of assigned values the system uses when a ranking score has been calculated for equipment using the decision tree formulas.

ranking score

The calculated score by which the system determines equipment criticality and reliability.

ranking survey

A survey for selected equipment to calculate the Ranking Score and the Ranking Index.

The system calculates the Ranking Score using the formula of the ranking levels and the answers entered on the ranking survey.

right of way

A right of way consists of one or more routes. Examples of right of ways include the Eastern Parkway Line (NY City Subway) and Interstate 40.

route

A route belongs to a right of way and may itself consist of one or more linear segments. Examples are track 1 and 2 of the train line and the east and west bound lanes of a highway.

segment

Segments are pieces of equipment that are part of routes. Segments are usually linear themselves, but can also be point assets, for example in cases where a switch is not defined with a length.

sequence

The chronological order of work to be completed on a maintenance pattern based on either a time or meter-based interval for releasing work orders.

In calibrations it indicates the order in which test points should be calibrated.

set

A number assigned to identify a group of test points.

sets and consists

A set is a group of equipment that are physically attached to each other for a functional reason, such as train cars. A consist is made up of one or more sets. An example of a consist is a full train that is made up of various sets of grouped train cars.

standard

The ideal reading for a piece of equipment against which actual readings should be measured. Standard also refers to the parts used to perform a calibration.

statement of conditions

A statement of conditions on healthcare equipment as required by The Joint Commission to document that a fire safe environment of care and compliance is maintained.

strategy

Utilized to record a corporate or organizational strategic initiative such as the corporate commitment to reduce electrical consumption by an amount and a date. The strategy does not specify how this will be accomplished. For example, a strategy can be to reduce electrical consumption by 35% before fiscal year 2014. To accomplish the strategic initiative, the following can be done:

- Average 35% reduction across the enterprise.
- Minimum reduction of 25% per facility.

target

The focus of an objective or initiative.

test point

The actual point (calibration point) at which the accuracy of the equipment is tested to the known standard. A piece of equipment that requires calibration may consist of numerous test points.

test point range

The numeric values indicating the acceptable range for the test point. The values identify the upper and lower limits of the standard for the test point. The test point reading must fall within this range for the test point to pass.

trace

The act of selecting multiple pieces of equipment along a linear right of way, route, or segment to include on multiple equipment work orders. The equipment available for selection is based on the defined relationships between linear right of ways, routes and segments, and any defined branch points for crossing over to these equipment records. The action of selecting this equipment is called tracing.

UMDNS code

A code which identifies a healthcare asset in the Universal Medical Device Nomenclature System™ (UMDNS) which is a standard international nomenclature and computer coding system for medical devices.

Infor EAM

- Online Help
- Infor Xtreme Support

About

View system application information, such as application name, version number, schema name, and user ID.

ABC analysis

Generate ABC analysis to create an ABC analysis report for reference purposes and/or to update the class assignments for part.

ABC inventory analysis is an inventory method that enables you to divide your stock inventory items into three groups or classes: A, B, and C. ABC class assignments are used as selection criteria for a number of material management functions, such as EOQ calculations, stock replenishment, repairable spares, and physical inventory counts.

To generate ABC analysis, enter a percentage value as the cutoff point for each of the three classes. The system then assigns parts to one of the ABC classes by comparing the part's value to the value of other parts. Parts assigned to class A represent the largest percentage of your total inventory value. Parts assigned to class B represent a moderate percentage of your total inventory value. Parts assigned to class C represent a small percentage of your total inventory value.

Depending on your preference, the system determines a part's ABC class based on either part value or part usage value. The system arranges the parts in descending order so that the part with the largest **Percentage of Value** is first, with other parts following in descending order according to their **Percentage of Value**. The system then assigns a class to each part based on the percentages specified for **A Cutoff Point %**, **B Cutoff Point %**, and **C Cutoff Point %**.

The system determines part value percentages using the **Price Type** specified for each part. The system enables you to perform ABC Analysis for reference purposes without affecting the current class assignments of a store's parts, or you can click **Update ABC Class** to automatically update part ABC classes.

ABC analysis

Materials > Process > Generate ABC Analysis

Description	Displays, on a per-store basis, the parts that have been classified by the Generate ABC Analysis procedure
Parameters	Specify the **Organization**, **Store**, **A Cutoff Point %**, **B Cutoff Point %**, and **C Cutoff Point %**. **Update ABC Class** Select to automatically update the ABC class on stock records. Unselect to display the intended classification, but the system does not update the stock record. **Options** Select to display Valued Based or Usage Based report data.
Report Type	Consumer

Access violations

Menu Path

Administration > Reports > Access Violations

Description

Displays a list of access violations per user during a given time period. Access violations occur when users enter incorrect passwords on the login page.

Account detail setup

Administration > Databridge > Account Detail Setup

Define account detail codes for your general ledger accounts. The degree of detail included in your account detail definition is specific to the business practices of your organization. For example, your general ledger may include the following segments: segment 1-1400-000 identifies your Organization, 1-1300-100 identifies your Accounts Receivable for Future Payments, 1-3300-000 identifies your fixed assets, etc. Create account code segments for each of these codes. You can also associate Flex SQL query codes with account codes. Flex SQL codes identify SQL query statements that are used to manipulate and validate data related to the account code segment in the database.

After defining account detail codes, the codes are associated with transactions in the system at the entity level (such as purchase orders, invoices, etc) and are used to link system transactions with external accounting systems.

Activating the data warehouse load process

Activate the Data Warehouse Load (DWTL) job to enable the system to execute the data warehouse ETL process. The system executes the ETL process based on the DWTL job setup that indicates the schedule pattern for the ETL process. The settings specified for the DWTL job setup work in conjunction with the run parameter settings specified on the **Run Parameters** page.

See Setting the data warehouse run parameters on page 148.

The combination of the DWTL job setup and the run parameter settings indicate how frequently the ETL process runs, what time the process runs, and the process action (load and/or purge). Before running the ETL process, you must activate the DWTL job.

The default run time for the DWTL job is 1:00 AM. To specify a different run time, a database administrator must reset this value in the database. Contact your database administrator for additional information.

To activate the data warehouse load process:

1 Select **Administration > Data Collection > Job Setup**.
2 Select the Data Warehouse Load (DWTL) job.
3 Select the **Active** check box to enable the DWTL job to start at the **Next Run** date and time.
4 View the schedule pattern using **Month**, **Day of Month**, **Day of Week**, **Hour**, and **Minute**.

The schedule patterns are typically numeric, but can also include the following characters:

Character	Description
* (asterisk)	Matches all days, months, hours, and minutes. For example, an asterisk in Day of Week indicates that the system performs the job every day of the week.
, (comma)	Separates lists of days, months, hours, and minutes. For example, 31, 12, 0, 0 represents 12:00 A.M. on December 31.
- (hyphen)	Specifies a range. For example, 10-12 equals hours 10, 11, and 12.
/ (slash)	Specifies increments. For example, 0/15 minutes equals minutes 0, 15, 30, and 45.
L	Indicates the last. For example, Day of Month=L equals the last day of the month.

See the following table for more detailed examples.

Month	Day of Month	Day of Week	Hour	Minute	Description
*	*	*	0	5	Run 5 minutes past midnight, every day.
*	*	1-5	22	0	Run at 10:00 P.M. on each weekday.
*	*	*	0-23/1	0	Run each hour, every day.
3-12/3	L	*	1	0	Run at 1:00 A.M. on the last day of each calendar quarter.

5 Click **Submit**.

Note: If you want to run the Analytics data load, you must also enable the AETL job. The AETL job runs after the DWTL job has run and loads the Analytics data from the data warehouse tables into the Analytics tables.

To enable execution of Analytics jobs, you must also use the Install Parameters form to ensure that the PRODUCTS parameter is set to BOTH if you are running Infor EAM, set to EXTSQL if you are running Infor EAM for SQL Server only, or set to EXTORCL if you are running Infor EAM for Oracle only.

Actual labor hours against estimated-hospitality

Menu Path

Work > Reports > Actual Labor Hours Against Estimated-Hospitality

Description

Displays a list displaying how much time was spent, per trade, on work during a specified time period versus the original estimate.

Actual labor hours against estimated

Work > Reports > Actual Labor Hours Against Estimated

Description	Displays a list displaying how much time was spent, per trade, on work during a specified time period versus the original estimate

Parameters	Specify the **Organization**, **Trade**, and **Department**. **Group By** Select one of the following options: **None** Select to not group by day or week. **Day** Select to group by day. **Week** Select to group by week. Specify the **Start Date** and **End Date** for which to retrieve data.
Report Type	Basic

Ad hoc inspections

Inspect > Ad Hoc Inspection

Enter the results of an equipment inspection without specifying an existing route. Use this option when an unplanned inspection occurs. To enter ad hoc inspection results, you must first add equipment for inspection.

Note: If you take action upon equipment identified as a **`Safety`** piece of equipment, the system displays a confirmation message asking whether you wish to continue.

Adding additional costs for work orders via the contractor portal

Define additional costs for work orders. Additional costs are charges related to the work order but not to a specific part of service, i.e., non-inventory parts. These records do not affect purchasing.

To add additional costs for work orders via the contractor portal:

1. Select **Work > Contractor Portal**.
2. Select a work order, and then click the **Additional Costs** tab.
3. Click **Additional Cost**.
4. Specify this information:

Cost Description
Specify the description of the cost.

Cost Type
Select one of the following options:
- Part
- Hired Labor

Quantity
Specify the quantity of the cost.

Cost
Specify the cost of the additional charge.

Date
Specify the date of the additional cost.

Equipment
Specify the equipment for the additional cost.

5 Click **Submit**.

Adjustment

Work > Customer Contracts > Adjustments

Define adjustment codes to use on customer contracts and rental agreements to quickly identify an extra charge or a discount to apply to the contract. An adjustment could be an extra charge for a damaged vehicle or a late return of equipment. You may also define discounts or credits on the Adjustments form, by entering a negative rate.

Create a work order from an adjustment.

Administration setup

Administration > Administration Setup

Define administration setup options to format the module to your specifications.

Alert management

Administration > System Configuration > Alert Management

Create e-mail and work order alerts to notify users when data in Infor EAM (e.g. equipment) does not meet a specified criteria. First, create a grid to query data in the system and then use alert management to determine if the results need to be measured against a min/max setting or if the results alone will trigger an email and/or work order.

An alert management record can be created to monitor readings that are being imported into Infor EAM for chillers. The alert record may monitor to see if the difference between supply air temperature and the return air temperature is >22 degrees when chilled water temperature is <46 degrees and chilled water valve is open >50%. If all this criteria is met for a chiller then a work order would be created indicating that a belt could be slipping or the filters may be plugged.

Use the new R5ALERTDATAOBJ table to import records into Infor EAM. Then use Alert Management to analyze the records and create alerts when deviations occur. R5ALERTDATAOBJ was specifically designed for analyzing data imported from another system related to Infor EAM equipment records. This table can be accessed through web services or using the Infor EAM Import Utility. Once records are created in R5ALERTDATAOBJ, use this table in Grid Designer when creating the alert management grid query.

Create an active Alert Management grid on the **Grid Designer** form before setting up an alert on the **Alerts** form. See Defining grids on page 124.

Annual energy reduction comparison

Equipment > Reports > Asset Sustainability > Annual Energy Reduction Comparison

Print the annual energy reduction comparison report.

Annual energy use

Menu Path

Equipment > Reports > Asset Sustainability > Annual Energy Use

Description

Displays the annual energy usage report.

Annual energy use-hospitality

Menu Path

Equipment > Reports > Annual Energy Use-Hospitality

Description

Displays the annual energy usage report for a number of years as specified in the report parameters.

Approval lists

Work > Revision Control > Approval Lists

On the **Approval List** form, you can configure the system to track and control the authorization of modifications to entities. Create a revision control approval list to assign users to be designated for an entity revision record, and manage the list of users for an existing revision control approval list.

Set the installation parameter PMRVCTRL to YES to activate Revision Control. Contact your system administrator for more information.

AMS-Approve customer charges

Work > Additional Features > Asset Management Services > AMS-Approve Customer Charges

Customer charges are calculated based on customer contracts, pricing schedules, and work orders associated with customer contracts.

Review customer charges and make corrections as necessary, and then approve and generate the customer charges to customer invoices.

Approve inspection results

Work > Process > Approve Inspection Results

The **Approve Inspection Results** form consists of two pages: the **Parameters** page and the **Preview** page. On the **Parameters** page, you can define the selection criteria for locating the inspection points to process in the batch. The **Preview** page allows you to preview all of the inspection points selected for processing based on the selection parameters, enabling you to select or unselect inspection points to include in the batch generation process before you actually process the inspection point batch. You

can select or unselect individual inspection points for processing, or you can select or unselect all inspection points for processing.

AMS-customers

On the **AMS-Customers** form, you can define the customers to whom to charge the cost of maintenance work, associate properties with customers to easily create service requests for customers, create a list of callers for service requests, and view work order information associated with each customer.

Note: This documentation refers to the customers functionality in the AMS or Asset Management Services module.

See Customer contracts on page 1403.

Archived events

Administration > Archived Events

View the following items for archived work order events:

- activities
- booked labor
- qualifications
- scheduled labor
- transactions
- additional costs
- booked vendor hours
- comments

Aspects

Work > Inspections > Aspects

Define codes to represent specific aspects to measure. Measure one or multiple aspects against standards or gauges.

You can also create aspect prompts to add more information to your inspection results. For example, if you have an inspection aspect such as wall thickness for a pipe, you can add properties such as temperature and weight to further classify the inspection results. Aspect prompts and their associated list of values appear on the **Results** page of the **Monitored Data** form in addition to the predefined properties. The aspect/prompt relationship acts in the same way as custom fields.

Asset failures by service life

Menu Path

Equipment > Reports > Asset Failures by Service Life

Description

Print the asset failures by service life report.

Assets for PO

Purchasing > Assets for PO

Order parts tracked by assets that are not yet defined in the database. Create new asset records and associate them with purchase order items. The system only requires that you create assets for purchase order items if the installation parameter ASSETASS is set to P.

Define an asset for each individual part. For example, associate three assets with the order line if the ordered quantity is three. You cannot set the order status to Ready for printing (on the **Purchase Orders** form) until you associate all parts tracked by asset.

Average monthly usage analysis

Menu Path

Materials > Reports > Average Monthly Usage Analysis

Description

Displays part usage and demand information per store for the number of months requested.

Advanced maintenance planning configuration

Work > Advanced Maintenance Planning > Advanced Maintenance Planning Configuration

Advanced maintenance planning configuration.

Archive records

Administration > Setup > Archive Records

Archive work orders, purchase orders, stock transactions, electronic records, and audit trail records.

Assets

Equipment > Assets

Pieces of equipment are entities for which you store data and create work orders. Equipment can be of many different types, but the four main types are locations, systems, positions, and assets.

- **Locations**
  Physical locations of systems, positions, and assets. For example, a pumping system is located in Room 104.

- **Systems**
  Collections of positions and/or assets that work together so that when one part goes down, all parts are affected. For example, if a pump stops working, you must turn off the entire water line to repair it.

- **Positions**
  Functions performed by a general kind of asset. For example, the pump that moves water from one tank to another is a functional position, which can be filled by any number of actual, physical pumps (assets). Positions are also called functional positions.

- **Assets**
  Generally, physical objects. Assets are the base unit of equipment information and the smallest tracking unit for capital investments.

Locations, systems, positions, and assets form a hierarchy of equipment information, with locations at the top of the hierarchy and assets at the bottom. Data is shared among the levels of the equipment hierarchy. For example, data for a work order performed on an asset is also stored in the position, system, and location equipment to which the asset belongs. This data sharing allows you to track assets and their performance in detail and under differing conditions, to evaluate the performance of entire systems, and to assess the effect that locations and positions have on systems and assets.

Define your organization's assets as equipment. Define parent/child relationships among equipment to link costs and meter readings. A physical meter is a tangible device, such as a car odometer, that measures a particular usage of a piece of equipment. Physical meters have limits on how much usage you can track before the meter resets to zero. Define physical meters in the **Meters** form.

Logical meters record the accumulative usage of a piece of equipment throughout its operational life. The meter due value of a preventive maintenance work order is always based on a logical meter. Use logical meters to monitor asset usage. Plan preventive maintenance in response to logical meter levels. Define logical meters on the **Meters** page of the **Assets**, **Positions**, **Systems**, or **Locations** form.

Associate warranty documents with specific pieces of equipment or with other equipment. Define warranty terms based on equipment usage or by date. When necessary, create warranty claims, and then enter settlement details for the claim in Infor EAM. View and modify the list of PM schedules for equipment (assets, positions, or systems) on the **PM Schedules** tab of the respective Equipment form.

Asset inventory

Equipment > Asset Inventory > Asset Inventory

Perform asset audits to compare the physical location of the asset in the system with the actual physical location of the asset. Define the parameters for the asset inventory on the **Parameters** tab, and then perform the asset inventory manually or using a handheld device.

Associate custom fields

Administration > Custom Fields > Associate Custom Fields

Fields associated with a class appear only when the class has been specified in the regular class field. Fields associated with an entity (class is *) always appear on screens based on that entity, whether or not a class has been specified. Define lookup values for custom fields of the Code+Description type.

Audit log

Menu Path

Administration > Security > Audit Setup

Description

Displays a list of audited status changes.

Audit setup

Administration > Security > Audit Setup

The system provides a flexible way to track changes of every attribute for almost every table. When a user enters, updates, or deletes an attribute, the system records the old value, new value, user code, function used, and date/time stamp. To activate this auditing, you must know the field and the technical name of the table to track. The system cannot track tables that do not appear in lookups or have no primary key.

Set up audit triggers to monitor attribute changes to records. Create audit trail triggers to define what changes to which attributes you should audit. Once you know the field and the technical name of the table to track, set up audit triggers. You can also view trigger status values and purge audit records.

You can also administer comments and custom fields audit flags. Select the entities for which the system tracks audit flags, ensuring that the system records all changes to comment and custom field records for the particular entity.

Batch update equipment ranking values

Equipment > Process > Batch Update Equipment Ranking Values

Use the **Batch Update Equipment Ranking Values** form to:

- update equipment ranking values in a batch
- complete surveys in a batch
- copy equipment ranking values to equipment in a batch

Batch work order generation summary

Work > Process > Generate/Release WOs

Description	Displays summary information of the work order generated from the **Generate/Release WOs** form. This report can only be printed from the **Generate/Release WOs** form.
Parameters	No parameters
Report Type	Basic

Batch work order updates

On the **Batch Work Order Updates** form you can book labor for work orders in a batch.

Booked labor by activity

Menu Path

Work > Reports > Booked Labor By Activity

Description

Display a graph that calculates the number of booked hours by activity per trade

Book PO labor

Work > Process > Book PO Labor

Receive vendor labor for purchase orders.

Breaking up kits

Materials > Kits > Breakup Kit

Return parts allocated to a kit.

Build kits

Materials > Kits > Build Kit

Build a kit from a stock of parts within a store using a pre-defined kit template.

Budgets

Create and update budgets on the **Budgets** form. Once you have created a budget, you can add sub-level budgets and assign specific monetary amounts to each budget area on the **Details** page.

Budget analysis

Menu Path

Operations > Reports > Budgets > Budget Analysis

Description

Displays all work orders that are associated with the selected budget along with actual, estimated, and remaining parts, labor, and tool costs.

Budget calendar types

On the **Budgets Calendar Types** form, define calendar types to determine the number of reporting periods in a budget term.

Budgets consistency control

Menu Path

Operations > Reports > Budgets > Budgets Consistency Control

Description

Tracks budget inconsistencies. Displays data for all structure levels.

Budget groups

Create budget groups for entities to assign a budget amount to a group of items. For example, you can define a budget group for the HVAC group containing all pieces of equipment associated with the HVAC system.

Budget position details

Menu Path

Operations > Reports > Budgets > Budget Position Details

Description

Displays totals for each budget detail.

Budget structures

Create budget structures to define levels for cost reporting.

Budget summary

Description	Displays the calculated estimated, actual, and remaining costs for a selected budget
Parameters	Specify the **Organization**, **Budget Structure**, and **Budget Term**.
Report Type	Consumer

Budget terms

Specify budget terms on the **Budget Terms** form, and then define periods for each budget term. A budget term consists of a calendar type defined by start and end dates, such as a 2006 monthly budget term or a 2006 quarterly budget. Periods set the start and end dates for the terms.

Bulletin board notices

Operations > Call Center > Bulletin Board Notices

Create bulletin board notices to view call center-related news and updates.

Calibration analysis

Description	Displays a list of completed calibration work orders by department that have resulted in the specified minimum number of consecutive or non-consecutive calibration statuses of pass or fail. The report allows you to identify patterns in the results of calibration work orders to determine whether the frequency of calibration PMs should be adjusted, whether the equipment should be replaced, etc. Using **Min. # of Calibrations**, the system determines the actual number of completed calibration work orders to retrieve for the report. If the actual number of completed calibration work orders is less than the value specified for **Min. # of Calibrations**, the system does not display any results. However, if the number of completed work orders is greater than or equal to the value of **Min. # of Calibrations**, the system displays all of the work orders. Calibration work orders are considered consecutive if there are no other work orders for the equipment containing test points that were completed between the work orders in question.

Parameters	Specify the **Organization**, **Department**, **System**, **Equipment**, **Class**, **Category**, and **Equipment Criticality**. **Min. # of Calibrations** Specify the minimum number of work orders to retrieve for each piece of equipment based on the selection criteria. **Min. # of Calibrations** is a required field. Select one or more of the following options: • **Non-Consecutive** Select to print a list of all calibration work orders. If **Non-Consecutive** is unselected, the system only prints a list of consecutive work orders meeting the specified criteria. • **Include Pass With Fail** Select to include all work orders with a calibration status of Pass, fail exists (PF). • **Include Pass With Recal** Select to include all work orders with a calibration status of Pass, recal exists (PR). • **Include Incomplete** Select to include all work orders with a calibration status of Incomplete. • **Print Test Point Comments** Select to print comments entered for test points in the report output. **Calibration Status** Select one of the following options: **Pass** Select to include only work orders with a status of Pass (P). **Fail** Select to include only work orders with a status of Fail (F). **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **End Date** is a required field.
Report Type	Consumer

Calibration analysis

Work > Reports > Calibrations > Calibration Analysis

Description	Displays a list of completed calibration work orders by department that have resulted in the specified minimum number of consecutive or non-consecutive calibration statuses of pass or fail. The report allows you to identify patterns in the results of calibration work orders to determine whether the frequency of calibration PMs should be adjusted, whether the equipment should be replaced, etc. Using **Min. # of Calibrations**, the system determines the actual number of completed calibration work orders to retrieve for the report. If the actual number of completed calibration work orders is less than the value specified for **Min. # of Calibrations**, the system does not display any results. However, if the number of completed work orders is greater than or equal to the value of **Min. # of Calibrations**, the system displays all of the work orders. Calibration work orders are considered consecutive if there are no other work orders for the equipment containing test points that were completed between the work orders in question.

Parameters	Specify the **Organization**, **Department**, **System**, **Equipment**, **Class**, **Category**, and **Equipment Criticality**. **Min. # of Calibrations** Specify the minimum number of work orders to retrieve for each piece of equipment based on the selection criteria. **Min. # of Calibrations** is a required field. Select one or more of the following options: • **Non-Consecutive** Select to print a list of all calibration work orders. If **Non-Consecutive** is unselected, the system only prints a list of consecutive work orders meeting the specified criteria. • **Include Pass With Fail** Select to include all work orders with a calibration status of Pass, fail exists (PF). • **Include Pass With Recal** Select to include all work orders with a calibration status of Pass, recal exists (PR). • **Include Incomplete** Select to include all work orders with a calibration status of Incomplete. • **Print Test Point Comments** Select to print comments entered for test points in the report output **Calibration Status** Select one of the following options: • **Pass** Select to include only work orders with a status of Pass (P). • **Fail** Select to include only work orders with a status of Fail (F). Specify the **Start Date** and **End Date** for which to retrieve data. **End Date** is a required field.
Report Type	Consumer

Calibration due report

Work > Reports > Calibrations > Calibration Due Report

Description	Displays a list of all open calibration work orders containing test points for which the planned completion date is less than or equal to the **Due By** date. The system calculates the planned completion date of a work order using the following formula: Planned completion date = (Target date + Duration) - 1 If you select to include backlogged work orders, the system displays the number of days late for each work order in the report output. The system calculates the number of days late using the following formula: Days late = System date - Planned completion date The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), such as SYS1/SYS2/SYS3.

Parameters	Specify the **Organization**, **Department**, **System**, **Equipment**, **Class**, **Category**, **Equipment Criticality**, and **Assigned To**. **No Backlog** Select to not print work orders whose planned completion date is less than today's date. **Show MEC Details** Select to display MEC work order details for multiple equipment work orders. **Sort By** Select one of the following options: **Planned Comp Date** Select to sort by the planned completion date. **Equipment** Select to sort by equipment. **Due By** Specify the due date for the calibration. **Due By** is a required field.
Report Type	Consumer

Calibration due report

Work > Reports > Calibrations > Calibration Due Report

Description	Displays a list of all open calibration work orders containing test points for which the planned completion date is less than or equal to the **Due By** date.
	The system calculates the planned completion date of a work order using the following formula:
	`Planned completion date = (Target date + Duration) - 1`
	If you select to include backlogged work orders, the system displays the number of days late for each work order in the report output. The system calculates the number of days late using the following formula:
	`Days late = System date - Planned completion date`
	The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), e.g., SYS1/SYS2/SYS3.

Parameters	Specify the **Organization**, **Department**, **System**, **Equipment**, **Class**, **Category**, **Equipment Criticality**, and **Assigned To**. **No Backlog** Select to not print work orders whose planned completion date is less than today's date. **Show MEC Details** Select to display MEC work order details for multiple equipment work orders. **Sort By** Select one of the following options: • **Planned Comp Date** Select to sort by the planned completion date. • **Equipment** Select to sort by equipment. **Due By** Specify the due date for the calibration. **Due By** is a required field.
Report Type	Consumer

Calibration record report

Description	Displays a calibration record that includes calibration header information, such as the work order and equipment. The body of the report is printed in a tabular format that includes the loop instruments, test points, standards used, potential standards, work order comments and custom fields, and any equipment custom fields for the calibration work order. The report enables you to print a document to serve as a guide for the technician performing the calibration and also as a document on which to record the actual results of the calibration process. The report also provides an area on which to record performed by and approved by signatures. After completing the calibration, transfer the information recorded on the document during the calibration process into the system to maintain an electronic record of the calibration, and then store the printed document in a secure location to keep a printed record of the equipment calibration.

Parameters	Specify the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Equipment**, **Type**, **Equipment Criticality**, **Location**, **Trade**, **Status**, **Assigned To**, **Assigned By**, **Person Responsible**, and **System**. Select one or more of the following options: • **Scheduled Date Range** Select to print a list of all calibration work orders for a scheduled date range. • **Reprint** Select to reprint a list of all calibration work orders that have already been printed. • **Include Activities** Select to include all work order activities for all the work orders included in the report output. • **Work Order Custom Fields** Select to include all work order custom fields that have been set up to print on work orders for all the work orders included in the report output. • **Equipment Custom Fields** Select to include all equipment custom fields for all the equipment on the work orders included in the report output. • **By Person Responsible** Select to sort the report output by the person responsible. • **Search MEC WOs** Select to search multiple equipment work orders. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Calibration record report

Work > Reports > Calibrations > Calibration Record Report

Description	Displays a calibration record that includes calibration header information, such as the work order and equipment. The body of the report is printed in a tabular format that includes the loop instruments, test points, standards used, potential standards, work order comments and custom fields, and any equipment custom fields for the calibration work order. The report enables you to print a document to serve as a guide for the technician performing the calibration and also as a document on which to record the actual results of the calibration process. The report also provides an area on which to record performed by and approved by signatures. After completing the calibration, transfer the information recorded on the document during the calibration process into the system to maintain an electronic record of the calibration, and then store the printed document in a secure location to keep a printed record of the equipment calibration.

Parameters	Specify the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Equipment**, **Type**, **Equipment Criticality**, **Location**, **Trade**, **Status**, **Assigned To**, **Assigned By**, **Person Responsible**, and **System**. Select one or more of the following options: • **Scheduled Date Range** Select to print a list of all calibration work orders for a scheduled date range. • **Reprint** Select to reprint a list of all calibration work orders that have already been printed. • **Include Activities** Select to include all work order activities for all the work orders included in the report output. **Work Order Custom Fields** Select to include all work order custom fields that have been set up to print on work orders for all the work orders included in the report output. **Equipment Custom Fields** Select to include all equipment custom fields for all the equipment on the work orders included in the report output. **By Person Responsible** Select to sort the report output by the person responsible. **Search MEC WOs** Select to search multiple equipment work orders. Specify the **Start Date** and **End Date** for which to retrieve data.
Report Type	Consumer

Calibration reverse traceability

Description	Displays a list of calibration work orders, including all test points on the work order, for which a selected standard has been used to calibrate a piece of equipment. The completion date of the work orders must fall within the specified start and end date. When the standard used for calibration is out of tolerance, it is necessary to identify the equipment that has been calibrated with the out of tolerance standard. The system also enables you to print work orders for which test point deviations are greater than or equal to the specified deviation. The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), such as SYS1/SYS2/SYS3.
Parameters	Specify the **Organization**, **Equipment**, **Part**, **Lot**, **Department**, **Deviation**, and **UOM**. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **End Date** is a required field.
Report Type	Consumer

Calibration reverse traceability

Work > Reports > Calibrations > Calibration Reverse Traceability

Description	Displays a list of calibration work orders, including all test points on the work order, for which a selected standard has been used to calibrate a piece of equipment. The completion date of the work orders must fall within the specified start and end date. When the standard used for calibration is out of tolerance, it is necessary to identify the equipment that has been calibrated with the out of tolerance standard. The system also enables you to print work orders for which test point deviations are greater than or equal to the specified deviation. The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), e.g., SYS1/SYS2/SYS3.
Parameters	Specify the **Organization**, **Equipment**, **Part**, **Lot**, **Department**, **Deviation**, and **UOM**. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **End Date** is a required field.
Report Type	Consumer

Call Center Setup

Operations > Call Center > Call Center Setup

Set up the call center form by selecting default values and the options to display on the form such as default work order status, default request type, the number of days to show closed work orders, and options for the GIS Map Search popup.

Call Center

Operations > Call Center

Process customer requests when customers contact the call center by creating customer requests and work orders, recording customer comments, and querying the knowledge base for information to facilitate the customer's needs.

Call Center WO

Menu Path

Work > Reports > Print Work Orders > Call Center WO

Description

Displays a work order with fields commonly used by off-site call center contractors who do not have access to the system.

Calendar groups

Operations > Call Center > Calendar Groups

Define a calendar group code for equipment that share periods of availability.

Capital request categorization codes

Administration > Setup > Capital Request Categorization Codes

Define capital request categorization codes for use on the Capital Planning Request form.

Case management

Case management allows you to collect and track data for events not associated with a work order. Examples of events include accidents, spills, emission events, halts of production lines, and shift incidents. First define the events as a case, and then define tasks to complete for the case, and associate service codes, and task checklists.

Case management

Description

Displays the case management records for specific scheduled start dates.

Menu Path

Operations > Reports > Call Center > Case Management

Parameters

Specify the **Organization**, **Case**, **Equipment**, **Type**, **Status**, **Department**, **Class**, **Location**, **Cost Code** for which to generate the report.

Specify the **Requested By**, **Responsible**, and **Assigned To** persons for which to generate the report.

Select the **Include Task Plan Checklist** check box to include checklist items for task plans associated with the case.

Select the **Incude Task Comments** check box to include task comments associated with the case in the report.

Select the **Include Task User Defined Fields** check box to include the task plan user defined fields in the report

Select the **Print Attachments** check box to print all case attachments with the report.

Specify the **Start Date** and **End Date** for which to retrieve data.

Report Type

Basic

Case management report

Description

Displays the case management records for specific scheduled start dates.

Menu Path

Operations > Reports > Call Center > Case Management

Case management tasks

Define tasks or activities related to a case that must be performed to complete the case.

Categories

Equipment > Setup > Categories

Set up initial equipment information before using the equipment module. Categories provide a way to further organize pieces of equipment. For example, if a class is defined for motors, create a category for motor types and sizes. Associate permits with equipment categories.

Calibration results

Work > Calibration Results

Caller login

Specify this information:

Caller ID
Specify the caller ID to access Infor EAM Requestor.

Campaigns

Work > Projects > Campaigns

A campaign is a list of jobs that may be performed on a given list of equipment as necessary to complete work. Campaigns are comprised of two types of events:

- **Survey**
  Maintenance personnel checks equipment specified on the work order to see if issue(s) exist.

- **Job**
  Work order to correct issue(s) found.

If equipment passes the survey, work on the equipment is unnecessary.

If equipment fails the survey, work on the equipment is necessary. All survey results are recorded on the Equipment page of the Campaigns form, or the Survey Equipment page of the Work Order form.

A campaign can have multiple jobs listed to complete work on necessary equipment, however only one survey is allowed per campaign.

Change notices

Equipment > Additional Features > Change Notices

Vendors use change notices to notify their customers of possible defects in their equipment or to recommend changes to previously documented maintenance plans. Change notices can be recorded in the system once they are issued from the vendor. Identify equipment affected by the change notices, reference change notices on work orders, and track transactions and events associated with change notices.

Closing codes

Equipment > Setup > Closing Codes

The system contains four types of closing codes: action codes, cause codes, failure codes, and problem codes. Action codes describe the steps necessary to correct the problem, such as adding lubricant to a pump. Cause codes identify what caused the component or type of component to fail. Failure codes identify the reason the equipment failed. Finally, problem codes identify the observed equipment failure, such as a leak from a faucet or the overheating of a pump.

CO2 analysis

Menu Path

Equipment > Reports > CO2 Analysis

Description

Displays CO2 reduction for equipment calculated for a specific date range. The reduction calculation can be based on the equipment efficiency (design versus actual) or on a comparison with last year's data.

CO2e emissions by greenhouse gas

Menu Path

Equipment > Reports > Asset Sustainability > CO2e Emissions by Greenhouse Gas

Description

Print the CO2e emissions by greenhouse gas report.

Consignment activity

Menu Path

Materials > Reports > Consignment Activity

Description

Displays a list of consignment activity.

Contractor portal

Contractors use this screen to browse assigned work order activities and update the activities, work order comments, and documents as necessary.

Cost summary by project and area

Menu Path

Work > Reports > Projects > Cost Summary By Project and Area

Description

Prints a summary of costs by project and area.

Physical inventory

Materials > Transactions > Physical Inventory

Count physical inventory and compare against online inventory. The Physical Inventory form displays stocktake records for all organizations for which you have access permission and for which you have store access permission.

Create service request portal

Create a new service request to request maintenance on a piece of equipment or a location. Alternately, update open service requests.

Capital planning requests

Work > Capital Planning Request

Create capital planning requests to request a capital expenditure. Capital planning requests are based on forecasted labor costs, forecasted material costs, and expected cost avoidance.

Create service requests

Create service requests to request maintenance work.

1. Click **New Service Request** on the **My Service Requests** page. The system displays the **Create Service Request** page.
2. Specify this information:

   I'm having trouble with
   Select the type of problem you are experiencing.

   Comments
   Specify comments about the maintenance problem

   Alternate Contact
   Specify an alternate contact person.

   Contact Phone
   Specify a contact phone number.

   Reference Number
   Specify your internal reference number.

Property
Select the name of the property needing service.

Building
Select the building in which the problem is occurring.

Floor/Unit
Select the floor/unit in which the problem is occurring.

More Details
Specify additional location details.

3 Click **Submit**. The system submits the service request.
Note: Click **Submit and Add Another** to create another request after the system submits the first request.

Click **Reset** to reset all values on the page to the last saved values.

Click **Back** to return to the previous page without saving changes to the current page.

Creating store groups

Materials > Setup > Store Groups

A store group is a group of stores that share the same transfer fees. Create store groups to determine if transfer fees apply for transferring parts between stores in situations where shipping fees may or may not apply.

Creating work requests or work orders

Create work requests for maintenance work orders, and then supervisors or other authorized employees can either approve or reject them.

Create work orders to repair broken equipment, modify equipment to meet safety and environmental standards, perform any other work order during a normal workday, and to record information concerning equipment problems. Work orders can either be independent or part of a much larger project.

If you have rights to create records in the default organization, the system populates Org with your default organization. If you do not have rights to create records in the default organization or if your default organization is not valid, then Org remains empty. If there is no default organization, the system uses the DEFORG install parameter if you have rights to create records in that organization. Otherwise, Org remains empty.

Note: You can also create work orders from the Equipment form. Select **Equip > Equipment Details**. The system shows the Equipment form. Click **Create Work Order**. The system shows the Create Work Order form.

Infor EAM Mobile inherits the security setting for Dept based on the security setting specified in Infor EAM.

To create work requests or work orders:

1. Select **Work > Create Work Request/Work Order**. The system automatically populates the equipment description, Meter, Critic, and SysLvl if available.
2. Enter a description of the problem.
3. Specify this information:

   Org
   Specify the organization to which the work belongs if you use multi-organization security.

   Equip
   Specify the equipment on which to perform the work.

   Proj
   Specify the project and the project budget.

   Type
   Select the type of work needed, such as breakdown, repairable spare, etc.

   Status
   Choose one of these options:

Option	Description
Create a work order	Enter R for the status Released.
Create a work request	Enter Q for the status Work request. The system disables StdWO.

   Dept
   Specify the maintenance responsibility center responsible for the work.

   Warranty
   Specify if the equipment is under manufacturer warranty.

   Safety
   Specify if this work requires special safety precautions.

   Locatn
   Specify the location of the work to be done.

   StdWO
   Specify the standard work order.

   Class
   Specify the class of the work.

   Priority
   Specify the priority of the work.

CostCo
Specify the cost code assigned to the work.

ProbCo
Specify the code identifying the problem.

Assign
Specify the person responsible for the work.

Parent
Specify the parent work order.

Target
Specify the target start date for the work.

Due
Specify the due date for the work.

Duratn
Specify the duration of the work, in days.

Report
Specify the date the work was reported.

4 Click **Save**.
5 Click **Yes**.

AMS-Customer contracts

Create contracts for asset management services customers to specify how time, material, and labor costs are charged to a customer for maintenance work. Create fixed charge schedules for customer contracts to create a set price to be added to a customer invoice based upon a specified due date.

Customers are defined for use with service requests and asset management services. Click Creating Customers on page 910 for more information.

Chart Setup

Administration > Start Center Setup > Chart Setup

In addition to KPIs and inbox entries, the **Start Center** displays charts based on user-defined SQL statements. A chart is a graphical representation of data such as work orders assigned to specific departments.

After defining charts, grant users access to the charts. Charts can either be user-group specific or public. Public charts are displayed for all users. Define system privileges for users to personalize their **Start Center** to display charts based on their preferences.

Classes

Administration > Setup > Classes

Define classes for most entities. The system allows you to separate a single entity into groups, most often for cost analysis. For example, you can assign classes to equipment, and then give all air conditioning units a class of HVAC. With this information, the system can provide an analysis that compares the cost of maintaining all HVAC units.

Classes and custom fields

Administration > Setup > Classes

Define class records for entities. Classes allow you to segment a single entity into groups for cost analysis or other comparisons.

Closing periods

Administration > Security > Closing Periods

The system gathers maintenance costs on an ongoing basis. When you are ready to process those costs, define closing periods. Typically, closing periods occur at the end of every month, although some companies process transactions on a quarterly basis. When the specified date arrives, the system freezes all of the relevant data, and a new costing period begins.

Define closing periods just before transferring transaction data to another system for account processing (general ledger, accounts payable, accounts receivable, etc.).

Condition score matrix setup

The **Condition Score Matrix Setup** screen is used to associate a **Condition Score**, **Condition Index**, and inspection interval with any combination of **Severity**, **Intensity**, **Size**, and **Importance** for nonconformities.

A nonconformity with higher **Severity**, **Intensity**, **Size**, and **Importance** will often require re-inspections more often than a nonconformity with lower values. The Condition Score Matrix uses a nonconformity's **Severity**, **Intensity**, **Size**, and **Importance** to determine its **Condition Score**.

Configuration manager

Administration > System Configuration > Configuration Manager

Export Configuration allows users to export a large number of configuration items to a specially formatted file. Import Configuration allows users to import these files.

Contact information

Operations > Call Center > Contact Information

Enter the contact information of both customers and providers for follow up and informational purposes.

Contract classes

Menu Path

Purchasing > Reports > Contracts > Contract Classes

Description

Displays a list of the different contract classes.

Facilities

Equipment > Facilities

Create facilities to identify and maintain buildings, floors, elevators, HVAC units, etc. for associated properties.

Closing code hierarchy

Equipment > Setup > Closing Code Hierarchy

Define parent/child hierarchy details for closing codes.

Rooms

Equipment > Rooms

Create rooms that are accessible in Infor10 EAM and Infor10 HMS when the two products are integrated.

The Rooms form was developed for Infor10 EAM Hospitality Edition. The Hospitality Edition can be run with stand-alone Infor10 EAM or integrated with Infor10 HMS. When running in stand-alone mode for example, Infor10 EAM is not integrated with Infor10 HMS), Infor10 EAM users can create and update rooms using this form. However when running in integrated environments, rooms are created and maintained in Infor10 HMS and synchronized to Infor10 EAM. Rooms cannot be updated in Infor10 EAM. Only **Status** and structure fields are editable.

Note: If the rooms were created in Infor10 EAM you may edit the rooms on this form. However if the rooms were created in Infor10 HMS you cannot edit the rooms on this form. To edit the rooms access the room records on the Rooms form in Infor10 HMS.

Vehicles

Equipment > Vehicles

Create and maintain vehicles for hospitality properties.

Customer contracts

Work > Contract Management > Customer Contracts

Define new contracts for customers. The customer contract details information such as charges, clauses, comments, and invoice details.

Reservations

Work > Contract Management > Reservations

Define a reservation for a customer to record the rental of equipment for short periods of time, and the charges based on usage fees for a period of time (hours, days, and weeks) and for the usage measured in a specific unit of measures (miles, kilometers, and engine hours).

Customer request

Operations > Reports > Call Center > Customer Request

Description	Prints a copy of a customer request
Parameters	Specify the **Customer Request**, **Status**, **Assigned To**, **Customer**, **Employee**, **Department**, **Provider**, **Service Category**, **Service Problem Code**, and **Equipment**. **Customer Information** Select to display the customer's information on the report. **Action Requests** Select to include any action requests on the report. **Remarks** Select to print the customer's remarks on the report. **Custom/WO Custom Fields** Select to include all custom fields and work order custom fields on the report. **Request Date** **Promise Date** Specify the requested date and the promised date for the customer's request.
Report Type	Consumer

Contract templates

Create a template to define an actual contract with a customer. Include high level contract details, charge definitions, contract clauses, and comments. After creating a template, use the template to quickly create a contract or modify a contract.

Customer invoices

The Customer Invoices screen displays details of the invoices created for customer contracts and customer rentals.

Note: Customer invoices can only be generated by the system. You cannot manually insert or delete invoices on this screen, but you can modify customer invoices.

Work orders hospitality

Create and update hospitality-based work orders.

Customer survey results

Description

Displays a list of all approved customer surveys and their results.

Menu Path

Work > Reports > Customer Survey Results

Note: This report is not included in the default menu. Contact your system administrator to modify the location of the report.

Work orders healthcare

Create new work orders for one or more pieces of healthcare equipment.

Work orders healthcare

Create new work orders for one or more pieces of healthcare equipment.

Incident requests

Work > Verticals > Hospitality > Incident Requests

Create and update hospitality-based incident request records.

Crystal Clear report status

Administration > Crystal Clear Report Status

View a list of the queued reports of the current day, and select them for display once completed.

The install parameter REPPURGE determines how long report records and the associated PDF files should exist on the server before being purged. Contact your system administrator for more information.

Choose one of the following options:

View the report status
See the following table for information about the report status:

Status	Description
Submitted	The report has been submitted but has not been accepted by the report server.
In Progress	The status from creation until the report is either successfully created (Ready) or fails to be created (Failed)
Failed	The status if the report fails to be created. In this scenario, Error Message will also be populated.
Ready	The status if the report is created successfully
Viewed	The status once the user has viewed the report

View the report
Double-click a Ready or Viewed report from the Reports list. The system displays the report in PDF. If the Status of the report was Ready, the system updates it to Viewed.

You can only view reports that you created.

Cost summary by transaction date

Menu Path

Work > Reports > Projects > Cost Summary By Transaction Date

Description

Prints a summary of costs by transaction date. The report includes summary counts, hours and costs for all pieces of equipment which appear on PPM and JOB type work orders.

CO2e emissions-hospitality

Menu Path

Equipment > Reports > Asset Sustainability > CO2e Emissions Chart

Description

Displays equipment (in graphical form) in best and worst order based on CO2 emissions for the selected year and compares the data with the previous two years.

Capital performance evaluation-hospitality

Menu Path

Equipment > Reports > Capital Performance Evaluation-Hospitality

Description

Displays for the selected equipment the outstanding capital request values for the selected period and for the future period and, if applicable, the GAS (Global Asset Sustainability) index for the equipment. This report also displays the correlation between the GAS index and the capital request.

Cost codes

Administration > Setup > Cost Codes

Define cost codes for the organization, and then reference them along with any data involving costs, such as work orders, purchases, material issues, etc. Charge maintenance costs to the correct area by specifying cost codes. The cost for repairing a unit air conditioner, for example, might come out of a particular department's budget.

Custom fields

Administration > Custom Fields > Custom Fields

Tailor the system for the working environment by adding custom fields to forms.

Define an unlimited number of new fields, and attach a selection of these fields to any class of an entity (such as an equipment class or a purchase order class) or to an entity (such as all equipment or all purchase orders). Custom fields appear on the **Custom Fields** page.

Specify valid lookup values for a custom field using the **Associate Custom Fields** form.

Customer invoice detail

Menu Path

Work > Reports > Customer Invoice Details

Description

Includes details on customer invoices such as charge categories, subcategories, charge levels, and adjustments.

AMS-Customer invoice lines overview

View an overview of customer invoice lines to access detailed information about all the charges on customer invoices on the **AMS-Customer Invoice Lines Overview** form.

Customer invoices are generated to create and assemble accounts receivable invoices for asset management service customers, work order charges, and fixed payments. View detailed customer invoice line information on the **AMS-Customer Invoice Lines Overview** form.

Customer invoices are only related to asset management services and should not be confused with the invoice voucher functionality in the Purchasing Management module. Click Recording invoice vouchers on page 700 for more information.

Customer invoices are generated in several different ways:

- Calculate customer charges and create a single customer invoice using the Create Customer Invoice right-click option on the **Work Orders** form
- Generate customer invoices from the **AMS-Customer Invoices** form
- Create an invoice for a work order

Upon initiation of the invoice generation process, the system locates all customer charge records and fixed charge schedules for customer contracts. The system does not recalculate the invoice charge records. The system adds the total price for the customer(s) based on the specified invoice generation criteria. The system changes the Status of all work orders on the **AMS-Approve Customer Charges** form to Invoiced.

Depending on the specified generation criteria, the system generates separate invoices for each customer, for which the invoice organization is the organization of the customer contract.

Notes: If a single customer is referenced on more than one customer contract and the customer contracts are from different organizations, the system generates invoices for each of the customer contract organizations.

You can also generate invoices for customers that are marked as Out of Service. Click Creating customers on page 910 for more information.

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See Recording invoice vouchers on page 700 for more information.

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You can also generate invoices for customers that are marked as Out of Service.

See Creating customers on page 910 for more information.

Reservation requests

Work > Contract Management > Reservation Requests

Create, update, and approve reservation requests.

Service request chart

Description

Displays a graph that calculates the number of service requests by various groupings.

Menu Path

Work > Reports > Call Center > Service Request Chart

Customer surveys

Insert, update, or delete customer surveys used to assess customer satisfaction, responsiveness, etc.

Customers

Work > Customer Contracts > Customers

Define the customers to whom to charge the cost of maintenance work. Then, associate properties and create a list of callers for service requests.

Daily trade schedule

Work > Reports > Scheduling > Daily Trade Schedule

Description	Displays a daily trade schedule for a specific date or range of dates
Parameters	Specify the **Organization**, **Trade**, and **Department**. **Date From** **Date To** Specify the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.
Report Type	Consumer

Databridge setup

Administration > Databridge > Databridge Setup

Databridge is a component of Infor EAM that enables the system to exchange XML business document messages with other systems.

If you are running Databridge for Infor EAM, you need to perform the initial configuration of Databridge via the **Databridge Setup** page. Configure Databridge setup options to format the module to your specifications.

Data warehouse run log

Administration > Data Collection > Data Warehouse Run Log

The **Data Warehouse Run Log** page enables you to view information such as the operation processed, the target database object, start and end time, the elapsed time of the process, and the status of a process. View detailed error information to view error numbers, error messages, and sequences.

Delete run log records and error messages as necessary. Infor recommends that you delete old run logs and error messages periodically.

Check the data warehouse run log for any errors after running a full load. You must run a full load without any errors prior to switching to an incremental load. If any errors occur during the full load, you must correct the errors and run a full load until no errors occur.

Data warehouse run parameters

Administration > Data Collection > Data Warehouse Run Parameters

Set the data warehouse run parameters to initialize the data warehouse run control table and establish the appropriate run parameter settings for executing the data warehouse ETL process at regularly scheduled intervals. You can also modify run parameters as necessary and execute an ETL process manually. Set parameters to initiate a full or partial (incremental) data load and/or purge data.

When running the ETL process for the first time, you must run a full load with no errors. After running a clean full load, you do not need to run a full load again, because the data warehouse retains all of the data from the full load. Subsequent future loads can be run automatically based on your data warehouse setup, such as on a nightly basis. Future loads will be incremental and will only add to the existing data by loading the data since the last load. Therefore, after completing a full load, the system automatically resets the Load from Date to the current date (date of the most recent load) and the Load Type to Incremental so that you do not have to reset those parameters for future data loads.

Although an incremental load only loads data since the most recent load, an incremental load also verifies time stamps for records so that it will load any changes that have been made to an existing historical record or for transaction data that may be post-dated, etc.

Although it is not necessary, you can run a full load if desired. If you select Purge Old Data, running a full load purges all existing data in the data warehouse before loading any data; therefore, you can run a full load to purge the existing data from the data warehouse and then reload all of the data based on a new Load from Date, etc.

The data warehouse does not maintain historical values for parts and stores. Instead, the data warehouse takes daily snapshots of the value of materials and inventory in each snapshot. Therefore, purging the existing data from the data warehouse will also purge non-historical value information.

After running a full ETL load, you must check the data warehouse run log for any errors.

See Viewing data warehouse run log errors on page 153.

You must run a full load without any errors prior to switching to an incremental load. If any errors occur during the full load, you must correct the errors and run a full load until no errors occur.

Dataspy

A Dataspy is a named, predefined view of a list of records or set of data that can be used on any page, lookup, or data area that contains that same list of records.

A Dataspy consists of the following four basic components:

- **Filter**
  Contains the conditional statements that make up a filter. For example, a Dataspy might filter for all requisitions that have a **Status** "equal to" Approved, and a **Creation Date** "greater than" last Friday.

- **Sort**
  Specifies the order in which the records should be sorted. For example, a Dataspy might sort the requisitions so that the most recently created requisitions are displayed at the top of the list in descending order.

- **Layout**
  Specifies the fields that are displayed in the list and the order in which those fields should be displayed. For example, a Dataspy might specify that the **Requisition Description** column is displayed to the left of the **Requisition Number** column and that the **Storeroom** field is not displayed in the list.

- **Advanced**
  Specifies an additional Where Clause used for filtering data. The Where clause is appended to the Where clause generated by the Dataspy Filter.

Note: You can also specify column order by arranging the columns in a list view.

See Arranging columns in a list on page 319.

If a custom field saved in a Dataspy is ever unassociated, then that custom field will no longer appear in the Dataspy nor will it impact the Dataspy. If the same custom field is ever associated again, the relationship in the Dataspy will automatically be restored.

Assets healthcare

Equipment > Assets Healthcare

Define your organization's healthcare equipment as assets.

Properties healthcare

Equipment > Properties Healthcare

Define a property or a collection of properties or assets that work together to create a system.

Systems healthcare

Equipment > Systems Healthcare

Define a system consisting of a collection of properties and/or assets that work together to create a system.

Degree day analysis-hospitality

Menu Path

Administration > Reports > Degree Day Analysis-Hospitality

Description

Displays a list of degrees for a specified date range and degree codes. Select the **Include History** field when generating the report to display all historical data from the Historical Temperatures page. This feature also compares the actual temperature data against the historical temperature data.

Delinquent PM summary report

Menu Path

Work > Reports > Delinquent PM Summary

Description

Displays a list of employees that are assigned to past due PM work orders. Also displays the total count of past due PM work orders and total past due work hours.

Delivery addresses

Purchasing > Setup > Delivery Addresses

Define and maintain delivery addresses for purchasing and materials.

Departments

Equipment > Setup > Departments

A department is the center or area that is responsible for the maintenance of equipment, such as an asset, a position, a system, or a location. The department coordinates the work, assigns the appropriate crew, plans the work, and approves respective work orders.

When defining equipment, assign it to a department. The department can be modified if needed on work orders. When creating work orders (for maintenance or repairs to equipment), the system rolls

up the associated costs to the department of the work order. Set up a default store for each department as well as a default supervisor. When reserving parts for a work order, the system stores them in the specified store.

Associate tools with departments for scheduling purposes. Once you have associated a tool with a department, the system allows you to schedule the tool on a work order for the department.

Documents

Administration > Setup > Documents

Assign a code to documents, specify track revision information, and identify the location of the document.

When defining electronic document files, consult your system administrator before defining documents to determine if directories have already been set up.

Configuring your internet browser to work with the application

Several settings must be changed from the default values in order to allow Infor EAM to run on Internet Explorer, Chrome, or Safari.

See the steps below to configure your specific internet browser to work with Infor EAM.

Configuring Internet Explorer to work with the application

To configure Internet Explorer 9 or 10, add the Infor EAM application server as a trusted site, and then update your Internet Explorer security settings.

To configure Internet Explorer to work with Infor EAM:

1. Open Internet Explorer.
2. Select **Tools > Internet Options** from the Internet Explorer menu bar.
3. Click the Security tab.

4 Select **Trusted sites**, and then click **Sites**.

5 Verify whether or not the Infor EAM site is listed for **Web sites** .

6 Choose from one of the following options:

- If the Infor EAM site is listed as a trusted site, click **OK**, and then select the Security Level for the zone as Medium-Low.
- If the Infor EAM site is not listed as a trusted site, add Infor EAM as a trusted site, click **OK**.
  Note: Unless your server is using https, unselect Require server verification (https:) for all sites in this zone.

7 Click **Yes**, and then click the Advanced tab.

8 Unselect **Send UTF-8 URLs**.

9 Click **OK**.

Configuring Chrome to work with the application

Enable the popup setting to allow Infor EAM to run on Chrome.

To configure Chrome to work with Infor EAM:

1 Open Chrome.

2 Choose **Settings > Show Advanced Settings** from the Chrome menu.

3 Scroll to **Privacy**, and then click **Content Settings**.

4 Scroll to **Pop-ups**, and then select **Allow all sites to show pop-ups**.

5 Click **Done**, and then close Settings.

Configuring Safari to work with the application

Enable pop-up windows to allow Infor EAM to run on Safari.

To configure Safari to work with Infor EAM

1 Open Safari.

2 Click the **Settings** icon.

3 Unselect the **Block Pop-Up Windows** option.
4 Close **Settings**.

Downtime tracking report

Menu Path

Equipment > Reports > Downtime Tracking

Description

Displays a list of all work orders and/or equipment where **Downtime Costs** or **Hours** exist on the header.

Electronic records

Menu Path

Administration > Reports > Electronic Records

Description

Displays a list of snapshots including the parent and child record.

Electronic records for lockout/tagout

Menu Path

Administration > Reports > Electronic Records

Description

Displays a list of snapshots including the parent and child record.

Parameters

Specify the **Organization**, **Entity**, and **Entity Code**.

Include Front Page
Select to print the front page with report parameters selected.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

Electronic records for permit to work

Menu Path

Administration > Reports > Electronic Records

Description

Displays a list of snapshots including the parent and child record.

Parameters

Specify the **Organization**, **Entity**, and **Entity Code**.

Include Front Page
Select to print the front page with report parameters selected.

Mark Confidential
Select to print a confidential banner in the title of the report.

Report Type

Consumer

Electronic records for safety

Menu Path

Administration > Reports > Electronic Records

Description

Displays a list of snapshots including the parent and child record.

Parameters

Specify the **Organization**, **Entity**, and **Entity Code**.

Report Type

Basic

E-mail notification setup

Administration > E-mail Messenger > E-mail Notification Setup

Set up Messenger for Infor EAM. Utilize Messenger to notify users via e-mail of specific changes in database tables. After you define installation parameters and create e-mail templates, set up e-mail notifications when certain events occur in the system database. Create e-mail notifications for a defined table based on the e-mail template. Define the parameters and constraints of each e-mail notification.

E-mail templates

Administration > E-mail Messenger > E-mail Templates

Create and modify e-mail messages using e-mail templates.

E-mail viewer

Administration > E-mail Messenger > E-mail Viewer

View records of all e-mails that have been initiated from database events to ensure proper delivery and to trouble-shoot problems with Messenger. The system displays all sent messages including those that encountered error messages.

Employee productivity report

Menu Path

Work > Reports > Employee Productivity

Description

Prints the employee productivity report.

Employees

Define codes to represent individual employees, and then use the employee codes to track full-time, part-time, and seasonal personnel. Next, define wage rates for employees to establish a specific hourly pay rate for an employee. Rates for employees can be defined based on the employee's level of experience, training, etc. Therefore, employees belonging to a designated trade can have different pay rates than other employees belonging to the same trade. You can also associate employee types with employees and record labor availabilities for individual employees or for a group of employees. The system uses labor availability records to calculate the available hours for employees. You may associate qualifications with employee codes to establish qualifications for personnel. Finally, you can associate properties with employees.

Energy Star

Infor is a partner of Energy Star, a joint program between the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) to monitor and improve energy efficiency efforts.

Infor EAM works with the customer by sending the customer's energy consumption data to Energy Star's Portfolio Manager system (PM) via web services of the Automated Benchmarking System (ABS). The customer receives Energy Star ratings in return from PM thru the ABS.

Infor EAM helps commercial businesses monitor energy efficiency ratings through four of eight total web services through which data is exchanged with the EPA:

1. **Get Pending Authorizations**
   Infor EAM receives ID information on the customer's facilities and meters.

2. **Confirm Pending Authorizations**
   Complete mapping of the customer's Infor EAM IDs to facilities and meter IDs in PM.

3. **Manage Meter Information**
   Send energy consumption data from Infor EAM to PM.

4. **Rating Exchange Service**
   Retrieve Energy Star Ratings for historical 12 month periods.

Energy Star message viewer

Equipment > Additional Features > Energy Star > Energy Star Message Viewer

View and purge asynchronous messages sent to the Energy Star Portfolio Manager (PM) thru the Automated Benchmarking System (ABS). View messages acknowledged by ABS with a transaction ID.

Energy Star ratings chart

Menu Path

Equipment > Assets > Energy Star Ratings Chart

Note: You may also access this report on the **Energy Star Ratings Chart** tab of the **Systems** or **Positions** forms.

Description

Print the energy star ratings chart report.

Entering meter readings

Note: If you take action upon equipment identified as a **`Safety`** piece of equipment, the system shows a confirmation message asking whether you wish to continue.

To enter meter readings:

1. Select **Equip > Meter Reading**

   Note: The **Equip** lookup shows all equipment records that have meters attached and that are in the organizations for which you have access permission.

2. Specify this information:

   Equip
   Specify the equipment for which to enter meter readings.

   UOM
   Meter
   Specify either the unit of measure or the physical meter code.

   Date
   Specify the date of the meter reading.

3. Choose one of the following options:

Option	Description
Read	Specify the current meter reading.
Diff	Specify the difference between the last reading and the current reading.

4 Click **Save**.
5 Click **Yes**.

Entering route inspection results

Enter the results of the inspection into the system after the employee performs the inspection.

To enter route inspection results:

1 Select **Inspect > Route Inspection**.
2 Select the work order for which to enter inspection results, and then click the **Inspection Results** tab.
3 Click **Add Record**.

   Note: If you linked custom prompt fields with Inspection Result fields and entered a value for Aspect, the system shows the prompt fields on the last Inspection Result page.

4 Specify this information:

   Equip
   Specify the equipment for which to enter inspection results.
   Note: The **Equip** lookup shows data that is in the organizations for which you have access permission.

   Aspect
   Specify the aspect to associate with this equipment

   PType
   Specify the point type to associate with the equipment.

   Point
   Specify the point to associate with the equipment.

5 Choose one or both of these options:

Option	Description
The inspection result is qualitative	For **Find**, specify the finding that relates to the inspection, or enter a **Cmnt**.
The inspection result is quantitative	For **Value**, specify the inspection result.

6 Specify this information:

Method
Specify the method of inspection for the selected inspection aspect.

Result
Select the reliability code for the inspection. This code is also used in regression analysis. Choose one of these options:

Option	Description
The measurement is acceptable	Select **Valid**.
The measurement is wrong	Select **Invalid**.
The inspection point has been changed so drastically that all previous inspection results for this point must be deactivated	Select **Discontinuity**.

Rating
Select the confidence rating for the in7spection results. Define confidence ratings on the Codes page of the Entities form (BNENTS) for the CRAT entity in Infor EAM.

Completed
Select to indicate that the inspection is complete.

Slope
Specify the slope for the inspection results.

Loc
Specify the location at which the inspection was performed.

Cmnt
Specify any additional information about the inspection results.

Insptr
Specify the person conducting the inspection.

StdWO
Specify either an existing standard work order or a PM schedule. The system generates the work order when the inspection results reach the critical value or tolerance.

New WO Required
Select to indicate that a new work order is required.

7 Click **Save Record**.
8 Click **Yes**.

Entering stocktake physical quantities

Enter the actual physical inventory count into the system. The system allows you to enter quantities for parts, parts tracked by asset, and serialized parts that are different than the expected quantity.

To enter stocktake physical quantities:

1. Select **Matl > Physical Inventory**.
2. Select the stocktake that contains the part for which to enter physical quantities, and then click the **Physical Quantity** tab.

   Note: If the BNINST parameter SHOWQTY=NO, then the expected quantity is displayed as empty.
3. Select the part for which to enter physical quantities.
4. Specify this information:

   Qty
   Specify the actual inventory count for the part.
   Note: Infor recommends that you enter the **Qty.** If you save an empty value for **Qty**, the API will fail.
5. Click **Save**.
6. Click **Yes**.

Enterprise organizational hierarchy

Administration > Databridge > Enterprise Organizational Hierarchy

Because Databridge will be sending and receiving information to/from other applications within your enterprise using Infor ION, you must configure Databridge for use with Infor ION by creating an enterprise organizational hierarchy that enables Databridge to correctly identify and handle the centrally defined organization structure in place for Infor ION. This enterprise organizational hierarchy is defined for Databridge on the **Enterprise Organizational Hierarchy** page.

Create enterprise organizational hierarchy structures to configure Databridge to handle the centrally defined organization coding structure in place within your enterprise. Within enterprises, there are many applications and systems that are in place, and many times each application includes its own concept or definition of the organization unit, which is frequently represented by a code of some type. Specifically, within your EAM system, organization codes may be defined as ORG1-GVL, ORG2-ATL, ORG3-DET, etc.; however, within other applications in use within your enterprise they may define organizations as follows GVL, ATL, DET, etc. Understandably, the establishment of specific organizational conventions within an enterprise (across business units, groups, etc.) is necessarily an internally driven matter that is determined by organizational business practices, accounting systems, applications, etc., and thus there will be differences in these organizational codes defined within your enterprise.

However, because Infor ION will be sending and receiving information containing the multiple organizational codes from the applications in place within your enterprise, ION must be able to handle all of this organizational information, therefore some kind of a centrally defined organization coding structure must be put in place that providesInfor ION and your applications with a common organizational

language to process the organizational information transmitted between your enterprise applications. This common organizational language is necessary for Infor ION, but once organizational information is received by an application, the application will then determine what to do with the information based on the business logic of the system, etc. The application may use XML or some other functionality to transform this common organizational language into the language of the application.

Enterprise search setup

An enterprise search allows the capability to search across an entire system of database table records or repositories. Define the search criteria for the enterprise search lookup capability across the system by first creating interest centers, and then setting up repositories after defining columns.

Equipment configuration

Equipment > Equipment Configuration > Equipment Configurations

Create equipment configurations to use as equipment templates. After creating an equipment configuration, use it to quickly define assets, positions, and systems that require the same information as is contained on the equipment configuration template.

Equipment costs by ranking chart

Description

Displays a chart of equipment costs by Risk Priority Number, Ranking Score, Condition Score, or Facility Condition Index.

Menu Path

Equipment > Reports > Equipment Costs by Ranking Chart

Equipment details report

Menu Path

Equipment > Reports > Equipment Detail

Description

Displays the equipment details report.

Equipment evaluation

Equipment > Procurement Evaluation > Equipment Evaluations

Create records to represent potential new equipment that will be evaluated as possible replacements for existing equipment.

Equipment generation

Equipment > Equipment Configuration > Equipment Generation

Generate equipment quickly in a central location using equipment configurations. Define details for the equipment generation on all levels in the structure. Details relate to equipment attributes such as department, cost code, and the person assigned to the equipment. You can assign different attributes to the children and the parent equipment.

Equipment history drilldown

Menu Path

Equipment > Reports > Equipment History Drilldown

Description

Displays a list of work orders and activities for a specific piece of equipment. Drill down to the list of parts or labor records and reasons for repairs for each piece of equipment on the work orders and activities.

Equipment list detail-healthcare

Menu Path

Equipment > Reports > Equipment List Detail- Healthcare

Description

Print the equipment list details report for healthcare assets, medical equipment, fire and safety equipment, and utility systems.

Equipment list detail-healthcare

Menu Path

Equipment > Reports > Equipment List Detail-Healthcare

Description

Print the equipment list details report for healthcare assets, medical equipment, fire and safety equipment, and utility systems.

Equipment operational status

Equipment > Additional Features > Equipment Operational Status

The **Operational Status** screen shows equipment which have overdue preventive maintenance records, meaning maintenance that should be performed has not yet been performed.

Equipment performance by cost chart

Menu Path

Equipment > Reports > Equipment Performance by Cost Chart

Description

Displays a graph that calculates the top 10 equipment with the greatest total work order costs for the selected dates.

Equipment performance by downtime chart

Menu Path

Equipment > Reports > Equipment Performance by Downtime Chart

Description

Print the equipment performance by downtime chart.

Equipment planning report

Menu Path

Equipment > Reports > Equipment Planning

Description

Prints a linear calendar listing work orders, PMs, and maintenance patterns for specific scheduled start dates.

Equipment profile report

Menu Path

Work > Reports > Equipment Profile

Description

Print details for a piece of equipment, or a list of work orders, or PM schedules associated to the equipment.

Equipment reservations detail report

Description

Displays report of details for equipment reservations.

Menu Path

Equipment > Reports > Equipment Reservations Detail

Equipment setup

Administration > Equipment Setup

Define equipment setup options to format the module to your specifications.

eRecords setup

Administration > Security > eRecords Setup

The system allows you to create electronic records, or snapshots, of events that occur in the database. A snapshot preserves the entire record, including information related to other database tables, to provide historical information related to the progress of your operation. For example, a snapshot of a work order header will include all information on the header as well as the associated activities. The system also provides the ability to print and export snapshots to external formats such as Adobe Acrobat Portable Document Format (.PDF).

Define entities to take a snapshot of the record when you change the status of the record attached to the entity. For example, if your organization requires electronic records of the specific stages of a purchase order, you can define the snapshot for the PORD entity. The system takes the snapshot of the record.

In addition to creating electronic records of information in the database, you can set up the system to require an electronic signature to authorize status changes to specific records. The electronic signature is attached to an entity, and when a system user changes the status of a record based on specific criteria, the system prompts the user for an ID, password, and a reason for the signature (such as review, approval, responsibility, etc.).

Event Log Type Filter

Operations > Call Center > Event Log Type Filter

Define which event log types are selectable in the Event Log Type for combinations of Source (Call Center or WO), WO Type, and WO Class.

Excluding work order types for advanced maintenance planning configuration

Enter work order types for which not to generate production requests from work orders. This is a list of work order types the system will not generate into production requests.

To exclude work order types for advanced maintenance planning configuration:

1. Select **Work > Advanced Maintenance Planning > Advanced Maintenance Planning Configuration**.
2. Click the **Exclude WO Types** tab.
3. Click **Add WO Type**.
4. Specify this information:

   WO Type
   Select the work order type for which not to generate production requests from work orders.

5. Click **Submit**.

Export configuration

Administration > Setup > Export Configuration

Create an export file for KPIs, inbox items, custom fields, custom reports, copied screesn, task plans, job plans, alerts, user defined grids, and web service prompts using the export configuration feature.

Extensible framework JavaScript

Add business-specific functionality to existing screens/tabs in the product by creating custom JavaScript files.

Screen setup

Administration > Screen Configuration > Screen Setup

Set up field filters for equipment and work order types. Specify which equipment and work order (WO) types must be made available for selection for a user on related screens.

Fleet billing report

Work > Reports > Fleets > Fleet Billing Report

Description	Displays a list fleet customers and the corresponding bills for each
Parameters	Specify the **Organization**, **Fleet Customer**, and **Bill**. **Include Details** Select to include detailed billing information. **Include Custom Fields** Select to include custom fields in this report. **Print No Charge Bills** Select to print bills that have no charges. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Fleet bills

View and modify fleet bills that are generated by the billing process.

You can also view billing details for specific fleet bills. Fleet bill charges are summarized to the unique fleet customer cost code and vehicle level. Charges are displayed by the following categories: Usage, Mileage, Maintenance, Non-maintenance, Fuel, Insurance, and Exceptions. The system also displays a total charge for each bill line, a subtotal, which summarizes the charges for all bill lines by category, an adjustment line, which summarizes all adjustments entered for previous bills that are included in the selected bill, grand totals of each of the charge categories, and a total bill charge.

Next, create an adjustment to vehicle ticket charges that have already been billed. The adjustments will be reflected on the subsequent fleet bill. You can make changes to billing category amounts or

cost codes. To enter specific pool or loaner adjustments for hours charges, hours markup charges, mileage charges, and/or exceptions charges, specify the assignment adjustment amount in the corresponding field. These assignment adjustments amounts can be negative (a credit) or positive (a debit).

Finally create an adjustment to vehicle ticket charges that have already been billed. The adjustments will be reflected on the subsequent fleet bill. To correct a ticket that was billed to an incorrect cost code, enter a new **Cost Code**. To enter specific assignment adjustments for period charges, period markup charges, mileage charges, mileage markup charges, fuel markup charges, insurance charges, insurance markup charges, and/or exceptions charges, specify the assignment adjustment amount in the corresponding field. These assignment adjustments amounts can be negative (a credit) or positive (a debit).

Fleet billing codes

First, create billing codes to determine the normal fees that customers are billed for vehicle usage through the ticketing process. Together, billing codes and markup codes, when associated with specific fleet customers, determine the total rates for specific fleet billing categories.

Finally, set up rates for fleet billing codes. Specify particular rates for particular dates by setting up start dates and end dates for the rates. For example, a usage rate might fluctuate during different times of the year. Set up usage rates for usage charges, mileage rates for mileage charges, and insurance rates for insurance charges.

Fleet cost code search and replace

Work > Fleet > Fleet Cost Code Search & Replace

Replace non-billable cost codes on all fleet transactions that will be billed to a fleet customer on the next bill. Replace cost codes on transactions before bills are generated and sent to the general ledger.

First, search cost codes for non-billable cost codes that are associated with at least one fleet transaction (work order, inventory transaction, vehicle ticket, or ticket adjustment) that will be billed in the next scheduled billing period and are not currently locked for replacement by another user. Next, replace existing code values with new cost code values for the appropriate transactions.

Finally, view all errors that occurred during the cost code search and replace process.

Fleet customers

Set up fleet customers to use throughout the Fleet Management system. Set up billing details to determine the costs for which the customer is billed.

You can also associate cost codes with fleet customers to correctly display transaction costs on fleet bills.

Next, associate billing codes with fleet customers. By associating a specific billing code with a specific billing customer, you determine the rate for a specific billing category. Together billing codes and markup codes, when associated with specific fleet customers, determine the total rates for fleet billing categories such as usage and mileage.

Finally, views all previously generated bills, or view a specific billing cycle by entering a **Period End Date**. Fleet bill charges are summarized to the unique fleet customer cost code and vehicle level. Charges are displayed by the following categories: Usage, Mileage, Maintenance, Non-maintenance, Fuel, Insurance, and Exceptions. The system also displays a total charge for each bill line, a subtotal, which summarizes the charges for all bill lines by category, an adjustment line, which summarizes all adjustments entered for previous bills that are included in the selected bill, grand totals of each of the charge categories, and a total bill charge. You can also select to print bills and view current charges.

Fuel issues

Manage fuel by tracking fuel issues and receipts. View fuel transactions.

Fleet configuration

Use the **Fleet Configuration** form to personalize the vehicle ticketing, maintenance, and billing process for pool, loaner, and assignment fleets of vehicles. First, create billing parameters to configure the point at which vehicle tickets are billed. Next, set up billing schedules to determine the billing end dates for the period billing process, and create exceptions to include in bills when needed. Next, grant authorizations to specific user groups for specific vehicle types. Finally, identify fuel, maintenance, and billing categories.

Fleet vehicle tickets

First, create vehicle tickets that will track the issuing and returning of fleet vehicles from the motor pool. The motor pool is a grouping of vehicles that are either rented to employees on a short term basis (pool/loaner vehicles) or are provided as a long-term means of transportation (assignment vehicles).

You can also associate billing exceptions with vehicle tickets. For example, associate an exception code that charges customers an additional fee for low amounts of fuel in returned vehicles with the vehicle ticket.

Finally, view billing adjustments for vehicle tickets.

Fleet markup codes

First, create fleet markup codes. Markup codes are used to charges additional fees above and beyond the normal fees, such as profit margin. Together, billing codes and markup codes, when associated with specific fleet customers, determine the total rates for fleet billing categories.

Finally, set up rates for fleet markup codes. Specify particular rates for particular dates by setting up start dates and end dates for the rates. A markup can be expressed as a flat rate or a flat percentage. For example, select to mark up the cost of fuel by 20 USD (per inventory UOM) or by 50 percent. Refer to the following topics for more information on billing codes:

Fuel receipts

Manage fuel by tracking fuel issues and receipts. View fuel transactions.

Fuel

Manage fuel by tracking fuel issues and receipts. Associate fuel types to depots, tanks, and pumps. View fuel transactions.

Fuel physical inventory

Record actual quantities of tanks on a fuel physical inventory record.

GAS index analysis-hospitality

Menu Path

Administration > Reports > GAS Index Analysis-Hospitality

Description

Displays the GAS (Global Asset Sustainability) index and the energy efficiency of equipment over a selected period of time and reports how much money was spent on each commodity (electricity, gas, water, etc.) consumed by that equipment

GDPR administration

Administration > Security > GDPR Administration

Review and maintain records in compliance with the EU's Global Data Protection Regulation. Records on the GDPR Administration screen are processed nightly unless removed permanently.

GDPR Compliance - Caller

Menu Path

Work > Reports > GDPR Compliance - Caller

Description

Generate a GDPR Compliance report for a caller. Reports will include a list of all data records associated with a caller. The data records will be displayed by table and will include the primary key fields and the description field, if available,from the referenced table.

GDPR Compliance - Contact

Description

Generate a GDPR compliance report for a contact. The report will include all details for the contact including name, address, phone number, and e-mail address. The data records will be displayed by

table and will include the primary key fields and the description field, if available, from the referenced table.

Menu Path

Administration > Reports > GDPR Compliance - Contact

GDPR Compliance - Employee

Menu Path

Administration > Reports > GDPR Compliance - Employee

Description

Generate a GDPR compliance report for an employee. Report will include a list of all data records associated with an employee. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

GDPR Compliance - Supervisor

Menu Path

Administration > Reports > GDPR Compliance - Supervisor

Description

Generate a GDPR Compliance report for a supervisor. Reports will include a list of all data records associated with a supervisor. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

GDPR Compliance - User

Menu Path

Administration > Reports > GDPR Compliance - User

Description

Generate a GDPR compliance report for a user. Report will include a list of all data records associated with a user. The data records will be displayed by table and will include the primary key fields and the description field, if available, from the referenced table.

Generate enterprise search definitions

Use this screen to generate the associated interest centers and repositories.

Generate production requests

Generate production requests.

Create and edit production requests based on open work orders in Infor EAM. When production requests are approved, the system sends the request to Infor ERP so that a corresponding production order can be created. Once EAM receives the production order the system updates the request with the production order details.

Work > Process > Generate Production Requests

Generate/release WOs

Create or update multiple work orders using the Generate/Release WOs form.

The Generate/Release WOs form consists of two pages: the **Parameters** page, on which you define the selection criteria for locating the work orders to process in the batch; and the **Preview** page, on which you can preview the work orders in the batch prior to actually processing them and select or unselect the work orders to process as necessary.

You may also generate work orders for repairable spare parts to be repaired internally. If you select to generate work orders for internal repairs, the system checks to see if there is a **Qty. for Repair** for any parts in store. If a positive quantity for repair exists, the system generates a work order of **Type** Repairable Spare containing the part(s) to be repaired internally. If **Auto-Assign** and **Active** are on, the system automatically moves the part from **Qty. on Hand** to **Qty. at Shop** when the internal repair work order is generated.

GIS maps

GIS maps identify the image service when using ArcIMS or the map service when using ArcGIS Server from which the map inside Infor EAM will be based.

GIS map search (REST)

Infor EAM can be integrated with ESRI's GIS (Geographical Information System) package. If you have purchased the GIS module, you may use all of the functions within the **GIS Map Search** forms.

Geographical Information Systems are important to companies with assets spread over a large area such as local governments/schools, oil and gas companies, utilities, etc. GIS systems are widely used to show assets and non-assets spatially via maps. These maps provide a better understanding of the location of the asset of interest, directions to the asset, work history of the asset, and the surrounding area of the asset in question.

Enter the geographical search criteria to view the associated map. You can select equipment from the grid, run a filter for equipment in the grid, or use the map functions to change the map.

After performing a search, you can select a piece of equipment in the grid and then highlight the equipment's location on the map, show any related child equipment on the map, view Analytics data, view GIS attributes, create and schedule work orders for that equipment. Select multiple equipment records to create a route and route work order. You can also print the map using the corresponding GIS map icon below the map. Associate the map to a work order in an Adobe Portable Document Format (PDF) file so that the map can later be printed with the work order.

Note: The screen display and functionality depend upon your `GISSERV` and `GISGEOSV` installation parameters. `GISSERV` must be set to `REST` and `GISGEOSV` must be set to `Geocode services URL` to experience the full features of this screen which include:

- By default, the startup view for this screen is set to Record View and the map is loaded on the full screen.
- This new map feature supports only GIS 10.1 and 10.2 servers.
- This new map screen utilizes architecture available on ESRI ArcGIS 10.1 and 10.2.
- For the new screen REST services are used instead of SOAP services. The result is better performance and faster map loads.
- The GIS Attributes popup is displayed as you navigate to the equipment List View screen.
- The new map screen features a floating popup which displays the GIS Attributes and the **Action** button is now located at the bottom of the popup.
- The **Action** button is also accessible:
  - as a right-click option on the equipment grid and work order grids
  - on the List View page near the **Export To Excel** and **Save Layout** icons

Global text changes

Administration > Screen Configuration > Global Text Changes

Access the **Global Text Changes** form to change boiler text (field labels) throughout the system rather than using screen designer on each separate screen where the boiler text appears. Making global text changes creates system-wide terminology changes. Any changes made on the **Global Text Changes** form are applied to all Infor EAM forms where the specified text appears.

Note: Error messages, function titles, and code descriptions cannot be changed using the **Global Text Changes** form.

It is possible to have duplicate texts within the system. Changing one will not affect the other.

GL process

On the **GL Process** page, you can administer general ledger (GL) processes, view schedule information for running GL processes on the Integration Server, enter or update schedule information, check schedule information, and/or remove schedules.

If you are a hosted (partner server) customer, you must contact Infor hosting services to schedule running a GL process to ensure that proper resources for running the GL process are planned and allocated by Infor hosting services. Refer to the Infor Web site for more information about contacting Infor hosting services.

Greenhouse gas

Materials > Setup > Greenhouse Gases

Create greenhouse gas records to establish and monitor the relationship between greenhouse gas emissions and its carbon dioxide equivalent.

Grid designer

Administration > Setup > Grid Designer

Create a new grid or copy an existing grid and modify the grid definition. A grid can be added to the menu as a new screen or as a tab on another form.

Hazards

Hazards are workplace tasks likely to cause bodily injury such as working with fire and flammable equipment, lifting heavy objects, handling sharp objects, working near roadsides, working at heights, or working in confined spaces. Define these tasks as hazards to notify your employees of potential dangers in the workplace as they perform maintenance.

Heating and cooling degree days vs. energy costs analysis-hospitality

Menu Path

Equipment > Reports > Degree Days vs. Energy Costs-Hospitality

Description

Displays the relationship between the heating and cooling degree days and energy costs.

Degree days vs. energy consumption - hospitality

Menu Path

Equipment > Reports > Degree Days vs. Energy Consumption - Hospitality

Description

Displays the relationship between the heating and cooling degree days and energy consumption type.

Import configuration

Administration > Setup > Import Configuration

Import export files created with the Export Configuration functionality. Import files such as KPIs, custom fields, documents, and inbox items to use in another Infor EAM implementation.

Inbox codes

Administration > Start Center Setup > Inbox Setup

Set up inbox entries by identifying the notifications that you wish to be displayed in the inbox. Select a SQL statement for the entry to query the database for the appropriate information to retrieve to the inbox. Select an appropriate screen to associate with the entry. For example, select the **Work Orders** form for an inbox entry for work orders that currently require approval. Specify a Dataspy to enable the system to automatically query for the records associated with the inbox entry to the called screen. You can also designate whether the entry is accessible to all users (public), or specify the user groups for which to enable the entry.

Incident summary chart-hospitality

Menu Path

Work > Reports > Incident Summary Chart

Description

Displays a chart with calculations of the number of incidents per property that occurred per month for the current year by selected groupings.

Incident response time chart-hospitality

Description

Displays a chart with calculations of the average response time for incident requests per problem code.

Menu Path

Work > Reports > Incident Response Time Chart

Infor EAM Databridge search

An Infor EAM Databridge transaction is a business transaction, such as returning items. Enter search criteria to obtain a list of transactions. Once Infor EAM Databridge displays the transaction list, you can view transaction details, such as key fields and error messages. Additionally, you can cancel transactions

if Databridge does not process them successfully. Query for transactions in Databridge and view detailed processing information for transactions.

See the following topics for more information on Infor EAM Databridge transactions.

Install parameters

Administration > Security > Install Parameters

Define new installation parameters to tailor the system to your working environment. Set up system-wide defaults to determine settings such as whether department security is on or off or the number of days before a password expires for users. Infor EAM installation sets up default values, also known as installation codes or installation parameters. You can also modify existing installation parameters. Some installation parameters are fixed, indicated by the **Fixed** check box. You cannot update fixed parameters. Customize unfixed installation parameters to tailor the system to your working environment.

Install parameter setup

Update installation parameters as required to perform normal operations.

Note: The screen is automatically loaded when at least one install parameter is set to **SET ME**.

Isolation points

Define isolation points for equipment to later isolate the equipment from its energy sources during a lockout/tagout procedure as part of a permit to work process.

Job plans

Define tasks on a detailed level to create a job plan. Predefine labor, parts, tools, and qualifications for jobs to minimize data entry and to standardize work. A job plan can exist anywhere a task plan exists, for example a job plan can be referenced on a task plan, PM schedule, standard work order, work order, purchase requisitions, or purchase order.

Job setup

Administration > Data Collection > Job Setup

Set up predefined jobs. You can also view and modify jobs. Finally, disable jobs to stop their next scheduled executions or restart previously stopped jobs

Key list-detail report

Description

Displays a list of keys.

Menu Path

Equipment > Reports > Key List-Detail

Key management

Equipment > Additional Features > Key Management

Create keys and rings of keys for equipment. Associate locks with keys and rings of keys and track transactions of keys and rings of keys.

Key management per equipment structure report

Description

Display the keys associated with the selected equipment structure.

Menu Path

Equipment > Reports > Key Management Per Equipment Structure

Key transactions report

Description

Displays a report for transactions of keys and their associated locks for a specified period of time.

Menu Path

Equipment > Reports > Key Transactions

Kit templates list

Menu Path

Materials > Reports > Kit Template

Description

Displays a list of parts for which **Track as Kit** is selected on the parts record.

Knowledge Base Articles

Operations > Call Center > Knowledge Base Articles

Create articles within the knowledge base to help process customer requests.

Knowledge base articles

Operations > Call Center > Knowledge Base Articles

Description	Prints knowledge base articles for call center employees
Parameters	Specify the **Organization**, **Knowledge Base Article**, **Status**, **Language**, **Department**, **Provider**, **Service Category**, and **Service Problem Code**.
Report Type	Consumer

KPI codes

Administration > Start Center Setup > KPI Setup

Set up key performance indicators (KPIs) for the Start Center. For example, define a KPI to measure the number of maintenance dollars spent for a production line during a month.

Select a SQL select statement for the KPI to calculate the current value for the KPI. Select a screen for which to enable a hyperlink for the KPI, and then enter a Dataspy to enable the system to automatically query for the records associated with the KPI to the called screen. You can also designate whether the KPI is accessible to all users.

Next, define KPI structures to create parent/child relationships between KPIs. The scores for child KPIs roll up to all of the children's parents. For example, you create a parent KPI to measure the overall efficiency of a production department during a month. You associate the parent KPI with child KPIs whose scores will roll up to the score for the parent KPI. One child KPI measures the number of units that the production line produces during a month. A second child KPI measures the maintenance costs for a production line during a month.

Finally, you can view KPI history to review the results of KPI calculations. A record in KPI history is generated when the score for a KPI is calculated. Updating the KPI is optional.

KPI/Inbox usage report

Menu Path

Select **Administration > Reports > KPI/Inbox Usage**.

Description

Displays a list of KPI's and inbox codes with the associated SQL code and associated users and groups.

Labor productivity-healthcare

Menu Path

Work > Reports > Labor Productivity- Healthcare

Description

Print the labor productivity healthcare report.

Labor required per day or trade

Work > Reports > Scheduling > Labor Required Per Day or Trade

Description	Displays a list of labor required for a particular day
Parameters	Specify the **Organization**, **Trade**, and **Department**. Select one of the following sorting options: • **Per Day** Select to sort by day. • **Per Trade** Select to sort by trade. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.
Report Type	Basic

Labor required per day or trade

Description	Displays a list of labor required for a particular day
Parameters	Specify the **Organization**, **Trade**, and **Department**. Select one of the following options: • **Per Day** Select to sort by day. • **Per Trade** Select to sort by trade. Specify the **Start Date** and **End Date** for which to retrieve data. **Start Date** and **End Date** are required fields.
Report Type	Basic

Languages

Administration > Setup > Languages

Configure the system to operate in more than one language. This feature is especially useful for multinational organizations and for companies in bilingual countries, such as Belgium (French and Flemish) and Canada (English and French).

When the system is configured with two or more languages, these languages will be predefined in the system. It is possible to define extra languages. Defining other languages is useful when creating purchase orders, quotation requests, etc., for suppliers in other languages.

To accommodate multilingual transactions, add free-format text in both your own language and in the supplier's language. While you can inspect the text in your own language using the corresponding features, the text in the supplier's language will be printed on the form that will be sent to the supplier.

Linear direction setup

Define the direction in which linear references increase or decrease. For example, a linear equipment could increase from north to south, meaning the starting point is in the north and the ending point is in the south.

The selection for north and south does not mean the linear equipment must always travel north to south. This selection is only used to identify the general direction.

List of all PM schedules

Description	Displays a listing of preventive maintenance schedules
Parameters	Specify the **Organization**. **Sort By** Select one of the following options: • PM • Nesting Reference
Report Type	Consumer

List of all PM schedules

Description

Displays a listing of preventive maintenance schedules.

Menu Path

Work > Reports > Scheduling > List of All PM Schedules

Note: This is an older version of the List of all PM schedules report no longer accessible in the default menu. To access this report in the default menu, you must first rename the report, and then add it to the menu.

To rename the report, see Creating reports on page 1189.

To add the report to the menu, see Setting up menus for user groups on page 79.

Parameters

Specify the **Organization**.

Select to sort the PM schedules report by **PM** or **Nesting Reference**.

Report Type

Consumer

List of budgets (lower level)

Description	Displays budget details for a particular budget
Parameters	Specify the **Budget Structure**, **Budget Term**, **Period**, **WO Location**, **WO Location Group**, **Department**, **Department Group**, **Equipment**, **Equipment Group**, **WO Type**, **WO Type Group**, **Cost Type**, **Cost Type Group**, **Cost Code**, **Cost Code Group**, **Project**, and **Project Group**.
Report Type	Consumer

List of budgets (top level)

Description	Displays an overview of the actual amounts for a budget period

Parameters	Specify the **Budget Structure** and **Budget Term**.
Report Type	Consumer

List of budget structure codes

Description	Displays the existing budget structures and a complete list of budget codes in the system
Parameters	Specify the **Organization**.
Report Type	Consumer

List of categories per class

Equipment > Reports > List of Categories Per Class

Description	Displays a list of equipment categories per class
Parameters	Specify the **Organization**, **Class**, and **Category**.
Report Type	Consumer

List of categories per class

Menu Path

Equipment > Reports > List of Categories Per Class

Description

Displays a list of equipment categories per class.

List of classes

Menu Path

Equipment > Reports > List of Classes

Description

Displays a list of classes.

List of classes

Menu Path

Equipment > Reports > List of Classes

Description

Displays a list of classes.

List of Infor EAM codes

Menu Path

Administration > Reports > List of Infor EAM Codes

Description

Displays a list of Infor EAM entity codes.

List of debit discounts

Menu Path

Purchasing > Reports > Contracts > List of Debit Discounts

Description

Prints a list of the debit discounts to expect.

List of documents

Menu Path

Administration > Setup > Documents

Description

Displays a list of documents and their information.

List of electronic records

Menu Path

Administration > Reports > List of Electronic Records

Description

Displays a list of electronic signature records.

List of equipment

Menu Path

Equipment > Reports > List of Equipment

Description

Displays a list of equipment.

List of equipment details

Description

Displays a list of equipment details.

Menu Path

Equipment > Reports > List of Equipment Details

Note: This is an older version of the List of Equipment Details report no longer accessible in the default menu. To access this report in the default menu, you must first rename the report, and then add it to the menu.

To rename the report, see Creating reports on page 1189.

To add the report to the menu, see Setting up menus for user groups on page 79.

Parameters

Specify the **Organization**, **Type**, **Equipment**, **Status**, **Class**, **Category**, **Location**, and **Position**.

Include All Child Equipment
Select to include all child equipment on the report.

Group By
Select to group by **Type**, **Class**, **Category**, or **Department**.

Report Type

Consumer

List of equipment details

Description

Displays a list of equipment details.

Menu Path

Equipment > Reports > List of Equipment Details

List of existing contracts

Menu Path

Purchasing > Reports > Contracts > List of Existing Contracts

Description

Specify the **Organization**, **Supplier**, and **Store**.

List of expired kits

Menu Path

Materials > Reports > List of Expired Kits

Description

Displays a list of expired kits determined by the specified lot expiration date.

List of functions

Menu Path

Administration > Reports > List of Functions

Description

Displays a list of functions and their information.

List of inspection results

Menu Path

Work > Reports > Inspections > List of Inspection Results

Description

Displays the results of an inspection for a particular piece of equipment

List of invoices

Menu Path

Purchasing > Reports > List of Invoices

Description

Displays supplier invoice information.

List of kits

Menu Path

Materials > Reports > List of Kits

Description

Displays a list of kits parts determined by the **Track as Kit** checkbox on the part record.

List of nonconformities

Description

Displays a list of nonconformities.

Menu Path

Equipment > Reports > List of Nonconformities

List of outstanding requisition items

Materials > Reports > List of Outstanding Requisition Items

Description	Includes outstanding line items for requisitions where **Status** is not Cancelled
Parameters	Specify the **Organization**, **For Store**, **From Store**, **From Supplier**, **Part**, **Requisition**, **Status**, **Originator**, **Buyer**, **Quotation Indicator**, **Cost Code**, and **Task**. **Req Items on Order** Select to print requisition items that are on order. **Requisitioned Items Not Yet Ordered** Select to print requisition items that have not been ordered. **All Requisition Items** Select to print all requisition items, regardless of the order status. **Date From** **Date To** Specify the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.
Report Type	Basic

List of permit issues

Description	Displays which permits were issued for what work orders
Parameters	Specify the **Organization**, **Permit**, **Work Order**, **Equipment**, and **Type**. **Include Inactive Permits** Select to include inactive permits in the report. **Sort By** Select to sort by Equipment or Work Order. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.

Report Type	Consumer

List of permit issues

Work > Reports > Permits > List of Permit Issues

Description	Displays which permits were issued for what work orders
Parameters	Specify the **Organization**, **Permit**, **Work Order**, **Equipment**, and **Type**. **Include Inactive Permits** Select to include inactive permits in the report. **Sort By** Select to sort by Equipment or Work Order. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

List of PM schedules

Description

Displays a quick report list of PM schedules.

Menu Path

Work > Reports > List of PM Schedules

List of PM work orders report

Menu Path

Work > Reports > Scheduling > List of PM Work Orders

Description

Prints the list of maintenance work orders report.

List of points to be inspected

Menu Path

Work > Reports > Inspections > List of Points to be Inspected

Description

Displays the inspection sequences, aspects, conditions, and methods to examine during a specific route inspection. Use this report to register the results of an inspection for later data entry.

List of purchases under contract

Menu Path

Purchasing > Reports > Contracts > List of Purchases Under Contract

Description

Displays a list of open purchase order lines

List of stock

Materials > Reports > List of Stock

Description	Displays stock quantity, reorder level, reserved quantity, and quantity on order grouped by store and sorted by store, part, and part organization
Parameters	Specify the **Organization**, **Store**, **Part**, **Part Class**, and **Supplier**. **Non-consignment** Select to print non-consignment items. **Consignment Item** Select to print consignment items. **Selection Options** Select one of the following options: **All Stock** Select to print all stock records. **Stock Below Reorder Level** Select to print stock that is below the reorder level. **Stock At/Below Minimum Level** Select to print stock this is at or below the minimum level. **Stock Requiring New Order** Select to print stock requiring a new order.
Report Type	Basic

List of tampered records

Menu Path

Administration > Reports > List of Tampered Records

Description

Displays a list of records that have been altered abnormally or tampered.

List of work orders

Description

Displays a list of work orders where Status=Released.

Menu Path

Work > Reports > List of Work Orders

Note: This is an older version of the List of Work Orders report no longer accessible in the default menu. To access this report in the default menu, you must first rename the report, and then add it to the menu.

To rename the report, see Creating reports on page 1189.

To add the report to the menu, see Setting up menus for user groups on page 79.

Parameters

Specify the **Organization**, **Department**, **Equipment**, **Assigned To**, and **Priority**.

Select to group the work order report by **Department**, **Equipment**, **Assigned To**, or **Priority**.

Scheduled Start Date
Scheduled End Date
Specify the scheduled start date and end date to retrieve the data.

Report Type

Consumer

List of work orders

Description

Displays a quick report list of work orders.

Menu Path

Work > Reports > List of Work Orders

Note: The older version of the List of work orders report is no longer accessible in the default menu. This quick report has replaced it. To access the older version of this report, you must first rename the report, and then add it to the menu.

See List of work orders on page 1460.

List of WOs for project

Menu Path

Work > Reports > Projects > List of WOs for Project

Description

Displays a list of work orders created for a project.

List of WOs bypassed due to nesting

Description	Displays a list of PM work orders that were bypassed because they were superseded by another PM work order
Parameters	Specify the **Organization** and **Department**.
Report Type	Consumer

List of WOs bypassed due to nesting

Work > Reports > Scheduling > List of WOs Bypassed Due to Nesting

Description	Displays a list of PM work orders that were bypassed because they were superseded by another PM work order
Parameters	Specify the **Organization** and **Department**.
Report Type	Consumer

Locations

Equipment > Locations

Pieces of equipment are entities for which you store data and create work orders. Equipment can be of many different types, but the four main types are locations, systems, positions, and assets.

- **Locations**
  Physical locations of systems, positions, and assets. For example, a pumping system is located in Room 104.

- **Systems**
  Collections of positions and/or assets that work together so that when one part goes down, all parts are affected. For example, if a pump stops working, you must turn off the entire water line to repair it.

- **Positions**
  Functions performed by a general kind of asset. For example, the pump that moves water from one tank to another is a functional position, which can be filled by any number of actual, physical pumps (assets). Positions are also called functional positions.

- **Assets**
  Generally, physical objects. Assets are the base unit of equipment information and the smallest tracking unit for capital investments.

Locations are the top level of the equipment hierarchy and, like other equipment, can have parents and children with many sub-levels. For example, a facility can be a parent to children such as wings, floors, and levels. Locations can also mean two different things. One location can tell you a piece of equipment's physical location, e.g., the pump in Boiler Room 2. Another location can be equipment itself, e.g., Boiler Room 2. Keep in mind that equipment keeps its location until it is moved; in other words, it can only be in one place at one time.

Locations, systems, positions, and assets form a hierarchy of equipment information, with locations at the top of the hierarchy and assets at the bottom. Data is shared among the levels of the equipment hierarchy. For example, data for a work order performed on an asset is also stored in the position, system, and location equipment to which the asset belongs. This data sharing allows you to track assets and their performance in detail and under differing conditions, to evaluate the performance of entire systems, and to assess the effect that locations and positions have on systems and assets.

Define your organization's locations as equipment. Define parent/child relationships among equipment to link costs and meter readings. A physical meter is a tangible device, such as a car odometer, that measures a particular usage of a piece of equipment. Physical meters have limits on how much usage you can track before the meter resets to zero. Define physical meters in the **Meters** form.

Logical meters record the accumulative usage of a piece of equipment throughout its operational life. The meter due value of a preventive maintenance work order is always based on a logical meter. Define logical meters on the **Meters** page of the **Assets**, **Positions**, **Systems**, or **Locations** form.

Locales

Administration > Setup > Locales

Create or modify locale settings for users. The system supports the locale at the user level, organization level, and global level (installation parameter). The system automatically employs the locale of the user. If this locale is not valid, then the system uses the locale of the default organization of the user. Finally, if that locale is not valid, then the system employs the locale of the global setting.

Lockout box

Define lockout boxes for employees to safely store all the keys used for a lockout/tagout procedure. Lockout/tagout procedures are observed during the maintenance required for a permit to work.

Login

Infor EAM is a Web-architected, Internet-based application. Infor EAM can only be accessed through the Internet Explorer (version 6.0 or higher) browser. Additionally, your browser must be set up to allow cookies and enable JavaScript before accessing the Infor EAM log in page.

Follow these steps to start Infor EAM.

1. Choose **Start > Programs > Internet Explorer** from the Windows task bar. Windows opens the Internet Explorer browser window.
2. Specify this information:

   Address
   Specify the URL provided by your system administrator. Internet Explorer displays the log in page.

   User ID
   Specify your user ID.

   Password
   Specify your password.
   Note: Users can change passwords at any time.

   Periodically, the system requires that you change your password.

   To reset your password, click **Forgot Your Password**.

3. Click **Log In**. The **Start Center home** page is displayed.
   Note: To log out and return to the login page, click **LOGOUT** on the header.

   If you want to bookmark the login page as a shortcut link, you may provide the User ID in the URL http://YourServer/web/base/logindisp?userid=YourUserID. If your User ID contains a "+" symbol, then you must substitute "%2B" for the "+" symbol.

Log files

Administration > Setup > View Log Files

View and save Infor EAM log and configuration files. Saved files are copied to a specified location on the local drive.

Lots

Materials > Setup > Lots

Manufacturers often produce items in volume batches, called lots. Lots are a numeric or alphanumeric method of indicating that an item is a member of a group of items that are produced at the same time.

Define lots and view bin stock per lot. For each lot, the system displays parts contained within that lot and specifies their store and bin location.

Long term WO list

Work > Reports > Scheduling > Long Term WO List

Description	Displays a list of work orders due over a longer period of time (six months, for example) in addition to projecting PM work orders that will be coming due
Parameters	Specify the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department**, **Location**, **PM**, **Work Order**, **Project**, **Type**, **Assigned To**, and **Assigned By**. **Search MEC WOs** Select to search multiple equipment work orders. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.
Report Type	Basic

Long term work order list

Description	Displays a list of work orders due over a longer period of time (six months, for example) in addition to projecting PM work orders that will be coming due
Parameters	Specify the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department**, **Location**, **PM**, **Work Order**, **Project**, **Type**, **Assigned To**, and **Assigned By**. **Search MEC WOs** Select to search multiple equipment work orders. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.
Report Type	Basic

Maintenance patterns

A maintenance pattern is a schedule of predefined jobs used to perform a preventive maintenance cycle., A maintenance pattern tells how the system should generate work orders for the maintenance pattern, and whether the resulting PM work order generation is based primarily on a time interval (weekly, monthly, annually), or on a meter interval (ex. 3000 miles) or both.

Manufacturers

Materials > Setup > Manufacturers

Manufacturer information in Infor EAM is more than a listing of manufacturers of parts. You can associate manufacturers with parts in a concise and organized manner and attach other relevant information relating to manufacturers and parts, such as drawing numbers, manufacturer part numbers, and local part numbers. Complete supplier information on the **Supplier** form prior to defining manufacturers and parts information.

Material lists

Certain work orders always require the same materials. A material list is a predefined list of parts that may be referenced on an activity of a work order, PM schedule, or standard work order to minimize data entry and ensure consistent material planning for jobs. First, define the material list header information, and then add part line items to the material list. Material lists must contain at least one part line item.

Materials setup

Administration > Materials Setup

Define materials setup options to format the module to your specifications.

Mean time between failures

Menu Path

Equipment > Reports > Mean Time Between Failures

Description

Displays the average time between failures.

Mean time between failures per equipment

Menu Path

Equipment > Reports > Mean Time Between Failures Per Equipment

Description

Details why a piece of equipment needed work and the average time between failures.

Mechanic's workbench

The **Mechanic's Workbench** screen allows mechanics to view all work order activities and jobs that have been assigned to the mechanic for selected shift sessions for a particular day on the **Shift Scheduling** form.

Menu structure and permissions

Administration > Overview > Menu Structure and Permissions

View user group permissions such as which user groups have access to specific screens, reports, or tabs. Verify security filters assigned to applicable user groups, or find screens and/or report locations in menu structures.

Medical equipment work orders by criticality

Menu Path

Work > Reports > Medical Equipment Work Orders by Criticality

Description

Print the report detailing the work orders for medical equipment by criticality ratings. The report displays all work orders with PPM or JOB type.

Meter based PM due report

Work > Reports > Scheduling > Meter Based PM Due Report

Description	Displays a list of meter-based PMs due by a certain date

Parameters	Specify the **Organization**, **Equipment**, **PM**, **Meter UOM**, **WO Class**, and **Department**. **Sort By** Select to sort by Equipment, PM, or Estimated Due Date. **Due By** Specify the due date for which to print the report. **Due By** is a required field.
Report Type	Consumer

Meter history

Menu Path

Equipment > Reports > Meter History

Description

Displays meter information and meter readings by piece of equipment.

Meter reading

Equip > Meter Reading

Enter meter readings recorded during equipment maintenance.

Meter replacement

Equip > Meter Replacement

Replace physical meters on equipment as necessary.

Methods

Work > Inspections > Methods

Inspections involve procedures or methods. With this feature, define the method of inspecting a particular aspect of a piece of equipment.

Mobile devices

Administration > System Configuration > Mobile Devices

Device licensing will now be based on the device licensing model. Both "named" and "concurrent" licensing will no longer be used. A record identifying each device must exist in the Mobile Devices table or a connection will not be allowed.

Create mobile devices within Infor EAM using the **Mobile Devices** form. Specify a number of devices up to the amount of licenses purchased.

See the *Infor EAM Mobile Full VGA User Guide* or the *Infor EAM Mobile Quarter VGA User Guide*.

Print notebook report

Description

Print the notebook report with details about the notebook records.

Menu Path

Equipment > Reports > Print Notebook Report

Parameters

Specify the **Notebook**, **Created By**, **Equipment**, **Nonconformity Class**, **Notebook Class**, **Nonconformity Severity**, **Nonconformity Type**, **Level 1**, **Level 2 Level 3**, **Level 4**, **Start Date**, and **End Date**.

Include Reference Details
Select to include reference details in the notebook report.

Include Email Details
Select to include email details in the notebook report.

Include User Defined Fields
Select to include user defined fields in the notebook report.

Include Custom Fields
Select to include custom fields in the notebook report.

Report Type

Basic

Monitored data

Work > Inspections > Monitored Data

View equipment, locations, categories, and profiles for inspection-related details.

Enter information to establish the performance of materials in service by collecting monitored data using techniques such as probes, coupons, etc. You can also maintain data for internal and external corrosion prevention with coatings, cathodic protection, and inhibition. The system processes collected information for trend analysis, prediction of remaining life, and scheduling of the next inspection date.

Monthly usage trends

Description	Prints a report showing monthly usage trends
Parameters	Specify the **Organization**, **Store**, **Part**, and **Part Description**. **Month From** **Month To** Specify the starting and ending month for which to retrieve data.
Report Type	Consumer

Monthly part usage chart report

Menu Path

Materials > Parts > Monthly Part Usage Chart

Note: You must first select the record, and then click the Monthly Part Usage Chart tab.

Description

The monthly part usage chart shows the part usage for the current month and the previous five months.

Monthly scheduling details

Menu Path

Work > Reports > Monthly Scheduling Details

Description

Displays a row calendar showing monthly scheduling details such as scheduled employee labor, planned parts, scheduled tools, and daily employee exceptions.

Data conversion

Import MP2 data into Infor EAM, and then select how to convert the uploaded data.

Selecting options for data conversions

Infor strongly recommends a system administrator or highly-skilled employee with a significant understanding of the data being converted execute the data conversion process.

Infor recommends the following criteria is met prior to running the conversion process to ensure a successful conversion:

Criteria	Description
Set up organizations	Set up organizations in Infor EAM prior to conversion, which will allow the user to decide which data users should be able to share across multiple organizations, e.g., common codes, or if data should only be available to specific organizations. Setting up organizations in Infor EAM prior to conversion will also allow the data to be split into separate and distinct groups geared towards different geographical locations or sites that do not share transactional data. Within organizations, set up to differentiate between departments or work groups; those groups can share certain data elements that help standardize how data displays, but cannot share transactional data.
Set up one user with organization rights	Set up one user in the system as an R5 (system administrator) with organizational rights which will allow the user to view the data after conversion.
Set up work order priorities (optional)	Work order priorities in Infor EAM are displayed differently than in MP2. Examine work order priority functionality in Infor EAM prior to setting up or converting data. Set up work order priorities in Infor EAM, or choose from the default work order priorities during the conversion process. You may opt to skip the conversion of the work order priorities. Conversion of work order priorities will only impact the work order priority field on tasks. Historical or open transactional data will not be affected by the conversion of work order priorities.
Set up equipment criticalities (optional)	Set up equipment criticalities in Infor EAM. Equipment criticalities are known as equipment priorities in MP2. If you decide not to set up equipment criticalities in Infor EAM prior to conversion, you may set up these equipment criticalities at a later date, choose from the default equipment criticalities during conversion, or select to skip converting equipment criticalities.
Set up work order types (optional)	Set up work order types prior to the conversion process to determine whether to use the same work order types as used in MP2 or to customize new work order types for Infor EAM. If you choose not to set up work order types prior to conversion, you may use the default values during the conversion process, set up the work order types at a later date, or skip converting work order types.

Criteria	Description
Set up user groups (optional)	Set up user groups within Infor EAM. The conversion process will then map the basic security levels for users in MP2 to users in Infor EAM. The user group mapping does not set up group security. However, if user groups are not initially set up, all users will be set up as R5 with system administrator rights. This may be changed after conversion.

MP2 conversion options - step 1 of 13

Select a destination organization for each Source Site. Destination organization represents all of the organizations set up by the user in Infor EAM. It is important to note that this list will not display common organizations.

Source Site represents the MP2 sites in the current upload.

Note: Selecting the same organization for all MP2 sites allows the option, in Step 2, to put data in that organization, or you may select to put the data in a common organization that may be shared by multiple organizations as more organizations are created in the system. This feature also allows the sites to operate in one geographical location within Infor EAM.

Selecting different organizations in this step for the MP2 sites only allows certain data to be converted into a common organization because that data has to be shared, e.g., Cost Centers and Crafts, and would have to remain shared in Infor EAM.

MP2 conversion options - step 2 of 13

All of the source areas shown in this step are always shared by multiple sites in MP2. For example, you could not have a cost center associated to a particular site in MP2. All sites would see the cost center, using the basic MP2 security. In Infor EAM, these areas can be shared with all organizations (as in MP2), or users can have different lists of source areas per organization.

If in Step 1 only one destination organization was selected for all of the MP2 sites displayed, users will have the following two options for each area:

- The organization you chose in Step 1, so that only the one organization will see the list in case a second organization comes into the system at a later time.
- A common organization. It is similar to the MP2 concept where these areas can be shared by multiple organizations so that users can standardize on their nomenclature for these areas and have a master list from which everyone chooses.

If in Step 1 there are multiple destination organizations chosen, then all of the areas will only have a common organization to choose from for the destination organization.

MP2 conversion options - step 3 of 13

Select to convert up to all 30 MP2 user-defined fields into Infor EAM. The system will create the field in Infor EAM and convert the respective data from MP2. Rename the user-defined fields once they are converted because the conversion process will not convert any field name changes.

MP2 conversion options - step 4 of 13

Select the destination organization in Infor EAM for which the MP2 warehouse will service. In MP2, warehouses had one primary site for which it could perform transactions; however, the warehouse could perform transactions for other sites displayed in MP2 Inventory Setup.

In Infor EAM, storerooms (warehouses) are tied to one organization and can only perform transactions for the specific organization.

If you select to skip conversion of any MP2 warehouse into Infor EAM, the system will convert the inventory record associated with the specific MP2 warehouse, but will not convert the details (e.g., quantities on hand) of the warehouse inventory record.

MP2 conversion options - step 5 of 13

Select to convert MP2 employees into the Infor EAM common organization, or select to convert MP2 employees into a specific organization in Infor EAM based upon the employee's MP2 Site ID. In MP2, an employee assigned to Site 1 could perform work (work order) in Site 1, Site 2, Site 3, etc. To mimic this behavior in Infor EAM, select to convert MP2 employees into the Infor EAM common organization so that the employees are available.

By selecting to convert the employees based on their MP2 Site ID, the system will convert the employees into the Infor EAM organization chosen for the MP2 Site in Step 1.

MP2 conversion options - step 6 of 13

MP2 locations are combinations of four unique fields.

MP2 examples

MP2 Location=WEST CAMPUS MP2 Sub-Location 1=BLDG1 MP2 Sub-Location 2=FLOOR3 MP2 Sub-Location 3=ROOM306	AND	MP2 Location=WEST CAMPUS MP2 Sub-Location 1=BLDG1 MP2 Sub-Location 2=FLOOR2 MP2 Sub-Location 3=ROOM205

MP2 Location and MP2 Sub-Location 1 for each of these examples are exactly the same. However, if you examine the entire combination of four fields, you will see they are completely different. One is room 306 on the 3rd floor and the other is room 205 on the 2nd floor.

In Infor EAM, you may have only one field displayed at a time, while in MP2 screens displayed all 4 fields, e.g., WEST CAMPUS and BLDG1 would be displayed separately on the Infor EAM screens. This is sufficient if you are constructing your Infor EAM hierarchy from scratch; however, MP2 fields must be unique when converting. Here is an example of how to make the one 30 character field unique:

Infor EAM example

WEST CAMPUS-BLDG1-ROOM306

WEST CAMPUS-BLDG1-ROOM205

There are 25 characters in the example. This is less than the 30 character maximum in Infor EAM. MP2 Sub-Location 2 has been taken out, but users may still find the proper location.

If you chose this setup your grid would look like this:

Table 6:

Prefix	Field	Start Position	Length	Suffix
<blank>	Location	1	11	-
<blank>	MP2 Sub-location 1	1	5	-
<blank>	MP2 Sub-location 3	1	7	

This would guarantee field lengths covered at least the largest location and was still less than 30 characters. The system will cut off all data at the maximum length specified.

You may also use the prefix option to convert MP2 Sub-locations 1's. Here is an example:

Prefix	Field	Start Position	Length	Suffix
GVILLE				-
<blank>	MP2 Sub-location 1	1	5	

This would be the end result:

GVILLE-BLDG1

GVILLE-BLDG2

MP2 conversion options - step 7 of 13

MP2 vendors are a combination of two unique fields. For example, in MP2 you could have:

MP2 Vendor=GRAINGER	AND	MP2 Vendor=GRAINGER
MP2 Vendor Branch=GREENVILLE		MP2 Vendor Branch=ATLANTA

In Infor EAM, you may have one field displayed, e.g., GRAINGER would be displayed only once.

Here is an example of how to make the one 30 character field unique:

GRAINGER-GREENVILLE

The total character length is 19. This example works for vendors and vendor branches whose character lengths don't exceed 14. You may separate the values by '-' and still get in the full length of vendors.

The setup would look like this in the grid:

Prefix	Field	Start Position	Length	Suffix
<blank>	MP2 Vendor	1	14	-
<blank>	MP2 Vendor Branch 1	1	14	

Another option is to only have the MP2 Vendor column converted and to remove the MP2 Vendor Branch identification. By choosing to do this, the system will take the first MP2 Vendor record and bring over the detailed information such as address, payment terms, etc. and then not bring over the detailed information for the second MP2 Vendor with the same ID but different MP2 Vendor Branch. This selection would still keep the part/supplier information in tact. Here is an example:

Prefix	Field	Start Position	Length	Suffix
<blank>	MP2 Vendor	1	15	

In this example, two vendors would come over as one:

GRAINGER

MP2 conversion options - step 8 of 13

MP2 tasks are a unique combination of the 15 character site field and the 20 character task field. Contrastingly, in Infor EAM there is one 20-character PM schedule or standard work order field that does not use the Infor EAM organization as part of the primary key. All MP2 tasks that have equipment will become PM schedules and all MP2 tasks that do not have equipment will become standard work orders. For example:

Table 7: MP2 example

MP2 Site=GREENVILLE MP2 Task=3M-OILCHANGE	AND	MP2 Site=ATLANTA MP2 Task=3M-OILCHANGE

In Infor EAM you may only have one field that can have the same PM schedule value when converting the Task IDs from MP2. Here is an example:

GRE-3M-OILCHANGE

ATL-3M-OILCHANGE

The characters are both less than the 20 character maximum of Infor EAM. In this example, the values of both fields were merged and separated by a '-'. If in your tasks list there are not any tasks and site combinations exceeding the 20 character maximum, you may still separate the values by a '-' and enter the full length of tasks IDs. Here is an example:

Prefix	Field	Start Position	Length	Suffix
<blank>	MP2 Site	1	3	-
<blank>	MP2 Task	1	16	

This would guarantee field lengths covered at least the largest site/task combination and was still less than 30 characters. The system will cut off all data at the maximum length specified.

You may also select to only convert MP2 Tasks if you are certain no duplicate task ID exists in another site. If a duplicate Task exists, the second record will process as an error in the conversion process. This error can be corrected and reprocessed. Here is an example of converting Tasks only:

Prefix	Field	Start Position	Length	Suffix
<blank>	MP2 Task	1	20	

MP2 conversion options - step 9 of 13

Indicate how to convert MP2 equipment meters into Infor EAM.

MP2 and Infor EAM meter naming functionality differs. MP2 allows the same meter name for multiple pieces of equipment; however, Infor EAM requires that equipment have a unique 20 character meter name. Here are examples from both MP2 and Infor EAM.

Table 8: MP2 example

Equipment=FORKLIFT1 MP2 Meter Name=HOUR	AND	Equipment=BOILER1 MP2 Meter Name=HOUR

In Infor EAM, a unique meter ID is required to allow features such as meter roll down and meter replacement. Here is an example of what you may do for the conversion into Infor EAM:

Infor EAM Example

Meter Name=FORKLIFT1-HOUR

Meter Name=BOILER1-HOUR

The characters are both less than the 20 character maximum of Infor EAM. In this example, the values of both fields were merged and separated by a '-'. If in your equipment and meters list there are not any equipment and meter combinations exceeding the 20 character maximum, you may still separate the values by a '-' and enter the full length of meters. Here is an example:

Prefix	Field	Start Position	Length	Suffix
<blank>	Equipment	1	14	-
<blank>	Meter	1	5	

This would guarantee field lengths covered at least the largest equipment/meter combination and was still less than 30 characters. The system will cut off all data at the maximum length specified.

Another option is to sequentially generate meter names, which would give the meter names a unique code with a beginning sequential number that you choose.

MP2 conversion options - step 10 of 13

Select a destination group in Infor EAM to convert the MP2 roles. The selected group will replace the MP2 role when the users and the site role assignments are converted. Only user groups created in Infor EAM are displayed.

If you select to skip the role conversion process, R5 (system administrator) rights are assigned to all users that are converted. The users will be placed into the R5 User Group in Infor EAM, and may be modified after the conversion process. During the conversion, only site role assignments will be converted. MP2 purchasing center or warehouse role assignments are not converted.

MP2 conversion options - step 11 of 13

Select how to convert MP2 work order priorities. The conversion will only affect the work order priorities of the converted tasks. In Infor EAM, the work order priority field is a field in which users select from a valid priority.

The grid displays the number of work order priorities that exist in Infor EAM. Once the work order priorities are displayed in the grid, the MP2 range of priorities can be set up in order to convert them into the proper Infor EAM priority.

MP2 priorities cannot overlap or users will receive an error. The system does allow gaps in numbering or a blank row in the grid. The priority field is not required in Infor EAM; therefore, MP2 work order priorities are not required to be mapped.

Here is an example of six work order priorities in Infor EAM:

Source Low Value	Source High Value	Destination Priority	Description
1.00	1.99	1	Affects health and safety
2.00	2.99	2	Affects output immediately
3.00	3.99	3	Affects output within 24 hours
4.00	4.99	4	Does not affect output immediately; spare exists
5.00	5.99	5	Does not affect process/effect is minor
6.00	9999.99	6	Non-vital equipment

If you follow this example, no work order priority in MP2 will be excluded in the conversion process. No MP2 work order priority can be less than 1.00, and by setting the source high value to 9999.99 on the last number, the conversion process will convert any work order priority greater than 6.00, and will fall into the 6 work order priority in Infor EAM.

MP2 conversion options - step 12 of 13

Select how to convert MP2 equipment criticalities into Infor EAM. In Infor EAM, the equipment criticality field is a field in which users must select from a valid criticality.

The grid displays the number of equipment criticalities that exist in Infor EAM. Once the equipment criticalities are displayed in the grid, the MP2 range of equipment criticalities can be set up in order to convert them into the proper Infor EAM equipment criticality.

MP2 equipment criticalities cannot overlap or users will receive an error. The system does allow gaps in numbering or a blank row in the grid. The equipment criticality field is not required in Infor EAM; therefore, MP2 equipment criticalities are not required to be mapped.

Here is an example of six equipment criticalities in Infor EAM:

Source Low Value	Source High Value	Destination Criticality	Description
1.00	1.99	1	Emergency/Immediate
2.00	2.99	2	Urgent/Less than 24 hours
3.00	3.99	3	Required within 24-48 hours
4.00	4.99	4	Required within one week
5.00	5.99	5	Required within one month
6.00	9999.99	6	Required at first opportunity or shutdown

If you follow this example, no equipment criticality in MP2 will be excluded in the conversion process. No MP2 equipment criticality can be less than 1.00, and by setting the source high value to 9999.99 on the last number, the conversion process will convert any equipment criticality greater than 6.00, and will fall into the 6 equipment criticality in Infor EAM.

MP2 conversion options - step 13 of 13

Destination Work Order Type in Infor EAM will replace the Source Work Order Type from MP2 during the work order type conversion process. All MP2 tasks that have equipment assigned without a work order type will be converted as Preventive Maintenance. All MP2 tasks that have no equipment assigned without a work order type will be converted as Breakdown.

Setting up work order types in Infor EAM provides a better understanding of the term 'system code' and how different work order types behave within Infor EAM. For example, if you set up a work order type with a system code of PM, then the system will only display this work order type when creating PM Schedules in Infor EAM. The system will not display this work order type when simply creating work orders in Infor EAM.

This step also provides an opportunity to convert multiple MP2 work order types into a single Infor EAM work order type to help clean up data.

If you select to skip the work order type conversion process, or skip conversion of a work order type that is on an MP2 task, the system will convert all MP2 tasks and assign the work order types as stated above.

MP2 inventory transactions

View historical MP2 data that was uploaded into the Infor EAM system. Historical MP2 data includes work requests, work orders, purchasing, quotations, SPM readings, meter readings, and inventory transactions.

To view MP2 history:

1. Select **Administration > MP2 History > MP2 Work Orders**.

   Select **Administration > MP2 History > MP2 Work Requests**.

   Select **Administration > MP2 History > MP2 Purchasing**.

   Select **Administration > MP2 History > MP2 Quotations**.

   Select **Administration > MP2 History > MP2 Inventory Transactions**.

   Select **Administration > MP2 History > MP2 Meter Readings**.

   Select **Administration > MP2 History > MP2 SPM Readings**.

2. Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy. The system applies the Dataspy to the list view.

   See Dataspy on page 328 for more information.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields, and then click **Run**.

   See Defining Quick Filters on Lookups on page 317 for more information about entering search parameters.

3. View the MP2 history.

MP2 meter readings

Administration > MP2 History

View historical MP2 data that was uploaded into the Infor EAM system. Historical MP2 data includes work requests, work orders, purchasing, quotations, SPM readings, meter readings, and inventory transactions.

To view MP2 meter readings:

1. Select **Administration > MP2 History > MP2 Work Orders**.

   Select **Administration > MP2 History > MP2 Work Requests**.

   Select **Administration > MP2 History > MP2 Purchasing**.

   Select **Administration > MP2 History > MP2 Quotations**.

Select **Administration > MP2 History > MP2 Inventory Transactions**.

Select **Administration > MP2 History > MP2 Meter Readings**.

Select **Administration > MP2 History > MP2 SPM Readings**.

2 Choose one of the following options:

Dataspy
Select an existing Dataspy or edit an existing Dataspy. The system applies the Dataspy to the list view.

See Dataspy on page 328.

Quick Filter
Define a quick filter to filter the list of records in the lookup based on the key fields, and then click **Run**.

See Defining quick filters on lookups on page 317.

3 View the MP2 history.

MP2 purchasing

Administration > MP2 History

View historical MP2 data that was uploaded into the Infor EAM system. Historical MP2 data includes work requests, work orders, purchasing, quotations, SPM readings, meter readings, and inventory transactions.

To view MP2 purchasing history:

1 Select **Administration > MP2 History > MP2 Work Orders**.

Select **Administration > MP2 History > MP2 Work Requests**.

Select **Administration > MP2 History > MP2 Purchasing**.

Select **Administration > MP2 History > MP2 Quotations**.

Select **Administration > MP2 History > MP2 Inventory Transactions**.

Select **Administration > MP2 History > MP2 Meter Readings**.

Select **Administration > MP2 History > MP2 SPM Readings**.

2 Choose one of the following options:

Dataspy
Select an existing Dataspy or edit an existing Dataspy. The system applies the Dataspy to the list view.

See Dataspy on page 328.

Quick Filter
Define a quick filter to filter the list of records in the lookup based on the key fields, and then click **Run**.

See Defining quick filters on lookups on page 317.

3 View the MP2 history.

MP2 quotations

Administration > MP2 History

View historical MP2 data that was uploaded into the Infor EAM system. Historical MP2 data includes work requests, work orders, purchasing, quotations, SPM readings, meter readings, and inventory transactions.

To view MP2 quotations history:

1 Select **Administration > MP2 History > MP2 Work Orders**.

Select **Administration > MP2 History > MP2 Work Requests**.

Select **Administration > MP2 History > MP2 Purchasing**.

Select **Administration > MP2 History > MP2 Quotations**.

Select **Administration > MP2 History > MP2 Inventory Transactions**.

Select **Administration > MP2 History > MP2 Meter Readings**.

Select **Administration > MP2 History > MP2 SPM Readings**.

2 Choose one of the following options:

Dataspy
Select an existing Dataspy or edit an existing Dataspy.

See Dataspy on page 328.

Quick Filter
Define a quick filter to filter the list of records in the lookup based on the key fields, and then click **Run**.

See Defining quick filters on lookups on page 317.

3 View the MP2 history.

MP2 SPM readings

View historical MP2 data that was uploaded into the Infor EAM system. Historical MP2 data includes work requests, work orders, purchasing, quotations, SPM readings, meter readings, and inventory transactions.

Follow these steps to view MP2 history.

1 Open the MP2 Work Orders, MP2 Work Requests, MP2 Purchasing, MP2 Quotations, MP2 Inventory Transactions, MP2 Meter Readings, or MP2 SPM Readings form. The system displays the **List View** page.
2 Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy. The system applies the Dataspy to the list view.

   See Dataspy on page 328.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields, and then click **Run**. The system displays MP2 data records.

   See Defining Quick Filters on Lookups on page 317.

3 View the MP2 history.

MP2 work orders

Administration > MP2 History

View historical MP2 data that was uploaded into the Infor EAM system. Historical MP2 data includes work requests, work orders, purchasing, quotations, SPM readings, meter readings, and inventory transactions.

To view MP2 work orders history:

1 Select **Administration > MP2 History > MP2 Work Orders**.

   Select **Administration > MP2 History > MP2 Work Requests**.

   Select **Administration > MP2 History > MP2 Purchasing**.

   Select **Administration > MP2 History > MP2 Quotations**.

   Select **Administration > MP2 History > MP2 Inventory Transactions**.

   Select **Administration > MP2 History > MP2 Meter Readings**.

   Select **Administration > MP2 History > MP2 SPM Readings**.
2 Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.

   See Dataspy on page 328.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields, and then click **Run**.

   See Defining quick filters on lookups on page 317.

3 View the MP2 work orders history.

MP2 work requests

Administration > MP2 History

View historical MP2 data that was uploaded into the Infor EAM system. Historical MP2 data includes work requests, work orders, purchasing, quotations, SPM readings, meter readings, and inventory transactions.

To view MP2 work requests history:

1 Select **Administration > MP2 History > MP2 Work Orders**.
   Select **Administration > MP2 History > MP2 Work Requests**.
   Select **Administration > MP2 History > MP2 Purchasing**.
   Select **Administration > MP2 History > MP2 Quotations**.
   Select **Administration > MP2 History > MP2 Inventory Transactions**.
   Select **Administration > MP2 History > MP2 Meter Readings**.
   Select **Administration > MP2 History > MP2 SPM Readings**.
2 Choose one of the following options:

   Dataspy
   Select an existing Dataspy or edit an existing Dataspy.
   See Dataspy on page 328.

   Quick Filter
   Define a quick filter to filter the list of records in the lookup based on the key fields, and then click **Run**.
   See Defining quick filters on lookups on page 317.

3 View the MP2 work requests history.

Multi-org security

Administration > Security > Multi-org Security

Multi-organization security (MOS) is a feature that allows the system administrator to set up separate, secured, logical databases within the organization. There is one logical database for each organization; however, there is still one physical system database. To activate MOS, you must set the MULTIORG installation parameter to YES. After activating MOS, you cannot deactivate it. Depending on the type of security set up, the system does not allow users to view or influence data from organizations to which they do not belong.

With MOS, the system becomes more user-driven, rather than user-group driven, making it possible for users to have different roles. Associate users with more than one organization and establish a default organization for that user. The system automatically displays the user's default organization at login, which can be changed to any organization to which the user has access. To switch organizations after login, simply log out and log back in as the new organization. After logging in to a specific organization, users can view and influence data specific to all the organizations to which they have access and all information defined as common, which is information accessible across all organizations and users.

When inserting new records, the system automatically associates the record to the organization of the current login session; however, users can change the organization to any organization to which they have access.

Using multi-organization security (MOS), establish record-level security for system forms depending on the organization of the record. To utilize record-level security for a form, first activate MOS capability for the entity associated with each function.

My account

Change your e-mail address, system language, and login password as necessary.

Nonconformities

The nonconformities screen allows you to collect and track nonconformities or issues with equipment. Each nonconformity can have multiple observations. You can track the development of these nonconformities, create work orders for nonconformities, and associate checklists with nonconformities.

On the **Condition Score Matrix Setup** screen you can define any combination of **Severity**, **Intensity**, **Size**, and**Importance** and associate a **Condition Score**, **Condition Score Index**, and **Next Inspection Date**. This matrix is used to determine a **Condition Score**, **Condition Score Index**, and **Next Inspection Date** of a nonconformity.

Nonconformities analysis chart

Description

The nonconformity analysis chart displays a breakdown of nonconformities by severity, intensity, importance, or condition index.

Menu Path

- **Equipment > Assets**
- **Equipment > Positions**
- **Equipment > Systems**

Select the **Nonconformities Analysis** tab.

Nonconformities setup

Define settings for nonconformities and nonconformity observations to control synchronization, status changes, and merge restrictions.

On the **Status Dependencies** tab you can create and maintain observation status codes and their effect on the nonconformity header status. You can specify that if the observation of a nonconformity is updated to a specific status, then the nonconformity header record is also updated to a specific status.

Nonconformity observations

Create observations for nonconformities in order to track their development over time. Create observations for new nonconformities on the Nonconformities screen or create new observations for existing nonconformities on the Nonconformities Observations screen.

Nonconformity types

The **Nonconformity Types** screen is used to define types of nonconformities used with the nonconformity screens. Examples include rot, corrosion, and leaks.

Nonconformity types can be associated with material types, parts, and EMRS. Nonconformity types marked as General can be used for any equipment.

Notebook

Equipment > Notebook

Enter notes and details about defects for equipment. You can specify specific notes, nonconformity details, physical location details, and user defined fields. You can also attach a photo, take a photo or video, and record a voice memo.

Select **Private** to make the notebook record editable only by the user who created it.

You can also add references and email transactions to notebook records on the **References** and **Emails** tabs..

Objectives

Equipment > Additional Features > Asset Management Policy > Objectives

Define your organization's tactical initiatives as objectives. Tactical initiatives are short-term goals that help an organization achieve its strategic, long-term goals. The expected results and when the results are expected will be specifically stated.

For example, an objective can be to reduce electrical consumption at the Greenville, SC facility by 10 percent in fiscal year 2014. You can select energy as the target type and consumption as the target sub-type. Another example is to reduce hazardous waste at the Greenville, SC facility by 15 percent in fiscal year 2013. You can select waste as the target type and hazardous as the target sub-type.

OEE metrics report

Menu Path

Equipment > Assets > OEE Metrics

Equipment > Positions > OEE Metrics

Equipment > Systems > OEE Metrics

Note: You must first select the record, and then click the OEE Metrics tab.

Description

The OEE metrics report shows the overall efficiency of equipment based on the availability, performance, and quality of the equipment.

Open service requests report

Description

Displays the service requests with an **Open** status.

Menu Path

Operations > Reports > Call Center > Open Service Requests

Open service requests report

Description

Displays the service requests with an **Open** status.

Menu Path

Operations > Reports > Call Center > Open Service Requests

Operator checklist

View and create checklist results for equipment on this form without going to the **Checklist** tab of the **Work Order** form.

Organizations

Administration > Security > Organizations

Define organizations within your enterprise. You can also edit organizations as necessary.

Finally, create fiscal years to indicate the fiscal periods on which to base asset depreciation. After defining fiscal years, you can update them as necessary. However, updating an existing fiscal year can invalidate records associated with equipment for which unit of output is the depreciation method.

Add options for organizations which function much like installation parameters.

Overdue vehicle issues/returns list report

Menu Path

Work > Reports > Overdue Vehicle Issue/Return List

Description

Displays all overdue vehicle rentals including vehicle issues and returns for customer rental contracts. Vehicles are considered overdue when they remain unreturned by the customer after the specified return date and time on the rental contract, or the vehicle has not been issued by the specified rental date and time on the rental contract.

Overview

Operations > Overview

Customize the Overview screen by adding widgets to populate data important to you for quick access. Once widgets are added, drag and drop the widgets to move them around on the screen. View and modify the layout as desired.

Partners

Administration > Databridge > Databridge Partners

On the **Partners** form, you can configure the partners of your Infor EAM Databridge network to enable communication between the Databridge application server and the partner server(s). You can also set up subscriptions for the partner to indicate the outbound transactions/documents that the partner uses.

Penalty deduction detail

Menu Path

Operations > Reports > Call Center > Penalty Deduction Detail

Description

Displays penalty deduction details for work orders.

Penalty deduction summary

Menu Path

Operations > Reports > Call Center > Penalty Deduction Summary

Description

Displays a penalty deduction summary for equipment.

Permit to work

Create and promote a safe work environment for your employees by defining permits to work. The permit to work details the hazards and precautions required to remove or prevent a potential hazard to your employee's safety.

An efficient permit to work includes:

- Details of potential hazards
- Details of the precautions to take to prevent potential hazards
- Any required lockout/tagout operations

Infor EAM Databridge partner job schedules

Administration > Databridge > Databridge Partner Job Schedules

Schedule and monitor Infor EAM Databridge partner jobs on the **Infor EAM Databridge Partner Job Schedules** page. A partner job is a process of running a customized java class plugged intoDatabridge, to prepare data to be sent to Databridge or to further process data received from Databridge to comply with various integration requirements. You can use this feature to create an execution schedule for a partner job.

Part condition template

Materials > Setup > Part Condition Templates

Define part condition templates when your organization reuses parts and needs to track the parts by their condition. Part condition templates define which conditions you can use to track parts. You can track parts throughout their life cycle. For example, the part condition can be new, used, rebuilt less than five times, or rebuilt more than five times.

When creating parts, **Tracked by Condition** must be selected. When a part is tracked by condition, the system creates a child record for each condition that is added to the part condition template.

Part warranty claims

Materials > Part Warranty Claims

Create a part warranty claim to submit claims for parts and manage associated claim settlements.

Permit to work setup

Define permit to work setup options to format the maximum initial duration, maximum number of extensions, and the maximum extension duration of a permit to work.

PM completion for life support equipment

Menu Path

Work > Reports > PM Completion Report for Life Support Equipment

Description

Print the report detailing the PM completion for life support equipment. The report displays all work orders with PPM type.

PM repair costs chart

Menu Path

Equipment > Assets > PM Repair Costs Chart

Note: You may also access this report on the **PM Repair Costs Chart** tab of the **Positions** and **Systems** forms.

Description

Prints the PM work order repair costs chart report.

PM due overview report

Menu Path

Work > Reports > Scheduling > PM Due Overview

Description

Prints the PM due overview report.

Precautions

Define precautions employees will observe to safeguard workers from potential hazards in the workplace such as working with fire and flammable equipment, lifting heavy objects, handling sharp objects, working near roadsides, or working at heights.

Print contract

Menu Path

Purchasing > Reports > Contracts > Print Contracts

Description

Prints a copy of the contract.

Print customer contract

Menu Path

Work > Reports > Customer Contract

Description

Includes details on customer contracts and revisions.

Print hospitality work orders

Menu Path

Work > Reports > Print Work Orders

Description

Includes details on equipment tracking, compliance, activities, and booked labor hours.

Print permit to work

Menu Path

Work > Reports > Print Permit to Work

Description

Report displays a list of all permits to work with **Status** of Approved or Active. Includes all comments for safety records and lockout/tagout records, user defined fields, lockout/tagout tags, and hazard rating system information.

Printers

Administration > Setup > Printers

Set up printers.

Databridge processes

Administration > Databridge > GL Process Schedules

Administer general ledger (GL) processes to view schedule information for running GL processes on the Integration Server, enter or update schedule information, check schedule information, and/or remove schedules.

If you are a hosted (partner server) customer, you must contact Infor hosting services to schedule running a GL process to ensure that proper resources for running the GL process are planned and allocated by Infor hosting services. Refer to the Infor web site for more information about contacting Infor hosting.

Proof of delivery

Menu Path

Work > Reports > Proof of Delivery

Description

Displays proof that a work order was delivered or performed.

Properties

Work > Service Request > Properties

Define property code-structures for service requests that reflect actual property-building-floor/unit hierarchies.

When defining property code-structure combinations for service requests, you must first define a level one property before you can create lower levels. For example, you must insert a record for Property A before inserting a record for Property A Building 1.

Providers

Operations > Call Center > Providers

Create providers to facilitate knowledge base searches, process customer requests and comments, and to provide additional levels of reporting for a department.

PO history

View the purchase order histories of purchase orders using the **PO History** form. The **PO History** form enables you to select a specific purchase order and view the purchase order history for the current revision and all previous revisions of the purchase order. The **PO History** form displays the same information and includes the same tabs as the **Purchase Orders** form.

PO terms

Purchasing > Setup > PO Terms

Define purchase order terms to use in purchase order activities. Various suppliers might have different types of purchase terms. The system has five predefined types of purchase order terms. You can also edit purchase order terms as necessary.

Point types

Work > Inspections > Point Types

Inspection point types are groups of similar inspection points. Associating inspection points with point types simplifies data entry and analysis by standardizing descriptions.

Print PO

Menu Path

Purchasing > Reports > Print PO

Description

Includes a purchase order header and both part and service line items. By default, the report selects the current revision of purchase orders with a status of "Ready for printing" or "Approved" and those that do not have "Printed" selected. Print purchase orders that do not have a status of "Ready for Printing" or "Approved," or those that already have "Printed" selected by specifying a purchase order number on the parameter form.

POs awaiting invoicing

Menu Path

Purchasing > Reports > POs Awaiting Invoicing

Description

Displays a list of purchase orders for goods that have been received but not yet invoiced. The report includes the related requisition and purchase order numbers, the part or service ordered, the outstanding quantity, the unit of measure for the items, and the order price per unit for goods or services.

PO status

Menu Path

Purchasing > Reports > PO Status

Description

Displays a list of purchase order information including cost and receipt information with optional totals.

PO cost summary

Menu Path

Purchasing > Reports > PO Cost Summary

Description

Displays cost information for purchase orders.

Project budget code cost summary

Menu

Work > Reports > Projects > Project Budget Code Cost Summary

Description

Displays a summary of project costs by budget code.

Project budgets

Work > Projects > Project Budgets

Define budget codes to be associated with projects. Designate default budget codes.

Projects

Work > Projects > Projects

Define special projects in addition to the work defined in the work management and asset management modules. Examples of special projects are painting a room or building a new production line. Break large projects down into more manageable subprojects, and assign individual work orders to each step. You can also set up budget requirements and monitor costs for projects. Charge work orders and purchase orders against projects. The system displays actual costs, committed costs, and planned costs, eliminating guesswork.

Project cost breakdown

Menu Path

Work > Reports > Projects > Project Cost Breakdown

Description

Displays an overview of cost per project per budget.

Project cost summary

Menu Path

Work > Reports > Projects > Project Cost Summary

Description

Displays a summary of estimated, planned, ordered, actual, and total cost per project.

Project POs

Menu Path

Work > Reports > Projects > Project POs

Description

Displays a summarized list of purchase orders created to procure materials and external services.

Project budget code cost summary

Menu Path

Work > Reports > Projects > Project Budget Code Cost Summary

Description

Displays a summary of project costs by budget code.

Pricing variance

Menu Path

Purchasing > Reports > Price Variance

Description

Displays a list of purchase orders where discrepancies exist between the purchase order and the invoice

Print purchase order

Purchasing > Reports > Print PO

Description	Includes a purchase order header and both part and service line items. By default, the report selects the current revision of purchase orders with a status of "Ready for printing" or "Approved" and those that do not have "Printed" selected. Print purchase orders that do not have a status of "Ready for Printing" or "Approved," or those that already have "Printed" selected by specifying a purchase order number on the parameter form.
Parameters	Specify the **Organization**, **Store Organization**, **Purchase Order**, and **Buyer**. **Print Attachments** Select to print document attachments associated with purchase orders in addition to the purchase order. **Include All Revisions** Select to include all revisions to the purchase order. **Show Internal Part#** Select to include the internal part number. **Include Cost Code** Select to include the cost code. **Reprint** Select to print purchase orders that have been printed previously. The system prints only the requisition total in Euro currency. **Date** Specify the order date for which to retrieve data.
Report Type	Basic

Purchase history per PO/supplier

Menu Path

Purchasing > Reports > Purchase History Per PO/Supplier

Description

Displays all purchase orders for a given supplier.

Purchase orders

Purchasing > Purchase Orders

Create and revise purchase orders. The purchase order creation process has several steps. First, create the purchase order header and then add line items for parts and services. At this stage, you can also adjust part charges, associate clauses, create work orders and activities from service lines, and associate assets for parts tracked by asset. Next, change the status to Ready for printing to print the purchase order for approval. Finally, approve the purchase order and send it to the supplier. To change the status of a purchase order, enter a new status on the **Record View** page of the **Purchase Orders** form.

Purchasing contract text

Purchasing > Contracts > Purchasing Contract Text

Purchasing contract text contains basic, predefined information about the contract. Create or edit text to appear on the printed purchasing contract on the **Purchasing Contract Text** form.

Purchasing clauses

Purchasing > Setup > Purchasing Clauses

Define purchasing clauses to create a list of legal agreements. Attach purchasing clauses to contract classes, purchase orders, or blanket purchase orders. Use the International Standards Organization (ISO) purchasing clauses predefined in the system, or define purchasing clauses to suit your organization's needs. You can also edit purchasing clauses after creating them as necessary. Finally, you can create hierarchies with a general purchasing clause as a parent and more specific purchasing clauses set up as children.

Purchasing contracts

Purchasing > Contracts > Purchasing Contracts Purchasing Contracts detail agreements with specific suppliers for certain parts.

On the **Purchasing Contracts** form, you can assign parts, define discounts for those parts, and define order discounts for each purchasing contract you create.

Purchasing setup

Administration > Purchasing Setup

Define purchasing setup options to format the module to your specifications.

Print work order

Description

Includes work order details, task listing, diagnostics, repair details, and related equipment information.

Parameters

Specify the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Type**, **Equipment**, **Location**, **Priority**, **WO Type**, **Trade**, **Project**, **Equipment Criticality**, **Status**, **Customer**, **Property**, **Building**, **Floor/Unit**, **Assigned To**, **Scheduling Group**, and **Person Responsible**.

Scheduled Date Range
Select to print work orders based on the **Target Date**.

Reprint
Select to print work orders that have been printed previously.

Include Child Work Orders
Select to print child work orders on the work order card.

Work Order Custom Felds
Select to print custom fields added for work orders on the work order card.

Equipment Custom Fields
Select to print custom fields added for equipment on the work order card.

Print Attachments
Select to print document attachments associated with work orders in addition to the work order card.

You can only print document attachments that are Adobe Acrobat Portable Document Format (.PDF) files.

By responsible person
Select to group report data by the person responsible.

Start Date
End Date
Specify the starting and ending date for which to retrieve data.

Report type

Basic

Print work order - comprehensive

Menu Path

Work > Reports > Print Work Orders > Print Work Order - Comprehensive

Description

Includes comprehensive work order details, task listing, diagnostics, repair details, and related equipment information.

Permits for work orders

Menu Path

Work > Reports > Permits > Permits for WOs

Description

Displays copies of work permits for a particular work order.

Parameters

Specify the **Organization**, **Permit Reference**, **Permit**, and **Work Order**.

Report Type

Consumer

Print customer contract

Work > Reports > Asset Management Services > Print Customer Contract

Description	Prints a contract for a specific customer
Parameters	Specify the **Organization**, **Customer Contract**, and **Customer**. **Pricing Schedules** Select to display pricing schedules on the report. **Arranged WO Types** Select to display arranged work order types. **Custom Tariffs/Part Charges** Select to display custom tariffs and part charges if **Custom Trade Rates** and **Custom Part Charges** are selected on the related Pricing Schedule Record View page. **Related Customer Contracts** Select to display unfinished/approved related customer contracts on the report. **Fixed Payments** Select to display fixed payments on the report. **Calculated Work Orders** Select to display calculated work orders on report.
Report Type	Consumer

Print customer charges

Work > Reports > Asset Management > Print Customer Charges

Description	Displays a list of work order charges that are the responsibility of the customer

Parameters	Specify the **Organization**, **Work Order**, **Customer**, **Department**, **Equipment**, and **Project**. **Completed Work Orders** Select to include completed work orders only. **Released Work Orders** Select to include released work orders only. **Both** Select to include completed and released work orders. **Completed From** **Completed To** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Print invoice

Work > Reports > Asset Management Services > Print Invoice

Description	Prints an invoice for a specific customer and work order
Parameters	Specify the **Organization**, **Invoice**, **Customer**, **Work Order**, and **Status**.
Report Type	Consumer

Print healthcare work orders

Menu Path

Work > Reports > Print Work Orders Healthcare

Description

Includes details on equipment tracking, compliance, activities, and booked labor hours.

Permits for WOs

Work > Reports > Permits > Permits for WOs

Description	Displays copies of work permits for a particular work order
Parameters	Specify the **Organization**, **Permit Reference**, **Permit**, and **Work Order**.
Report Type	Consumer

Part failures

Work > Reports > Part Failures

Description	Displays the percentage of parts that failed versus parts that were issued. Data for this report comes from failures listed on the **Part Failures** page and the **Parts** page of the **Work Orders** form.
Parameters	Specify the **Organization**, **Part**, **Asset ID**, **Problem Code**, **Failure Code**, **Action Code**, and **Cause Code**. **Date From** **Date To** Specify the starting and ending dates for which to retrieve data.
Report Type	Consumer

PM compliance

Menu Path

Work > Reports > PM Compliance

Description

Includes compliance details for PM work orders.

PM forecasting

Work > WO Planning > PM Forecasting

Description	Displays a printed representation of a PM forecasting session similar to what is displayed on the actual PM Forecasting form
Parameters	None
Report Type	Basic

PM schedule profile report

Menu Path

Work > Reports > Scheduling > PM Schedule Profile

Description

Displays a list of PM schedule details and activity information along with optional task instructions and route information.

PM work packages

Work > WO Planning > PM Work Packages

A PM work package consists of PM work orders of the same period that have been grouped together under a single umbrella work order. PM work packages function similarly to batch processes, and they can be released together at the same time.

Part number history

Materials > Overview > Part Number History

View the history of modifications for part numbers.

Print reliability survey report

Menu Path

Equipment > Reports > Print Reliability Survey

Description

Print the reliability survey report.

Print maintenance pattern report

Menu Path

Work > Reports > Print Maintenance Pattern

Description

Print a maintenance pattern record

PO updates

Purchasing > Process > PO Update

Update purchase order details in a batch.

Print Flex business rules list

Menu Path

Select **Administration > Reports > Print Flex Business Rules List**.

Description

Print a Flex business rules list report.

Print build kit list

Menu Path

Materials > Reports > Print Build Kit List

Description

Includes details on kit parts and kits built.

Print kit restock list

Menu Path

Materials > Kits > Breakup Kit

Description

Includes details on the parts held for restocking once a kit is broken up and parts are to be returned to stock.

Print kit restock list

Menu Path

Materials > Kits > Breakup Kit

Description

Includes details on the parts held for restocking once a kit is broken up and parts are to be returned to stock.

Print work order

Description

Includes work order details, task listing, diagnostics, repair details, and related equipment information.

Parameters

Specify the **Organization**, **Work Order**, **Department**, **PM Schedule**, **Type**, **Equipment**, **Location**, **Priority**, **WO Type**, **Trade**, **Project**, **Equipment Criticality**, **Status**, **Customer**, **Property**, **Building**, **Floor/Unit**, **Assigned To**, **Scheduling Group**, and **Person Responsible**.

Scheduled Date Range
Select to print work orders based on the **Target Date**.

Reprint
Select to print work orders that have been printed previously.

Include Child Work Orders
Select to print child work orders on the work order card.

Work Order Custom Felds
Select to print custom fields added for work orders on the work order card.

Equipment Custom Fields
Select to print custom fields added for equipment on the work order card.

Print Attachments
Select to print document attachments associated with work orders in addition to the work order card.

You can only print document attachments that are Adobe Acrobat Portable Document Format (.PDF) files.

By responsible person
Select to group report data by the person responsible.

Start Date
End Date
Specify the starting and ending date for which to retrieve data.

Report type

Basic

Policies

Equipment > Additional Features > Asset Management Policy > Policies

Define your organization's corporate initiatives as policies. For example, a policy can be a corporate initiative to improve energy performance.

Service Request portal login

Using the URL provided, log in the application using your customer user ID in **Caller ID**, and optionally your **Portal ID**.

Click **Log In**.

Note: Click **Guest Entry** to log in as a guest.

Print work order-healthcare

Menu Path

Work > Reports > Print Work Order-Healthcare

Description

Includes details on equipment tracking, compliance, activities, and booked labor hours.

Print asset inventory list

Menu Path

Equipment > Reports > Print Asset Inventory List

Description

Print a list of asset inventory to compare the system physical location of the asset with the actual physical location of the asset. Define the parameters for the asset inventory on the **Parameters** tab which specifies counting criteria, and then perform the actual count manually or using a handheld device.

Project summary chart

Menu Path

Work > Projects > Project Summary Chart

Description

Displays a chart of costs associated with projects.

Note: You must select a project for which to generate the report, and then click the **Project Summary Chart** tab.

Part stockouts report

Menu Path

Material > Reports > Part Stockouts

Description

Print a list of stockouts (R5STOCKOUTS) for parts.

Queries

Administration > Start Center Setup > Queries

Define queries using existing Infor EAM data or SQL statements. Use SQL statements to define complex validation queries or validation queries to multiple system tables.

Reliability calculations

Menu Path

Equipment > Assets > Reliability Calculations

Description

Print the reliability calculations chart.

Note: You may also access this report on the **Reliability Calculations** tab of the **Positions** form.

QR codes setup

Generate QR codes for multiple uses. QR code is an abbreviation of Quick Response Code. It resembles black squares arranged in a square grid on a white background. The image is read by an imaging device such as a camera, and links users to a specific URL. QR codes can be used for document management, asset or product tracking, item identification, and various other uses.

RCM equipment at risk report

Menu Path

Equipment > Reports > RCM Equipment At Risk Report

Description

This report shows assets that have a certain minimum risk level and do not have preventative maintenance planned.

RCM potential yearly savings report

Menu Path

Equipment > Reports > RCM Potential Yearly Savings

Description

Print the RCM potential yearly savings report.

RCM risk levels report

Menu Path

Equipment > Reports > RCM Risk Levels

Description

The RCM (Reliability Centered Maintenance) Risk Levels report shows the output of a RCM risk assessment or risk analysis. The report includes risk matrix set-up records where **Type** is Risk Level.

Reliability growth

Menu Path

Equipment > Assets > Reliability Growth Equipment > Systems > Reliability Growth

Equipment > Positions > Reliability Growth

Description

Print the reliability growth chart.

Request discount based on purchases

Menu Path

Purchasing > Reports > Contracts > Request Discount Based on Purchases

Description

Prints a request to a supplier for the discount based on the purchase orders in the contract period.

Regions

Administration > Setup > Regions

Create and update region codes for tracking degree days.

Report organization structure

Operational Area > Facility > Campus > State > Country > Continent > Worldwide

Create an organizational tree-structure to roll up reporting on performance statistics, energy consumption, and resource utilization. Define an organizational structure by which you control the roll-up of energy consumption. For example, the reporting structure might roll up like this:

Reports

Administration > Setup > Reports

Define new parameters for existing reports, modify parameters for existing reports, or create entirely new reports.

Reservation calendar

Equipment > Additional Features > Reservation Calendar

Create and modify equpiment reservations using the reservation calendar. You can double-click on the calendar or click and drag to create an equipment reservation for a certain period of time.

You can specify defaults for the reservation calendar on the **Reservation Calendar** tab of the **Screen Setup** screen.

Response time by department report

Description

Displays department response time to work orders.

Menu Path

Work > Reports > Response Time By Department

Review reservation requests

Work > Contract Management > Review Reservation Requests

View a list of reservation requests ready for approval and then either accept or reject the reservation request.

Review operator checklist

Review and complete checklist results for equipment on this form without going to the **Checklist** tab of the **Work Order** form.

Ring list-detail report

Description

Displays a list of key rings.

Menu Path

Equipment > Reports > Ring List-Detail

Risk matrix report

Menu Path

Equipment > Reports > Risk Matrix

Description

View the risk matrix report for records where Type is equal to Consequence Category.

Risk matrix setup

Equipment > Setup > Risk Matrix Setup

Define consequence categories, probabilities, and risk levels for the risk matrix.

Roles

Administration > Security > Role Setup

Define roles to serve as templates for Lightweight Directory Access Protocols (LDAP) that can store hierarchical data definitions across platforms. LDAP is most often used to store user credentials across many applications. Create LDAP roles for automatic user creation.

Route inspections

Inspect > Route Inspection

Enter the work order/route combination record for a work order, and then enter the results. Perform the inspection after completing the data setup for inspections and after creating work orders for the routes.

Note: If you take action upon equipment identified as a **`Safety`** piece of equipment, the system displays a confirmation message asking whether you wish to continue.

Safety review required

Menu Path

Work > Reports > Safety Review Required.

Description

Displays a list of all safety, permits to work, and lockout/tagout records where **Safety Review Required** is selected for PM schedules, equipment, parts, and standard work orders. The report retrieves the records that have not been previously reviewed.

Screen designer

Modify the page layout of record view, detail view, and list-detail view pages. You can move fields, modify the display type of fields, and rename field labels.

Contact your system administrator for information on Screen Designer.

Screens

Administration > Screen Configuration > Screens

Create new screens or modify existing screens by associating icons with screens setting background-printing parameters for reports, changing text, defining custom tabs, and associating Dataspies and users.

Service categories

Operations > Call Center > Service Categories

Create service categories to facilitate knowledge base searches, process customer requests and comments, and to provide additional levels of reporting for a department.

Service Problem Codes

Operations > Call Center > Service Problem Codes

Create service problem codes to identify requests, concerns, or problems that customers frequently experience. Associate GIS map layers with service problem codes to filter the equipment search on the GIS map.

Service requests

Create service requests when tenants call in to request maintenance. Use the search bar to quickly locate information associated with the caller. If the caller record does not exist, you may quickly create a new caller record. If a caller record does exist, you may edit the caller's information and then enter service request details. Next, assign personnel to complete work required for a particular service request. Once you choose to assign personnel, the system generates a work order for which you may assign one or multiple activities. You may view the work order details on the **Work Order Details** page.

To close a service request, the service request to close must be open and associated with an open work order to which personnel is assigned. Closing a service request will also close the work order to which it is associated. Additionally, you must have sufficient system privileges to close both the service request and work order. You may close service requests on the **Closing** page of the **Service Requests** form, or you may book employee time for service requests and close service requests concurrently on the Book & Close page of the **Service Requests** form.

You may also book hours, issue or return parts, enter additional charges, and create a service request log entry for service requests on the **Service Requests** form.

Service requests by department report

Description

Displays service request information by the departments handling the service request.

Menu Path

Operations > Reports > Call Center > Service Requests by Department

Service requests report

Description

Displays service request details regardless of status.

Menu Path

Work > Reports > Call Center > Service Requests

Service requests by service category report

Description

Displays the service requests associated with a specific service category.

Menu Path

Operations > Reports > Call Center > Service Request By Service Category

Service requests by service code

Description

Displays service requests report by service codes.

Operations > Reports > Call Center > Service Requests by Service Code

Service requests by service code report

Description

Displays service requests report by service codes.

Operations > Reports > Call Center > Service Requests by Service Code

Service requests by type report

Description

Displays a bar chart of the service requests by specific type.

Menu Path

Operations > Reports > Call Center > Service Requests by Type

Service requests by status report

Description

Displays a chart representation of service requests by status.

Menu Path

Operations > Call Center > Reports > Service Requests By Status

Service request overview report

Description

Displays a graph report of the total service requests for a specific organization, including graph, pie, bar, and area charts of the open service requests, service requests by type, service requests by status, service requests by service code, service requests by service category, service requests by department, and service request status summary by type.

Menu Path

Operations > Reports > Call Center > Service Request Overview

Service request overview report

Description

Displays a graph report of the total service requests for a specific organization, including graph, pie, bar, and area charts of the open service requests, service requests by type, service requests by status, service requests by service code, service requests by service category, service requests by department, and service request status summary by type.

Menu Path

Operations > Reports > Call Center > Service Request Overview

Service request portal

Access the service request portal to create a new service request to request maintenance on a piece of equipment or a location. Alternately, update open service requests when a work order or case is not already associated to the service request, or view existing service requests.

Service request status summary by type report

Description

Displays a bar chart graph of summaries of service request statuses by type when the type is selected on the bar chart.

Menu Path

Operations > Reports > Call Center > Service Request Status Summary by Type

Sets and consists

Equipment > Sets/Consists

A set is a group of equipment, such as train cars, that are physically attached each other. Each piece of equipment, has a position in that Set, which is the Set Position. A consist is one or more sets of these equipment, such as a fully functional train. Each piece of equipment has a position within the Consist, which is the Consist Position.

Infor EAM Databridge Setup

Infor EAM Databridge Setup enables you to view, change, or update settings on both the Databridge Server and/or theDatabridge Partner Server on the **System Setup** page, and then load the modified settings as necessary.

The current Databridge server settings are automatically retrieved when you open the **System Setup** page. You can modify this information as necessary; however, you cannot insert any new records.

Short customer invoice

Menu Path

Work > Reports > Short Customer Invoice

Description

Includes short details on customer invoices.

Note: The report does not include details such as charge categories, subcategories, charge levels, and adjustments.

Start Center

Administration > Start Center Setup

View inbox entries and KPIs on the **Start Center** page. You can also personalize and refresh the inbox and KPIs.

Standard work order frequency report

Menu Path

Work > Reports > Scheduling > Standard WO Frequency

Description

Displays the frequency of standard work orders.

Status change authorizations

Administration > Security > Status Authorizations

Users have different levels of authority within the system. For example, a manager might have authority to approve purchase requisitions. A planner might have authority to cancel a work order. A project manager might have authority to freeze a project.

Set up authorization levels for entity status values when records for the entity are created or when their status is modified. Set authorization levels for user groups or individual users.

System codes

Entities are the fundamental core of the system. Configuration of entities and their respective codes determines what functions of the system are available and to which users. An entity is a table of related data pertaining to specific system functions.

There are three kinds of entities in the system: Status Entities, Type Entities, and Code Entities. The system identifies entities as Extended Codes, but they are identified to users as User Codes. When you install Infor EAM, all Infor EAM Codes and User Codes are identical. Tailor the system to an organization by adding new user codes on the **System Codes** form.

Classes divide entities into groups that share certain characteristics. For example, you can subdivide an entity into classes to define a separate list of custom attributes for each class.

Define system codes to tailor the system to the entity. System codes allow you to define your own business processes, that is create the steps for work order administration. The number of steps you create may be fewer than the ones created by the system codes at installation. You can also edit existing user codes.

Top 10 call center requests report

Menu Path

Operations > Reports > Call Center > Top 10 Call Center Requests

Description

Displays a pie chart representing the top 10 most commonly occurring service problem codes requested in the call center.

Top 10 breakdowns report

Menu Path

Equipment > Assets > Top 10 Breakdowns

Equipment > Positions > Top 10 Breakdowns

Equipment > Systems > Top 10 Breakdowns

Description

Displays a pie chart representing the top 10 most commonly occurring work order types requested for selected equipment.

Message ID

Administration > Databridge > Databridge Message Status

On the **Message ID** page, you can query for messages using search parameters and view the status of messages processed by Infor EAM Databridge. Search for outbound transactions, enter search criteria to search for specific transactions, view transaction details such as key fields and error messages, and to retry messages that were not processed correctly.

Infor EAM Databridge outbound events

On the Databridge Outbound Events form, you can enter search criteria to obtain a list of outbound transactions. View transaction details, such as key fields and error messages. Additionally, you can cancel transactions if Databridge does not process them successfully.

Conditions

Work > Inspections > Conditions

Inspection conditions are restrictions on inspections. The conditions differ with different equipment. For example, check the brake system of a vehicle only when it is stationary with the wheels removed. For other equipment, the weather or the temperature might restrict an inspection.

The system includes, on the work order printout, any conditions that must be met prior to the inspection.

Findings

Work > Inspections > Findings

Define codes that represent the results of an inspection. All of the codes defined on this form represent qualitative findings, not quantitative results. For example, a qualitative finding of a pipe inspection is "The pipe is leaking".

Associate one or more equipment classes with a specific inspection finding. For example, associate tire tread wear results with vehicle classes (four door sedans, two door sedans, vans, etc.).

You can also assign equipment classes to a finding on the **Class** page. The **Classes** page displays a list of equipment classes assigned to a particular finding. A finding may have multiple equipment class assignments, if it is not a general finding, which by default applies to all equipment classes.

For example, equipment with a class of HVAC may have different findings than equipment with a class of MOTOR. When you enter inspection results for a piece of equipment with a class of HVAC, only the

general findings and those assigned specifically to the HVAC class will appear in **Finding** on any inspection result entry form.

Formulas

Work > Inspections > Formulas

Define generic formulas to establish any calculation that produces a minimum or maximum critical value for an inspection point aspect combination or any calculation with entered monitored data, and then identify where the system executes those formulas. First, define the actual formula, and then define parameters used within the formula. The system calculates formulas with SQL statements defined for the parameters used in the formula.

After defining formulas, associate parameters used within the formulas.

Status of inspection points

Menu Path

Work > Reports > Inspections > Status of Inspection Points

Description

Displays a list of inspection points and their statuses.

Inspection route report

Menu Path

Work > Reports > Inspections > Inspection Route Report

Description

Displays the inspection sequences, aspects, conditions, and methods to examine during a specific route inspection. Use this report to register the results of an inspection for later data entry.

Shutdowns

Work > Projects > Shutdowns

Your organization may have equipment that can only be serviced when it is completely out of service or shut down. Define shutdown codes, and then define equipment to service during shutdowns. A shutdown can represent either a part of the facility or a type of shutdown to be performed.

Associate standard work orders and specific equipment with the shutdown identification codes. For example, create a shutdown identification code for each station within your facility, and then associate each piece of equipment in the station with that identification code.

Table of equipment with custom fields

Equipment > Reports > Table of Equipment with Custom Fields

Description	Displays a table of the technical details of equipment
Parameters	Specify the **Organization**, **Type**, **Equipment**, **Description**, **Class**, **Category**, **Location**, **Custom Field**, **Value**, **Text**, and **Department**.
Report Type	Consumer

Meters

Equipment > Setup > Meters

A physical meter is a tangible device, such as a car odometer, that measures a particular usage of a piece of equipment. Physical meters have limits on how much usage you can track before the meter resets to zero. Define physical meters in the **Meters** form.

Logical meters record the accumulative usage of a piece of equipment throughout its operational life. In Infor EAM, the meter due value of a preventive maintenance work order is always based on a logical meter. Use logical meters to monitor equipment usage. Plan preventive maintenance in response to logical meter levels. Define logical meters on the **Meters** page of the Assets, Positions, Systems, or Locations form.

Positions

Equipment > Positions

Pieces of equipment are entities for which you store data and create work orders. Equipment can be of many different types, but the four main types are locations, systems, positions, and assets.

- **Locations**
  Physical locations of systems, positions, and assets. For example, a pumping system is located in Room 104.

- **Systems**
  Collections of positions and/or assets that work together so that when one part goes down, all parts are affected. For example, if a pump stops working, you must turn off the entire water line to repair it.

- **Positions**
  Functions performed by a general kind of asset. For example, the pump that moves water from one tank to another is a functional position, which can be filled by any number of actual, physical pumps (assets). Positions are also called functional positions.

- **Assets**
  Generally, physical objects. Assets are the base unit of equipment information and the smallest tracking unit for capital investments.

Locations, systems, positions, and assets form a hierarchy of equipment information, with locations at the top of the hierarchy and assets at the bottom. Data is shared among the levels of the equipment hierarchy. For example, data for a work order performed on an asset is also stored in the position, system, and location equipment to which the asset belongs. This data sharing allows you to track assets and their performance in detail and under differing conditions, to evaluate the performance of entire systems, and to assess the effect that locations and positions have on systems and assets.

Define your organization's positions as equipment. Define parent/child relationships among equipment to link costs and meter readings. A physical meter is a tangible device, such as a car odometer, that measures a particular usage of a piece of equipment. Physical meters have limits on how much usage you can track before the meter resets to zero. Define physical meters in the **Meters** form.

Logical meters record the accumulative usage of a piece of equipment throughout its operational life. The meter due value of a preventive maintenance work order is always based on a logical meter. Use logical meters to monitor asset usage. Plan preventive maintenance in response to logical meter levels. Define logical meters on the **Meters** page of the **Assets**, **Positions**, **Systems**, or **Locations** form.

Associate warranty documents with specific pieces of equipment or with other equipment. Define warranty terms based on equipment usage or by date. When necessary, create warranty claims, and then enter settlement details for the claim in Infor EAM. View and modify the list of PM schedules for equipment (assets, positions, or systems) on the **PM Schedules** tab of the respective Equipment form.

Systems

Equipment > Systems

Pieces of equipment are entities for which you store data and create work orders. Equipment can be of many different types, but the four main types are locations, systems, positions, and assets.

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  Physical locations of systems, positions, and assets. For example, a pumping system is located in Room 104.

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  Collections of positions and/or assets that work together so that when one part goes down, all parts are affected. For example, if a pump stops working, you must turn off the entire water line to repair it.

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  Functions performed by a general kind of asset. For example, the pump that moves water from one tank to another is a functional position, which can be filled by any number of actual, physical pumps (assets). Positions are also called functional positions.

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  Generally, physical objects. Assets are the base unit of equipment information and the smallest tracking unit for capital investments.

Locations, systems, positions, and assets form a hierarchy of equipment information, with locations at the top of the hierarchy and assets at the bottom. Data is shared among the levels of the equipment hierarchy. For example, data for a work order performed on an asset is also stored in the position, system, and location equipment to which the asset belongs. This data sharing allows you to track assets and their performance in detail and under differing conditions, to evaluate the performance of entire systems, and to assess the effect that locations and positions have on systems and assets.

Define your organization's systems as equipment. Define parent/child relationships among equipment to link costs and meter readings. A physical meter is a tangible device, such as a car odometer, that measures a particular usage of a piece of equipment. Physical meters have limits on how much usage you can track before the meter resets to zero. Define physical meters in the **Meters** form.

Logical meters record the accumulative usage of a piece of equipment throughout its operational life. The meter due value of a preventive maintenance work order is always based on a logical meter. Use logical meters to monitor asset usage. Plan preventive maintenance in response to logical meter levels. Define logical meters on the **Meters** page of the **Assets**, **Positions**, **Systems**, or **Locations** form.

Associate warranty documents with specific pieces of equipment or with other equipment. Define warranty terms based on equipment usage or by date. When necessary, create warranty claims, and then enter settlement details for the claim in Infor EAM. View and modify the list of PM schedules for equipment (assets, positions, or systems) on the **PM Schedules** tab of the respective **Equipment** form.

Blanket order list

Purchasing > Reports > Blanket Order List

Description	Prints a list of approved blanket orders and blanket order lines that includes the blanket order header and blanket order lines
Parameters	Specify the **Organization**, **Supplier**, **Blanket Order**, **For Store**, and **Class**. **Comments** Select to print comments on the report. **Release Information** Select to include release information on the report. **Terms/Clauses** Select to include terms and clauses information on the report. **Custom Fields** Select to print custom fields on the report. **Approvers** Select to print information about the authorized approvers on the report. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Blanket orders

Purchasing > Blanket Orders

Use blanket orders to order a fixed number of items for a predetermined price or over a specific period of time. First, create blanket order headers, and then add line items. You can generate purchase orders from a blanket order, associate clauses with blanket orders, and set up user authorization for blanket order releases. When satisfied with the blanket order, approve the blanket order by changing the status to Approved. You must have authorization to create or update blanket orders; you must be a buyer for your organization with sufficient purchasing limit permissions to create blanket orders.

Calibration equipment

Menu Path

Equipment > Reports > Calibration Equipment

Description

Displays a list of all equipment that requires calibration and has been configured for calibration. The report includes all equipment that is defined as a loop, instrument, or standard if any one of these requires calibration. Standards are either parts tracked by asset or parts tracked by lot. The system only prints part standards that are tracked by asset, because you do not have to associate a piece of equipment with parts tracked by lot.

The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), such as SYS1/SYS2/SYS3.

Additionally, if the equipment tolerance is a percentage rather than an absolute, the system designates the tolerance as a percentage by printing a percent sign (%) following the devices to and from tolerance.

Calibration history

Menu Path

Equipment > Reports > Calibration History

Description

Displays a list of calibration work order results for calibration work orders for which the completion date falls within the specified start and end date. The results shown for each work order will be related to test points having the greatest deviation from the standard.

The **System** field in the report output displays all of the systems above the selected System/Equipment in an equipment hierarchy. If the selected System/Equipment has more than one parent in a hierarchy, the system displays each parent and separates each code with a forward slash (/), such as SYS1/SYS2/SYS3.

Additionally, if more than one standard is used for the work order, the system prints each standard and its due date or lot expiration date on a separate line.

Capital performance evaluation

Menu Path

Equipment > Reports > Capital Performance Evaluation-Hospitality

Description

Displays for the selected equipment the outstanding capital request values for the selected period and for the future period and, if applicable, the gas index for the equipment. This report also displays the correlation between the gas index and the capital request.

Child equipment

Equipment > Process > Child Equipment Replacement

Replace child equipment record in the equipment hierarchy with another child equipment record.

CO2 emissions

Menu Path

Equipment > Reports > CO2 Emissions

Description

A report which displays equipment (in graphical form) in best and worst order based on CO2 emissions for the selected year and compares the data with the previous two years.

Credit card numbers

Purchasing > Setup > Credit Cards

Define credit cards for use as payment on purchase orders. You may also define users authorized to charge purchase orders to a specific credit card.

Equipment depreciation

Menu Path

Equipment > Reports > Equipment Depreciation

Description

Displays a report of the total equipment depreciation expense and book value through the **End Date**.

Depending on the selection criteria entered, the system includes all equipment records with a depreciation schedule of the selected **Depreciation Type** for which an **Original Cost** is specified that does not have a **Transfer Date**.

If a piece of equipment is sold/scrapped, the system determines whether the **Sold/Scrapped Date** is prior to the report **End Date**. If so, then the system displays the depreciation expense for the equipment through the **Sold/Scrapped Date** and a **Book Value** of zero.

If you specify a future date as the **End Date** for the report, the system generates a report of the actual depreciation expense/book value through the current system date, as well as the projected depreciation expense/book value through the specified **End Date**.

If the depreciation method for a piece of equipment is units of output, the system generates a report of the most recent depreciation expense/book value that is presently available based on the current system date and units of output entered.

Equipment hierarchies

Menu Path

Equipment > Reports > Equipment Hierarchies

Description

Displays a list of equipment hierarchies.

Equipment history

Menu Path

Equipment > Reports > Equipment History

Description

Details the date and reason work was performed on a piece of equipment or an equipment type.

Fault-trend analysis

Menu Path

Equipment > Reports > Fault Trend Analysis

Description

Details how often a piece of equipment failed and why.

Gas index analysis

Menu Path

Administration > Reports > GAS Index Analysis

Description

Displays the gas index and the energy efficiency of equipment over a selected period of time and reports how much money was spent on each commodity, such as electricity, gas, water, etc., consumed by that equipment

Warranty claims

Menu Path

Equipment > Reports > Warranty Claims

Descriptioin

Displays a list of claims filed against an equipment warranty.

WO cost by equipment

Menu Path

Equipment > Reports > WO Cost by Equipment

Description

Includes a list of work order costs per piece of equipment.

WO cost by type, cost code, or dept

Menu Path

Equipment > Reports > WO Cost by Type, Cost Code, or Dept

Description

Includes a list of work order costs by work order type, cost code, or department.

WO cost summary

Menu Path

Equipment > Reports > WO Cost Summary

Description

Includes itemized and total cost information (labor, materials, services, and tool costs) by equipment for open and closed work orders

WO cost of equipment per location

Menu Path

Equipment > Reports > WO Cost of Equipment Per Location

Description

Displays a list of equipment costs per location.

Cost of WOs per equipment

Menu Path

Equipment > Reports > Cost of WOs Per Equipment

Description

Displays a list of work order costs per piece of equipment.

Table of equipment with custom fields

Equipment > Reports > Table of Equipment with Custom Fields

Description	Displays a table of the technical details of equipment
Parameters	Specify the **Organization**, **Type**, **Equipment**, **Description**, **Class**, **Category**, **Location**, **Custom Field**, **Value**, **Text**, and **Department**.
Report Type	Consumer

Equipment details

Equip > Equipment Details

View equipment information, including assets, positions, systems, and locations, using the equipment function. The Equipment List View page displays all equipment records within the organizations for which you have access permission.

Note: You can also create work orders from the Equipment form by clicking **Create Work Order**.

Equipment transfer log

Menu Path

Equipment > Reports > Equipment Transfer Log

Description

Displays an overview of transferred equipment. If the transferred equipment has any child equipment, the system also prints an overview of the child equipment.

WO cost summary graph

Menu Path

Work > Reports > WO Cost Summary Graph

Description

Displays a graph showing itemized and totaled cost information, such as labor, materials, services, and tool costs, by equipment (and related child equipment) for open and closed work orders.

Clauses of contract classes

Purchasing > Contracts > Clauses of Contract Classes

Modify, add, and delete lists of purchasing clauses for an existing contract class.

Invoice allocations

Purchasing > Invoice Allocations

Book invoice allocations to assign costs to work order invoice vouchers and invoice voucher lines.

Invoice lines per buyer

Purchasing > Overview > Invoice Lines per Buyer

View invoice voucher line item information.

Invoice vouchers

Purchasing > Invoice Vouchers

Record invoice vouchers received from suppliers to verify invoices against purchase order-lines and received quantities. Create credit and debit notes to apply credits to invoices and inventory. Create non-purchase order invoice vouchers to record invoices for items or services received without associated purchase orders.

Regular invoice vouchers are used to create a record of a supplier's bill. Creating invoice vouchers creates a business process by which suppliers are paid for parts and services.

You can also create and edit costs for the invoice voucher header. The **Invoice Voucher** form applies costs to specific invoice voucher lines; the **Costs** page applies costs to the invoice voucher header.

Quotations

Purchasing > Quotes > Quotations

The system automatically creates a quotation record when a quotation is received via an RFQ and the RFQ header status is changed to Sent to Supplier. Update the record details as long as the quotation is in the status of Unfinished.

Requests for quotations

Purchasing > Quotes > Requests for Quotations

Requests for quotations (RFQs) are records of parts and services that are presented to suppliers to solicit bids on pricing. Define request for quotation information before submitting requests to suppliers.

Blanket order list

Menu Path

Purchasing > Reports > Blanket Order List

Description

Prints a list of approved blanket orders and blanket order lines that includes the blanket order header and blanket order lines.

Approved POs awaiting delivery

Menu Path

Purchasing > Reports > Approved POs Awaiting Delivery

Description

Displays a list of purchase orders that have been issued to suppliers but for which goods have not yet been received. The report includes the supplier, the date the purchase order was created, the related requisition, and purchase order numbers.

Request for quotation

Menu Path

Purchasing > Reports > Quotes > Request for Quotation

Description

Prints quotations that are sent to suppliers to elicit part and service quotes

Quotation summary

Purchasing > Reports > Quotes > Quotation Summary

Description	Displays a summary of the quotations from all suppliers associated with an RFQ
Parameters	Specify the **RFQ**, **Quotation Status**, **Part**, **Supplier**, **Quotation**, **Trade**, **Task**, and **Organization**. **Show RFQs** Select to sort Per Part/Service or Per Supplier.
Report Type	Consumer

Request for quotation summary

Menu Path

Purchasing > Reports > Quotes > Request for Quotation Summary

Description

Displays all RFQs and associated lines and suppliers per RFQ.

Consignment activity

Description

Displays a list of consignment activity.

Menu Path

Materials > Reports > Consignment Activity

Purchase requisition

Description	Select the originator, requisition type, requisition number, status and buyer to print a specific requisition. Otherwise, the report includes all requisitions. Includes option to convert totals to Euro currency.

Parameters	Specify the **Organization**, **Originator**, **Requisition type**, **Requisition**, **Status**, and **Buyer**. **Quotation** Select to print the quotation number if a quotation is associated with the requisition. **Show dual currency** Select to print values in Euro currency. **Important** The system prints only the requisition total in Euro. **Date** Specify the requisition date for which to retrieve data.
Report Type	Basic

Review/approve requisitions

View a list of requisitions awaiting approval, and then either accept or reject the requisitions.

You must have sufficient status change authorizations to approve and reject requisitions, and you cannot approve requisitions that exceed your requisition approval limit.

Generate POs

Quickly generate purchase orders based on requisition line items. Infor EAM creates new purchase orders from existing approved requisition line items or adds requisition line items to existing purchase orders.

Commodities

Materials > Setup > Commodities

Define commodity codes to establish a method of classifying materials for purchasing and inventory. Commodity codes can identify specific types of goods, such as fiber optics, fuses, switches, etc., that can then be used to categorize specific parts in your inventory. Buyers can then associate particular suppliers with these different commodities and send out requests for quotes (RFQs) for that particular

commodity. Storeroom and maintenance personnel can also use commodity codes to quickly access stock information.

Non-PO receipts

Materials > Transactions > Non-PO Receipts

Create non-purchase order receipts to receive parts into store without a purchase order to facilitate credit card purchases or any other type of purchase made without using a purchase order.

Currencies

Materials > Setup > Currencies

In international markets, organizations are required to monitor the various currencies used and the different exchange rates. The system contains many predefined currencies. Define additional currencies as necessary.

Greenhouse gas

Materials > Setup > Greenhouse Gases

Create greenhouse gas records to establish and monitor the relationship between greenhouse gas emissions and its carbon dioxide equivalent.

Part hierarchy codes

Materials > Setup > Part Hierarchy Codes

Create part hierarchy codes to create a coding structure that enables you to further define parts by classifying them into specific levels.

Before creating part hierarchy codes, you must first define the code levels for the Part code hierarchy entity (CLVL) on the **Classes** form. Click on Defining Classes on page 34 for more information.

After defining the code levels for the Part code hierarchy entity, you can then create part hierarchy codes to define a structured hierarchy between part code combinations. You can define a maximum of eight coding levels for parts.

iProcure vendors

Materials > Setup > iProcure Vendors

iProcure allows customers to plan work, track parts usage, manage stock levels, and replenish stock via the Internet. Now Infor EAM customers with iProcure can manage part information in Infor EAM. Create iProcure vendors in Infor EAM and create a new supplier for each iProcure vendor that currently does not have an associated supplier record. Associate iProcure items with parts on the **Suppliers** page of the **Parts** form. Add iProcure part items to requisitions.

Issue/return parts

Materials > Transactions > Issue/Return Parts

Issue parts from stores to work orders, equipment, or projects. Return unused parts to stores.

Store-to-store issues

Materials > Transactions > Store-to-Store Issues

Create store-to-store issues to create electronic records of the issue of stock part transfers from one store to another, including stores within different organizations. You can create a store-to-store requisition before creating a store-to-store issue. Click Creating Store-to-Store Requisitions on page 627 for more information.

The **Store-to-Store Issues** form enables you to create and manage transactions to transfer parts (stock parts, repairable spare parts, and parts tracked by asset) between stores, including stores within different organizations.

You can create multiple issues for the same store-to-store requisition as necessary.

After creating and approving the store-to-store issue transaction, the issuing store then physically issues the requested parts to the receiving store, in which the parts must be received.

The Store-to-Store Receipts form enables you to create and manage transactions to receive parts, repairable spare parts, and parts tracked by asset from other stores, including stores within different organizations. Click Creating Store-to-Store Receipts on page 635 for more information.

Refer to the following topics for more information.

Overview

Operations > Overview

Customize the Overview screen by adding widgets to populate data important to you for quick access. Once widgets are added, drag and drop the widgets to move them around on the screen. View and modify the layout as desired.

Manufacturer part numbers

Materials > Overview > Manufacturer Part Numbers

View a list of all parts and their manufacturers.

Parts

Materials > Parts

Creating and managing parts information for a business has far-reaching effects. Once you include this information in the database, it is used time and time again by buyers, storeroom employees, planners, managers, and other individuals throughout the organization.

One of the primary considerations associated with creating and managing parts information is choosing and establishing your pricing method for parts. The system enables you to set up and initialize stock using different price types and pricing methods.

Average price reflects a calculated average of part prices throughout the life cycle of the part. Last price is the last price paid for a part in purchasing. Standard price is a periodically adjusted fixed price that is usually taken from the supplier's catalog. You can enter the initial prices; however, The system readjusts these prices as the part begins to record transactions.

Base price is the default price used for purchasing if the part is not listed in the supplier's catalog. It is also the price used for work orders, stock issues, and direct purchases that involve the part. Base price is always average price, last price, or standard price depending on the value set for the price type.

The system also enables you to set up and initialize stock using the Last in first out (LIFO) and/or First in first out (FIFO) inventory valuation methods. LIFO and FIFO are both time-based price types. FIFO inventory pricing mandates that you consume the materials purchased first before using the most recently purchased materials. LIFO pricing mandates that you consume the most recently purchased materials before using the materials that were purchased first.

Class codes, categories, units of measure, suppliers, and other information must be defined in the system before adding parts information to the database.

Pick tickets

Materials > Pick Tickets

Create pick tickets to identify a set of parts that are required for a work order activity. Pick tickets facilitate the acquisition of materials needed for a pending work order activity by enabling the worker assigned to a work order to create and print a list of parts required for the work order activity. The worker can then take the ticket to the store and have the parts waiting for pick-up in a short period of time, which makes a pick ticket different than a material list. You can also associate multiple pick tickets with a work order activity or piece of equipment.

Import a parts list for a pick ticket to retrieve an existing list of parts defined elsewhere in the system to the parts list for the pick ticket.

Part inspections

Materials > Transactions > Part Inspections

View and modify records for incoming part inspections. View the comments associated with the selected inspection method on the PO receipt line.

Physical inventory

Materials > Transactions > Physical Inventory

Performing a physical inventory involves physically counting the materials you have in store and comparing the inventory data that you gather during count with the data stored in your online inventory. The physical inventory process enables you to reconcile your online inventory with the actual stock on the shelves and in bins in your stores.

To perform a physical inventory, first generate a physical inventory counting sheet to create a snapshot of the data in your online inventory that you will use to compare with the data you gather during your cycle count. Then, enter physical inventory quantities to update the actual physical quantities of inventory items found during your cycle count. Finally, refresh existing physical inventory data to update the expected quantities in the physical inventory data snapshot as necessary.

Internal repair receipts

Materials > Transactions > Internal Repair Receipts

Create internal repair receipts for fixed or scrapped repairable spare parts to record and update inventory information associated with repairing parts internally. An internal repair receipt consists of both a header and lines containing the parts to receive from an internal repair work order.

When repairing a part internally, a part to repair is taken from a store location to the shop to be repaired. During the repair process, either complete the repairs on a part, or scrap the part because you cannot repair the part to a usable state. You must receive the parts back into a store, which does not have to be the same store from which they were originally taken for repair.

Create an internal receipt header first, and then add part lines to the receipt. Update the **Status** of an internal repair receipt to indicate its progress through the receipt process and to initiate system actions based on receipt statuses.

Note: For parts tracked by asset, the system automatically changes the **Status** of the equipment by which the part is tracked to In Store when the part is received, or it changes the status to Withdrawn if the part is scrapped. If the equipment by which the part is tracked is part of an equipment hierarchy, the system cascades the status change for the parent equipment to all the dependent child equipment in the hierarchy.

If RPPRCCAL is set to YES, the system updates part prices in the same manner as it does a normal receipt. If RPPRCCAL is set to NO, internal repair receipts do not affect part prices.

PO receipts

Materials > Transactions > PO Receipts

Receive parts against existing purchase orders. First, create purchase order receipt headers so you can receive purchase orders to your location. Create your receipt header based on an outstanding purchase order or for a specific supplier.

Once you create a receipt header, the system allows you to retrieve outstanding PO lines on the **Active Lines** page. If you entered a purchase order on the receipt header, the system displays all outstanding part lines for the selected purchase order. If you entered a supplier and store on the receipt header, the system displays all outstanding part lines on all purchase orders for that supplier.

From the **Active Lines** page, select which parts to receive and identify bin and/or lot locations to which to receive them.

When you approve lines on a PO receipt, the system moves the lines from the **Active Lines** page to the **Processed Lines** page, changes the status of the receipt from Unfinished to Approved, and adds the received parts to stock.

Reasons for return

Materials > Setup > Reasons for Return

Define reasons for return based on the most common reasons for which you must return parts. When returning parts to the supplier, the system allows you to select a reason for return. Predefined reasons for returns enable you to track return trends.

Generate requisitions

Materials > Process > Generate Requisitions

Generate requisitions from low stock levels to automatically create requisitions.

Requisitions

Materials > Requisitions

Create a purchase requisition to request needed parts.

Review the status of all requisitions for repairs on equipment.

See the Requestor documentation for more information on requisitions.

Requisitions

Materials > Requisitions

Create requisitions on the **Requisition** form to request materials or services from outside vendors. A requisition consists of a requisition header and requisition lines. You can create a requisition for stock items, direct materials, or services. Stock items are materials that are kept in store and are tracked for inventory. Direct materials are items that you requisition specifically for work orders.

Supplier returns

Materials > Transactions > Supplier Returns

Return damaged or incorrect parts to a supplier.

Store-to-store requisitions

Materials > Store-to-Store Requisitions

Create store-to-store requisitions to transfer stock parts from one store to another, including stores within different organizations. A store-to-store requisition consists of the requisition header and requisition lines. Create the requisition header first, and then add part lines.

A typical store-to-store requisition goes through a number of status changes during the lifecycle of the requisition. User status change authorizations are established on the **Status Authorizations** form. Refer to the following list for a description of store-to-store requisition statuses:

- **Unfinished**
  The status of the store-to-store requisition at creation. The status of the store-to-store requisition header must remain Unfinished until lines are added to the requisition.

- **Request Approval**
  Lines have been added to the store-to-store requisition, and it is ready for approval.

- **Approved**
  The store-to-store requisition is approved and ready for fulfillment. Upon approval, all fields on the store-to-store requisition are protected, except **Status**, and all of the lines that are not Cancelled or Rejected are set to Approved.
  Note: You cannot approve a requisition if any store-to-store issues have been made against the requisition and the parts are still in-transit (issued but not yet received).

- **Cancelled**
  The entire store-to-store requisition is cancelled.

- **Rejected**
  The store-to-store requisition is rejected. The system protects all fields on the requisition, and you must enter a **Reject Reason** for the requisition.

Stores

Materials > Setup > Stores

Stores are specific locations for part storage areas. Set up initial store information before using the materials management module.

Create bins for stores to identify specific locations where parts can be stored. Bins are useful for locating and issuing parts and for supporting physical inventory counts of part holdings.

Quick store-to-store transfer

Materials > Transactions > Quick Store-to-Store Transfer

Transfer parts from store to store without requisitioning them. Transfers using the **Quick Store-to-Store Transfer** form never achieve in-transit status. Since this tracking feature is not used for this type of transfer, store-to-store transfers should be reserved for very quick material movements. Quantities available both in the sending and receiving warehouses are adjusted immediately after the system saves the transaction.

Store-to-store receipts

Materials > Transactions > Store-to-Store Receipts

Create store-to-store receipts to create electronic records for receiving stock part transfers from one store to another.

After creating the store-to-store issue transaction, the issuing store then physically issues the requested parts to the receiving store, in which the parts must be received. The receiving store then creates a store-to-store receipt transaction to receive the parts from the issuing store.

The **Store-to-Store Receipts** form enables you to create and manage transactions to receive parts (stock parts, repairable spare parts, and parts tracked by asset) from stores, including stores within different organizations.

You can create multiple receipts for the same store-to-store requisition as necessary.

Suppliers

Materials > Setup > Suppliers

Large maintenance organizations deal with many suppliers. Define suppliers to create records for the suppliers, business partners, and customers in your supplier network. There are suppliers for parts, equipment, services, rentals, office supplies, and more. The **Suppliers** form is the primary form for setting up a supplier network. Within this form, establish a list of suppliers, create a catalog of parts provided by specific suppliers, and list contacts for suppliers. You can associate addresses for suppliers.

Overview of supplier parts

Materials > Overview > Supplier Part Numbers

View a list of all parts and their suppliers.

Tax rates

Materials > Setup > Tax Rates

Define tax codes to apply to materials and purchases. Tax codes represent the definition of tax coding structure that consists of a tax rate type, a tax rate code, a value for tax rate code, a tax code, and a value for the tax code.

Define tax rates to build the second level of tax coding. Before creating a tax rate, create tax rate types on the **Tax Rate Type** form.

Create a tax rate, such as "SC TAX" to represent a South Carolina state tax, and then associate that tax rate with a tax rate type, such as a sales or excise tax rate type. The combination of a tax rate type and a tax rate represent the definition of a tax rate code. You can also indicate whether to include the tax rate code in stock valuation.

Tax codes

Materials > Setup > Tax Codes

Define tax codes to apply to materials and purchases. Tax codes represent the definition of tax coding structure that consists of a tax rate type, a tax rate code, a value for tax rate code, a tax code, and a value for the tax code.

Tax code records represent the combination of tax rate codes and tax code information that establish a structure that will apply all of the applicable taxes to materials and purchases based on transaction dates and the established tax structure created within a tax code. You can create any number of tax codes to fit any tax situation. You can also enter multiple rate codes for each tax code, as necessary.

Tax rate types

Materials > Setup > Tax Rate Types

Define tax codes to apply to materials and purchases. Tax codes represent the definition of tax coding structure that consists of a tax rate type, a tax rate code, a value for tax rate code, a tax code, and a value for the tax code.

Define tax rate types to specify tax rate classifications corresponding to base tax rates, such as taxable and nontaxable. Use tax rate type codes to identify the type of tax, such as sales tax, internal tax, excise tax, or an import tax.

List of outstanding requisition items

Materials > Reports > List of Outstanding Requisition Items

Description	Includes outstanding line items for requisitions where **Status** is not Cancelled
Parameters	Specify the **Organization**, **For Store**, **From Store**, **From Supplier**, **Part**, **Requisition**, **Status**, **Originator**, **Buyer**, **Quotation Indicator**, **Cost Code**, and **Task**. **Req Items on Order** Select to print requisition items that are on order. **Requisitioned Items Not Yet Ordered** Select to print requisition items that have not been ordered. **All Requisition Items** Select to print all requisition items, regardless of the order status. **Date From** **Date To** Specify the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.
Report Type	Basic

List of stock

Materials > Reports > List of Stock

Description	Displays stock quantity, reorder level, reserved quantity, and quantity on order grouped by store and sorted by store, part, and part organization

Parameters	Specify the **Organization**, **Store**, **Part**, **Part Class**, and **Supplier**. **Non-consignment** Select to print non-consignment items. **Consignment Item** Select to print consignment items. **Selection Options** Select one of the following options: • **All Stock** Select to print all stock records. • **Stock Below Reorder Level** Select to print stock that is below the reorder level. • **Stock At/Below Minimum Level** Select to print stock this is at or below the minimum level. • **Stock Requiring New Order** Select to print stock requiring a new order.
Report Type	Basic

Print pick ticket

Materials > Reports > Print Pick Ticket

Description	Displays a list of parts required to perform work on work orders or equipment. Only approved pick tickets are printed.
Parameters	Specify the **Organization**, **Work Order**, **Activity**, **From Pick Ticket**, **To Pick Ticket**, and **Store**. **Sort By** Select to sort by **Pick Ticket** or **Work Order**. **Date From** **Date To** Specify the starting and ending date by which to retrieve data. **Date From** and **Date To** are required fields.

Report Type	Basic

Stock issues history by part

Materials > Reports > Stock Issues History by Part

Description	Displays part, stock values grouped by store, part sorted by store, part, and part organization
Parameters	Specify the **Organization**, **Store**, **From Part**, **To Part**, **Class**, and **Number of Months**.
Report Type	Basic

Goods received note

Materials > Reports > Goods Received Note

Description	Displays a goods received note
Parameters	Specify the **Organization**, **PO Receipt**, **Transaction Code**, **From**, **From Code**, **To**, **To code**, **Purchase Requisition**, **Purchase Order**, and **Packing Slip**. **Printed** Select to print transactions that have been previously printed. **Date** Specify the date for which to retrieve data.
Report Type	Basic

Print purchase requisition

Materials > Reports > Print Purchase Requisition

Description	Select the originator, requisition type, requisition number, status and/or buyer to print a specific requisition. Otherwise, the report includes all requisitions. Includes option to convert totals to Euro currency.
Parameters	Specify the **Organization**, **Originator**, **Requisition Type**, **Requisition**, **Status**, and **Buyer.** **Quotation** Select to print the quotation number if a quotation is associated with the requisition. **Show Dual Currency** Select to print values in Euro currency. The system prints only the requisition total in Euro. **Date** Specify the requisition date for which to retrieve data.
Report Type	Basic

Goods return note

Materials > Reports > Goods Return Note

Description	Displays for each supplier, the supplier address and the list of goods returned. Displays all the approved return transactions grouped by the supplier and sorted by the order number.
Parameters	Specify the **Organization**, **Return**, **Supplier**, and **Return Status**. **Reprint** Select to print a list of goods returned that have been printed previously.
Report Type	Basic

Physical inventory discrepancy

Materials > Reports > Physical Inventory Discrepancy

Description	Displays physical inventory parts and quantities grouped by store, part, and part organization
Parameters	Specify the **Organization**, **Physical Inventory**, **Part**, **Store**, and **Status**. **Null Quantities** Select to include items with null quantities on the report. **Include Non-Discrepancy Items** Select to include items without any discrepancies on the report. **Group By** Select to group by Store or Part.
Report Type	Basic

Stock value listing by part type

Materials > Reports > Stock Value Listing by Part Type

Description	Provides an overview listing all parts in a store and all bin locations for that part. The report is grouped primarily by store and secondarily by part. The report has two display modes for listing either stock parts or for repair parts. Quantities and values are calculated for each location and totaled for each part.

Parameters	Specify the **Organization**, **Part**, **Store**, **Part Class**, **Stock Class**, **Supplier**, **Commodity**, **Manufacturer Part Number**, **Manufacturer**, **Category**, **Currency**, and **Part Type**. **Non-Consignment** Select to print non-consignment items. **Consignment Item** Select to print consignment items. **Cumulative Total** Select to display the total value for each part. **Display Repair Qty.** Select to display the repair quantity and core value for each part. **Group By** Select to group by Parts, Store, Stock, Supplier, Category, or Commodity.
Report Type	Basic

WO aging

Work > Reports > WO Aging

Description	Provides counts of work orders, per work order type, that are 1-10, 11-30, 31-60, 61-90, or over 90 days overdue
Parameters	Specify the **Organization** and **WO Type**.
Report Type	Consumer

Print physical inventory list

Materials > Reports > Print Physical Inventory List

Description	Displays a list of parts with physical inventory

Parameters	Specify the **Physical Inventory**. Select one or more of the following options: • **Print Quantity** Select to print the quantity. • **Order By Bin** Select to sort by bin. • **Print Assets** Select to print assets. • **Discrepancies Only** Select to print stocktake discrepancies only.
Report Type	Basic

Stock transactions

Materials > Reports > Stock Transactions

Description	Lists all approved inventory transactions for a specified period of time
Parameters	Specify the **Organization**, **Part**, **Part Class**, **Iss/Recv Entity**, **Iss/Recv Party**, **Counter Entity**, **Counter Party**, **Transaction Type**, and **Consignment Supplier**. **Non-Consignment** Select to print non-consignment items. **Consignment Item** Select to print consignment items. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.
Report Type	Basic

Economic order quantity (EOQ)

Calculate the EOQ for a store to determine the most efficient quantity to order for inventory items. EOQ represents the ideal balance between ordering costs and inventory holding costs for items being demanded annually at a constant rate. EOQ helps manage inventory by minimizing order costs and holding costs for each item.

Purchase history per item/supplier

Materials > Reports > Purchase History Per Item/Supplier

Description	Displays all parts and work orders associated with a given supplier
Parameters	Specify the **Organization**, **Supplier**, **Part**, **Work Order**, and **Task**. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

Inventory standard

Materials > Reports > Inventory Standard

Description	Displays a list of inventory items
Parameters	Specify the **Organization**, **Part**, **Class**, **Manufacturer**, **Preferred Supplier**, **Tracking Method**, **Store**, **ABC Class**, **Reorder Qty.**, **UOM**, **Stock Method**, **Minimum Quantity**, **Maximum Quantity**, **Bin**, and **Reorder Level**.
Report Type	Consumer

Print pick ticket

Menu Path

Materials > Reports > Print Pick Ticket

Description

Displays a list of parts required to perform work on work orders or equipment. The system only prints approved pick tickets.

Stock issues history by part

Materials > Reports > Stock Issues History by Part

Description	Displays part, stock values grouped by store, part sorted by store, part, and part organization
Parameters	Specify the **Organization**, **Store**, **From Part**, **To Part**, **Class**, and **Number of Months**.
Report Type	Basic

Goods received note

Materials > Reports > Goods Received Note

Description	Displays a goods received note
Parameters	Specify the **Organization**, **PO Receipt**, **Transaction Code**, **From**, **From Code**, **To**, **To Code**, **Purchase Requisition**, **Purchase Order**, and **Packing Slip**. **Printed** Select to print transactions that have been previously printed. **Date** Specify the date for which to retrieve data.
Report Type	Basic

Print requisition

Materials > Reports > Print Requisition

Description	Select the originator, requisition type, requisition number, status and/or buyer to print a specific requisition. Otherwise, the report includes all requisitions. Includes option to convert totals to Euro currency.
Parameters	Specify the **Organization**, **Originator**, **Requisition Type**, **Requisition**, **Status**, and **Buyer**. **Quotation** Select to print the quotation number if a quotation is associated with the requisition. **Date** Specify the requisition date for which to retrieve data.
Report Type	Basic

Parts currently reserved/allocated

Materials > Reports > Parts Currently Reserved/Allocated

Description	Displays a list of parts currently reserved/allocated
Parameters	Specify the **Organization**, **Store**, **Department**, and **Part**. **Sort By** Select to sort by Part, WO/Activity, or Store. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Goods return note

Menu Path

Materials > Reports > Goods Return Note

Description

Displays for each supplier, the supplier address and the list of goods returned. Displays all the approved return transactions grouped by the supplier and sorted by the order number.

Return summary

Menu Path

Materials > Reports > Return Summary

Description

Displays comprehensive information, per purchase order, about approved returns to suppliers.

Physical inventory discrepancy

Menu Path

Materials > Reports > Physical Inventory Discrepancy

Description

Displays physical inventory parts and quantities grouped by store, part, and part organization.

Stock value listing by part type

Menu Path

Materials > Reports > Stock Value Listing by Part Type

Description

Provides an overview listing all parts in a store and all bin locations for that part. The report is grouped primarily by store and secondarily by part. The report has two display modes for listing either stock parts or for repair parts. Quantities and values are calculated for each location and totaled for each part.

Print physical inventory list

Menu Path

Materials > Reports > Physical Inventory List

Description

Displays a list of parts with physical inventory.

Stock transactions

Menu Path

Materials > Reports > Stock Transactions

Description

Lists all approved inventory transactions for a specified period of time.

Monthly usage trends

Menu Path

Materials > Reports > Monthly Usage Trends

Description

Prints a report showing monthly usage trends.

Transaction type

Transaction prompts define where and in what order the data collection module populates information in the system. You can validate incoming data at the field level, as well as at conditional navigation between prompts.

First, determine what data to enter, in what sequence it should be gathered, and how to group data for processing to Application Programming Interfaces (APIs). Finally, define data prompts for each barcode transaction type.

Profiles

Create equipment profiles to use as equipment templates. After creating a profile, use it to quickly create equipment records that require the same information as is contained on the profile.

Associate a permit with a profile, so that all equipment that you create with the profile will be associated with the permit.

Prompt machine

Enter data into the data collection module with the **Prompt Machine** form instead of a barcode scanner, as necessary. Submit one or more transactions of a selected transaction type.

VMRS activities

Work > Reports > Fleet > VMRS Activities

Description	Prints a list displaying activity details for VMRS work orders

Parameters	Specify the **Organization**, **Equipment**, **Trade**, **Department**, **Work Order Status**, **Reason for Repair**, **Work Accomplished**, **Technician Part Failure**, **Manufacturer**, **System Level**, **Assembly Level**, and **Component Level**. The values available for **Assembly Level** are based on the system-level code. The values available for **Component Level** are based on a combination of the system-level code and the assembly-level code. **Show MEC Details** Select to display MEC work order details for multiple equipment work orders. **Activity Start Date** **Activity End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Print customer contract

Work > Reports > Asset Management Services > Print Customer Contract

Description	Prints a contract for a specific customer

Parameters	Specify the **Organization**, **Customer Contract**, and **Customer**. **Pricing Schedules** Select to display pricing schedules on the report. **Arranged WO Types** Select to display arranged work order types. **Custom Tariffs/Part Charges** Select to display custom tariffs and part charges if **Custom Trade Rates** and **Custom Part Charges** are selected on the related Pricing Schedule Record View page. **Related Customer Contracts** Select to display unfinished/approved related customer contracts on the report. **Fixed Payments** Select to display fixed payments on the report. **Calculated Work Orders** Select to display calculated work orders on report.
Report Type	Consumer

Expired warranties

Description	Displays a list of all warranties that have expired
Parameters	Specify the **Organization**, **Type**, **Equipment**, and **Location**. **Near Threshold** Select to include warranties that are near their threshold. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Hours needed for task plans

Work > Reports > Scheduling > Hours Needed for Task Plans

Description	Displays a listing of work order task plans along with their estimated hours
Parameters	Specify the **Organization**, **Department**, and **Task Plan**. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Revision control history

Work > Revision Control > Revision Control History

On the **Revision Control History** form, you can view the history of updated revision control records to verify the approval or rejection of revisions. The records display the designated approver and date.

Revision control approval

Work > Revision Control > Revision Approval

On the **Revision Control Approval** form, you can view revision approval records for various entities (PMs, tasks, material lists, and routes)and approve revisions when necessary. You can view approvers for the selected revision, and view the list of PM and PM-related revisions to evaluate the change to the associated entity record in terms of the PM schedule.

Review work requests

Work > Review Work Requests

View a list of work requests awaiting approval, and then either accept or reject the work requests.

You must have sufficient status change authorizations to approve and reject work requests, and you cannot approve work requests that exceed your work requests approval limit.

AMS-Pricing schedules

Create pricing schedules to define time and material calculations, work orders, custom trade rates, and part-specific charges to be associated with customers and customer contracts.

Custom trade rates are used to charge labor costs to customers based on rates defined for specific trades and hour types instead of a standard labor cost percentage entered on the Pricing Schedule header.

Custom part charges are used to charge material costs to customers based on rates defined for part classes instead of a standard stock item cost percentage entered on the Pricing Schedule header.

Additional charges on a pricing schedule are added to every work order that is completed for a customer contract. The additional charges are not added or displayed on the work order when the work order is created. Instead, additional charges are added to the work order costs when the system calculates work order customer charges.

Work order criteria is used identify the work orders for which to charge for pricing schedules. The system uses the specified work order criteria for a pricing schedule to select the work orders for which to charge a customer when calculating work order costs.

After the system selects all of the existing work orders matching the work order criteria for a pricing schedule, it then calculates and compiles all the costs for the work orders, which will be used later during the assembly of charges for customer invoices. Click Understanding the creation of customer invoices on page 1130 for more information.

Book labor by employee

Work > Process > Book Labor By Employee

Book labor by employee to record the hours required for an employee to perform work orders and non-WO time.

Batch meter readings

Equipment > Process > Batch Meter Readings

On the **Batch Meter Readings** form you can enter meter readings or meter differences.

In some cases, the default UOM is a parent meter attached to one or more Child ("Receiving") meters of the same UOM. In such cases, the new meter reading must roll down the hierarchy. Click Creating equipment hierarchies on page 385 for more information.

WO load balancing

Work > WO Planning > WO Load Balancing

Balance the workload by adjusting the schedule. The **WO Load Balancing** form consists of three pages: the **Parameters** page, on which you define the selection criteria for locating the work orders to balance; the **Preview** page, on which you can preview the work orders prior to actually balancing them and select or unselect the work orders to process as necessary; and the **Balance Load** page, on which you can balance the work order load.

The **Generate Options** section of the **Parameters** page enables you to specify the manner in which the system processes the work orders.

The **Preview** page allows you to preview all of the work orders selected for processing based on the selection parameters, enabling you to select or unselect work orders to balance. You can select or unselect individual work orders for processing, or you can select or unselect all work orders for processing.

The **Balance Load** page enables you to view labor availability and reschedule work.

Crews

Define and edit crew records.

Depots

Create depots to specify storage areas for fuel.

Deferred maintenance

Deferred maintenance is a work order activity for a specific piece of equipment that will be performed at a future date. For example, a work order for vehicle maintenance might include several critical and non-critical activities. To save time, a supervisor might decide to defer one or more non-critical activities to a later date. Create deferred maintenance from an existing work order or manually create deferred maintenance on the Deferred Maintenance form.

Property information

Enter property information that users can access when creating information requests as customers call in requesting additional information.

Information requests

Create information requests whenever customers call in requesting additional information.

Production requests

Create and edit production requests based on open work orders in Infor EAM. When production requests are approved, the system sends the request to Infor ERP so that a corresponding production order can be created. Once EAM receives the production order the system updates the request with the production order details.

Permits

Define permits to link safety or authorization information to work orders. For example, you may define a hot work permit regarding welding in a restricted area; a confined space entry permit when workers must complete the work in an enclosed production space such as a tank or vessel; or a lockout-tagout permit when the equipment involved must be completely stabilized or cut off from operational power supplies.

PM forecasting

Work > WO Planning > PM Forecasting

Forecast preventive maintenance for equipment beyond creating PM work orders. Define parameters to gather a group of selected equipment for which to forecast preventive maintenance. Forecasting PMs allows you to view the preventive maintenance on equipment for a selected period of time as much as one year in advance. Adjust the due dates for preventive maintenance as necessary to balance the resource workload.

Note: Due dates can only be updated for forecasted PMs. For existing PM work orders, the due date cannot be changed.

Preventive maintenance will not be forecasted for equipment used in a PM work package.

Only frequency-based PMs are supported on the PM Forecasting form. Meter-based PMs are not supported.

Only duplicate PMs are supported on the PM Forecasting form. Fixed and variable PMs are not supported.

PM plans

Create and update PM plans to create PM schedules or add equipment to multiple PM schedules at once. A PM schedule is a predefined set of preventive maintenance details to be performed on a defined interval for equipment. PM plans enable you to quickly enter and update groups of PM schedules.

PM schedules

Create preventive maintenance (PM) work orders to generate periodic work orders at the frequency or meter readings you specify.

Preventive maintenance work orders apply to single pieces of equipment or to systems that include several pieces of equipment.

Work order quick close

Quickly close completed work orders on the **Work Order Quick Close** form. When you enter a work order number, the system automatically enters a status of Completed and enters today's date as the date completed so that you may quickly close the work order. However, you may also update any information about the work order and book additional hours for the work order activities on this form.

Qualifications

Define qualifications to establish a set of occupational standards and/or required job-related training for personnel, tasks, trades, and/or work order activities. After defining a qualification, associate the qualification with personnel, tasks, trades, and/or work order activities to establish your criteria for qualification enforcement of work activities. Qualification enforcement is determined by the WOQUAL installation parameter.

If you are using qualification enforcement, you can only assign/schedule an employee who has the necessary qualification(s) to perform the work for which a qualification is required. If a qualification is associated with a trade, task, or work order activity, the employee must have that qualification on their personnel record. Employee qualifications are active if the employee has completed the necessary training course/requirements for the qualification and the qualification duration has not expired.

You can also define qualifications as training records to create a historical record of job-related training employees receive that does not need to be tracked for qualification enforcement.

Release PMs

On the **Release PMs** form, you can release PM work orders awaiting execution in a batch. Select the work orders to be released by changing the WO Status and updating the Scheduled Start Date.

After the system completes the batch release process, the system retains the records that have been successfully updated in the Release PMs list enabling you to print the released PM work orders individually or in a batch.

If you have established a nesting reference between major and minor PMs to bypass a minor PM that coincides with the release of a major PM, the system bypasses the minor PM as indicated by the nesting reference.

The system can only bypass a minor PM if it is currently associated with a major PM with a status of Released.

Routes

A route is a list of equipment that may be associated with a work order or preventive maintenance equipment record as an indication of the scope of work to be performed, such as number of repetitions. Several pieces of equipment that are serviced together often follow a particular route. Identify these routes and give them a route code. You can also associate inspection routes with a particular sequence of inspection points.

Revision control setup

Designate which PM work order fields, link buttons, and right-click options the system will protect when PM revision control is enabled for the Work Orders form and all work order-related tabs. Right-click options that are not work order specific, such as an Audit Trail, are not available for revision control setup.

Service codes

Create service codes that identify work request problems to add to service requests. You can create a service code based on a standard work order and the system will populate a service description and priority.

Shifts

Define the shifts used within the organization. You can also define the days for established shifts and assign employees to a specific shift.

Service requests

Create service requests when tenants call in to request maintenance. Use the search bar to quickly locate information associated with the caller. If the caller record does not exist, you may quickly create a new caller record. If a caller record does exist, you may edit the caller's information and then enter service request details. Next, assign personnel to complete work required for a particular service request. Once you choose to assign personnel, the system generates a work order for which you may assign one or multiple activities. You may view the work order details on the **Work Order Details** page.

To close a service request, the service request to close must be open and associated with an open work order to which personnel is assigned. Closing a service request will also close the work order to which it is associated. Additionally, you must have sufficient system privileges to close both the service request and work order. You may close service requests on the **Closing** page of the **Service Requests** form, or you may book employee time for service requests and close service requests concurrently on the Book & Close page of the **Service Requests** form.

You may also book hours, issue or return parts, enter additional charges, and create a service request log entry for service requests on the **Service Requests** form.

Standard WOs

A standard work order is a predefined set of details and activities that may be referenced on a work order to facilitate entry of repair jobs that are performed repeatedly over time, but not according to a definable schedule as is the case with periodic preventive maintenance. A basic standard work order defines a simple repair job consisting of one or more activities.

A basic standard work order consists of a header and one or more activity lines. **Standard WO**, **Description**, and **Organization** frame the header of any standard work order, while two additional required fields, **WO Type** and **Duration**, and two optional fields, **WO Class** and **Priority**, house data

that transfers to any work order on which the standard work order is selected. Any activities that are defined for the standard work order are copied to the work order as a result of selecting a standard work order.

To restrict the list of standard work orders available on a given work order to only those defined as applicable for the equipment and/or problem indicated on the work order at the time the standard work order selection is made, enter **Problem Code**, **Equipment Class**, and **Category**.

Create standard work orders, and then apply the information from standard work orders to regular work orders.

Supervisors

Work > Setup > Supervisors

Define codes to represent employee supervisors.

Task Plans

A task plan is a predefined set of work order activity details that may be referenced on an activity of a work order, PM schedule, or standard work order to minimize data entry and ensure consistent planning for jobs. Define the cost of the task plans for each supplier on the **Suppliers** page, and then define prices for common task plans on the **Prices** page if you are using multi-organization security. Finally, associate qualifications with task plans to establish the minimum qualifications for an employee to perform task plans associated with work on the **Qualifications** page.

Tools

Define tools for departments. Tools are pieces of equipment that a department uses to carry out maintenance work, such as scaffolding or excavators. The department is usually the owner of a tool, so the department's store keeps the tools.

Tool refers to a type of tool, rather than an individual item. For example, if the organization has several drills, create a general Tool code called DRILL. Then create individual parts for each drill and track them as assets using the drills' serial numbers.

Trades

Define codes for the types of employees performing maintenance work. The system charges the cost of the trade, based on an hourly rate, back to the appropriate work order, asset, or project, ensuring correct cost accounting. A single trade may have multiple rates based on the type of work performed or the department associated with the trade for a specific work order. Define standard trade rates for suppliers on the **Supplier Rates** page. On the **Qualifications** page, you may associate qualifications with trades to establish the minimum qualifications for an employee belonging to a trade to perform work for which the trade is selected.

When scheduling work, you can select to assign the work to an employee and/or a trade. When booking hours for the work, the system calculates the labor cost of the hours to book based on the trade rate defined for either the employee or the trade rate defined for the trade. Define rates for trades on the **Rates** page.

Daily hours worked per employee

Menu Path

Work > Reports > Scheduling > Daily Hours Worked Per Employee

Description

Displays what type of work (normal, overtime, and holiday) a specific employee performed over a given period and the number of hours.

Short term work order list (WOs)

Description	Displays a list of work orders due within a short period of time, such as week. It does not project PM work orders

Parameters	Specify the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department**, **Location**, **PM**, **Work Order**, **Project**, **Type**, **Equipment Criticality**, **Status**, **Assigned To**, and **Scheduling Group**. **Search MEC WOs** Select to search multiple equipment work orders **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

Qualification expiration report

Description	Displays a list of qualification expirations and expiration dates for an employee based on the date range entered. Select to generate the report for a single employee or a group of employees.
Parameters	Specify the **Organization**, **Employee Code**, **Employee Class**, **Employee Type**, **Trade**, **Department**, **Qualification**, and **Qualification Class**. **Sort By** Select to sort by Employee, Trade, Organization, Department, or Qualification. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

Qualification requirement report

Description	Displays a list of qualifications that are required for an employee to perform a trade or task for which they are not currently qualified. Select to generate the report for a single trade or task, or for a group of trades or tasks.
Parameters	Specify the **Organization**, **Employee**, **Employee Class**, **Employee Type**, **Trade**, **Trade Class**, **Task**, **Department**, and **Qualification**.
Report Type	Basic

Scheduled activities

Description	Displays information for scheduled activities
Parameters	Specify the **Organization**, **Work Order**, **Trade**, **Department**, **Maintenance Equipment**, and **Person Responsible**. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

Shift employee

Description	Displays a list of employees on a shift grouped by department
Parameters	Specify the **Organization**, **Department**, **Trade**, and **Shift**.
Report Type	Consumer

Short term WO list (activities)

Work > Reports > Scheduling > Short Term WO List (Activities)

Description	Displays a list of work orders due within the near future, including their activities, starting and ending dates, and estimated labor hours
Parameters	Specify the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department**, **Location**, **PM**, **Work Order**, **Project**, **Type**, **Equipment Criticality**, and **Status**. **Include Multiple Equipment** Select to include multiple equipment on the report. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Daily hours worked per employee

Menu Path

Work > Reports > Scheduling > Daily Hours Worked Per Employee

Description

Displays what type of work (normal, overtime, and holiday) a specific employee performed over a given period and the number of hours.

Expired warranties

Work > Reports > Expired Warranties

Description	Displays a list of all warranties that have expired

Parameters	Specify the **Organization**, **Type**, **Equipment**, and **Location**. **Near Threshold** Select to include warranties that are near their threshold. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Hours needed for task plans

Menu Path

Work > Reports > Scheduling > Hours Needed for Task Plans

Description

Displays a listing of work order task plans along with their estimated hours.

Short term WO list (WOs)

Work > Reports > Scheduling > Short Term WO List (WOs)

Description	Displays a list of work orders due within a short period of time, such as a week. It does not project PM work orders
Parameters	Specify the **Organization**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Department**, **Location**, **PM**, **Work Order**, **Project**, **Type**, **Equipment Criticality**, **Status**, **Assigned To**, and **Scheduling Group**. **Search MEC WOs** Select to search multiple equipment work orders. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.

Report Type	Basic

Material requirements analysis

Work > Reports > Scheduling > Material Requirements Analysis

Description	Displays a list of stock materials needed to complete a specific work order
Parameters	Specify the **Organization**, **Department**, **PM**, **Equipment**, **WO Type**, **Priority**, **Trade**, **Location**, **Project**, **Type**, and **Work Order**. **Direct Purchase Due Date is After Start Date** Select to include stock items where the direct purchase date is after the work order start date. **Qty Required > Qty in Stock** Select to include stock items where the quantity required for the work order is greater than the quantity in stock. **Search MEC WOs** Select to include MEC work orders on the report. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

WO on-time delivery by employee

Work > Reports > Scheduling > WO On-Time Delivery by Employee

Description	Displays a summary or detailed report of on-time work order (released and completed) statistics by employee

Parameters	Specify the **Organization**, **Employee Code**, **Task**, **Class**, **Requested By**, **Problem Code**, **Priority**, **Department**, **Work Order**, and **WO Type**. **Report Type** Select to print a Summary, Details, or Complete version of the report. **Date From** **Date To** Specify the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.
Report Type	Consumer

WO on-time delivery by trade

Work > Reports > Scheduling > WO On-Time Delivery by Trade

Description	Displays a summary or detailed report of on-time work order (released and completed) statistics by trade
Parameters	Specify the **Organization**, **Trade**, **Task**, **Assigned To**, **Class**, **Requested By**, **Problem Code**, **Priority**, **Department**, **Work Order**, and **WO Type**. **Report Type** Select to print a Summary, Detail, or Complete version of the report. **Date From** **Date To** Specify the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.
Report Type	Consumer

Meter based PM due report

Work > Reports > Scheduling > Meter Based PM Due Report

Description	Displays a list of meter-based PMs due by a certain date
Parameters	Specify the **Organization**, **Equipment**, **PM**, **Meter UOM**, **WO Class**, and **Department**. **Sort By** Select to sort by Equipment, PM, or Estimated Due Date. **Due By** Specify the due date for which to print the report. **Due By** is a required field.
Report Type	Consumer

Qualification expiration report

Work > Reports > Qualifications > Qualification Expiration Report

Description	Displays a list of qualification expirations and expiration dates for an employee based on the date range entered. Select to generate the report for a single employee or a group of employees.
Parameters	Specify the **Organization**, **Employee Code**, **Employee Class**, **Employee Type**, **Trade**, **Department**, **Qualification**, and **Qualification Class**. **Sort By** Select to sort by Employee, Trade, Organization, Department, or Qualification. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

Qualification requirement report

Work > Reports > Qualifications > Qualification Requirement Report

Description	Displays a list of qualifications that are required for an employee to perform a trade or task for which they are not currently qualified. Select to generate the report for a single trade or task, or for a group of trades or tasks.
Parameters	Specify the **Organization**, **Employee**, **Employee Class**, **Employee Type Trade Class**, **Trade**, **Trade Class**, **Task**, **Department**, and **Qualification**.
Report Type	Basic

Scheduled activities

Work > Reports > Scheduling > Scheduled Activities

Description	Displays information for scheduled activities
Parameters	Specify the **Organization**, **Work Order**, **Trade**, **Department**, **Maintenance Equipment**, and **Person Responsible**. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

Scheduled vs. actual - detail

Work > Reports > Scheduling > Scheduled - Actual Detail

Description	Displays detailed schedule activities. Depending on how you set up the report criteria, you can review the schedule date for scheduled work (but not started) on the same day, activities scheduled and worked on the same day, or work done but not scheduled on the same day. (You might have multiple lines for some activities.)

Parameters	Specify the **Organization**, **Trade**, **Department**, and **Person Responsible**. **Show Details of Activities Where** Select one of the following sort options: • Scheduled but Not Worked on the Same Date • Worked and Scheduled on the Same Date • Worked but Not Scheduled **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Schedule attainment

Work > Reports > Scheduling > Schedule Attainment

Description	Displays a summary of scheduled activities. View the number of activities that were scheduled and worked on the same date, the number of activities that were scheduled but not started on the same date, the number of activities that were worked on and not scheduled on the same date, as well as the percentage of activities scheduled that were worked on the same date.
Parameters	Specify the **Organization**, **Trade**, **Department**, and **Person Responsible**. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Shift employee

Work > Reports > Scheduling > Shift Employee

Description	Displays a list of employees on a shift grouped by department

Parameters	Specify the **Organization**, **Department**, **Trade**, and **Shift**.
Report Type	Consumer

Tool usage

Work > Reports > Tool Usage

Description	Displays a list of work orders per tool
Parameters	Specify the **Organization**, **Work Order**, **Department**, and **Tools**. **Date From** **Date To** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

Resource load graph

Menu Path

Work > WO Planning > PM Forecasting > Forecasting tab

Description

Displays a graph report listing resource data for the selected PM work orders.

Vehicle ticket report

Work > Reports > Fleet > Vehicle Ticket Report

Description	Displays ticket information based on the fleet vehicle ticket

Parameters	Specify the **Organization**, **Ticket**, **Status**, **Type**, **Fleet Customer**, **Vehicle**, **Received Vehicle**, **Issued To**, **Cost Code**, and **Ticket Class**. **Include PM Details** Select to print PM details. **Include Billing Details** Select to print billing details. **Print Custom Fields** Select to print custom fields. **Include Exceptions** Select to print exceptions. **Include Billing Adjustments** Select to print billing adjustments. **Print Attachments** Select to print document attachments associated with vehicle tickets in addition to the vehicle ticket. **Print Images** Select to print all images associated with the vehicle ticket. **Select Records By** Select to sort by Issued Date, Returned Date, or Completed Date. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.
Report Type	Consumer

Future maintenance cost

Menu Path

Work > Reports > Scheduling > Future Maintenance Cost

Description

Displays estimated present and future maintenance costs for equipment for a selected period. Report is divided into four sections.

- **Current Work Orders**
  Displays remaining estimated costs of open work orders.

- **Deferred Activities**
  Displays estimated costs of deferred maintenance.

- **Current PM**
  Displays remaining estimated costs of open PM work orders.

- **Forecasted PM**
  Displays estimated costs of PMs that will fall due within the specified date range.

Print short WO cards

Work > Reports > Print Work Orders > Print Short WO Cards

Description	Displays an abbreviated version of the Print Work Order report, including work order cost
Parameters	Specify the **Organization**, **Work Order**, **Department**, **Equipment**, **Location**, **WO Type**, **Project**, **Status**, **Assigned To**, **Standard WO**, and **Manufacturer**. **Work Order Custom Fields** Select to print custom fields added for work orders on the work order card. **Equipment Custom Fields** Select to print custom fields added for equipment on the work order card. **Hide Cost Values** Select to hide cost values on the work order card. **Prevent Update Print Flag** Select to prevent users from marking the records returned printed. **Print Attachments** Select to print document attachments associated with work orders in addition to the work order card. You can only print document attachments that are Adobe Acrobat Portable Document Format (.PDF) files. **Print MEC Attachments** Select to print MEC document attachments associated with work orders in addition to the work order card. **Print Images** Select to print all images associated with the work order card. **Search MEC Work Orders** Select to search multiple equipment work orders. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

View GL values

Administration > Databridge > View GL Values

Query for transactions in Databridge and view detailed processing information for transactions.

Flex Business Rules

Administration > Setup > Flex Business Rules

Define Flex SQL statements to define validation rules that are specific to your organization. You can set up one or more statements to be processed for postinsert or postupdate events.

Flex SQL processing supports data query (select) and data manipulation (insert, update, delete) statements. Use select statements to perform a check condition.

Uppercase and lowercase characters are allowed in the SQL statement. The row identifier token, however, must be either all uppercase or all lowercase (i.e., :ROWID or :rowid).

Every Flex SQL statement requires the use of a predefined :ROWID token. This token refers to the database row identifier for the record being processed in the specified table. The statement is executed for each record in the table affected by the insert or update operation.

The maximum statement length is 4000 characters. No statement termination character (;) is required.

Data manipulation statements are allowed, but make sure you do not begin an infinite cascading of trigger steps. For example, generally it is not recommended to create a Flex SQL statement that updates the base table identified in Table.

Infor recommends that you define Flex SQL business rules procedures in close cooperation with your Infor EAM consultant.

GL References

Administration > Databridge > GL References

Define general ledger reference information for your defined general ledger processes and view general ledger reference details.

Monitor Interface

Administration > Data Collection > Monitor Interface

View scanner transactions to be processed. The number of records available to view constantly changes as new records are processed through the system interface. You can also correct scanning errors in the system database. The correct record is reprocessed when saved.

GL Process Definition

Administration > Databridge > GL Process Definitions

Define general ledger processes to export transaction data to an external ERP general ledger and create journal entries in the corporate accounting system for the processes defined. Define parameters to enable general ledger process to dynamically construct an SQL select statement to transfer transaction information from Infor EAM to an ERP application.

Economic order quantity (EOQ)

Materials > Process > Calculate EOQ

Calculate the EOQ for a store to determine the most efficient quantity to order for inventory items.

Issue/return parts

Materials > Transactions > Issue/Return Parts

Issue parts from stores to work orders, equipment, or projects.

Return unused parts or parts that can be repaired to stores.

Equipment rankings

Equipment > Setup > Equipment Ranking

Create equipment rankings for equipment to determine the criticality or risk a piece of equipment poses to your operation. If the machine fails, could it have safety or environmental implications, or will it result in production shutdown? Equipment rankings will help formalize the process to determine this risk based on your answers to the ranking questions you have configured.

Equipment rankings allow users to assign a Ranking Index and Ranking Score to assess equipment risk. Users must first define criteria by which to assess the risk.

Use the Decision Tree and develop the formula to calculate the Ranking Score, and use the assigned score ranges to determine which Ranking Index should be applied.

To utilize the equipment ranking functionality, perform these tasks:

1. Create an equipment ranking record.
2. Add levels to the decision tree structure.
3. Add answers to the decision tree.
4. Add formulas to the decision tree.
5. Add normalization values to the decision tree.
6. Order questions for the decision tree.
7. Assign ranking scores to ranking index values.
8. Associate equipment to an equipmentt ranking.
9. Answer the ranking survey.
10. Calculate ranking values.

Resource load graph

Menu Path

Work > WO Planning > PM Forecasting > Forecasting tab

Description

Displays a graph report listing resource data for the selected PM work orders.

Safety work order report

Displays a list of all work orders where EVT_SAFETY is selected.

Select **Work > Reports > Safety Work Order**.

Strategies

Equipment > Additional Features > Asset Management Policy > Strategies

Strategic initiatives help organizations meet long-term goals. For example, a strategic initiative can be your organization's corporate commitment to reducing electrical consumption. Define your organization's strategic initiatives as strategies.

Temperature analysis chart

Menu Path

Administration > Setup > Regions > Temperature Analysis Chart

Description

Before you can set the parameters to generate the temperature analysis chart, you must enter **Temperature Minimum** and **Temperature Maximum** on the **Actual Temperatures** and **Historical Temperatures** tabs.

Top 25 service requests-details report

Description

Displays the top 25 most occurring service problem codes.

Menu Path

Operations > Reports > Call Center > Top 25 Service Requests-Details

Total annual energy use

Menu Path

Equipment > Reports > Asset Sustainability > Total Annual Energy Use

Description

Displays the annual energy usage report for one year as specified in the report.

Total service requests report

Description

Displays the total number of service requests.

Menu Path

Operations > Reports > Call Center > Total Service Requests

Total service requests report

Description

Displays the total number of service requests.

Menu Path

Operations > Reports > Call Center > Total Service Requests

Units of measure (UOM)

Materials > Setup > Units of Measure

Measurements for storing and issuing stock items can depend on the item itself or on the supplier. Cable, for example, is generally measured in feet. Liquids can be measured by the bottle, barrel, or gallon. Screws might be measured according to box or pound.

Measurements can vary within your own organization. Perhaps you must order widgets from a vendor in 24-item cases (the purchase unit of measure). Inventory, on the other hand, stocks widgets as single items (the inventory or stock-keeping unit of measure).

Define various measurements for different purchasing and inventory items. All system store transactions are based on inventory units of measure (how the items are actually stored). All quantities referred to on the bill of materials are also based on inventory units of measure.

When purchasing items in units of measure different from that in which you stock them, convert the unit of measurement. When the inventory unit of measure and the purchase unit of measure are exactly the same, the conversion factor is 1. If they are not the same, use the following formula:

purchase UOM x conversion = issue UOM

(1 box of widgets x 10 = 10 widgets)

When the buyer sends out requests for quotes to suppliers, the supplier might provide a price based on a unit of measure that is different than the purchase unit of measure (which could be true due to volume discounts, for instance). This is the quotation UOM, and you then need to supply a conversion factor between the quotation UOM and the purchase UOM when creating the purchase order or requisition.

Unreturned cores

View and track core parts issued to a work order, equipment, project-budget or employee that were never returned to the corresponding store after failing. When core parts remain outstanding, the value of the core part remains charged against the work order, or to whatever it was issued. Once the core part is returned the core value is removed from the work order.

Updating route inspection results

Update existing route inspection results as necessary.

To update route inspection results:

1. Select **Inspect > Route Inspection**.
2. Select the work order for which to update inspection results, and then click the **Inspection Results** tab.
3. Select the inspection record to update, and then click **Edit Record**.
4. Specify the information necessary to update the inspection result record, and then click **Save.**
5. Click **Yes**.

User defined screens

Administration > Screen Configuration > User Defined Screens

Create and modify user defined screens, and then define fields for these screens.

User groups

Administration > Security > User Groups

Set up user groups so that people who perform similar tasks within the organization have the same privileges. In the system, you can copy the header and child information from one user group to another. You can also edit user groups as necessary.

The system is configured with two user groups: R5, containing one user, and R5EMPTY, containing no users. The R5 user group has full access to all functions, including data setups, system setups, and system administration setups. R5EMPTY has no permissions. After installing Infor EAM, change the user password immediately. Only the system administrator should have access to this user.

After setting up users within a user group, the system administrator cannot delete the group. Infor strongly discourages using the predefined R5 and R5EMPTY user groups as default user groups because menus and authorizations of these two groups might be replaced during system upgrades.

After setting up new system user groups, view the users that are associated with user groups on the **User Groups** form.

You can also set screen-level permissions for data manipulation. Screen authorization for user groups is critical to database security and data integrity. Specify the functions to which user groups have access and specify the permission levels for each function. Specify the web services to which user groups have access and specify the permission levels for each web service. Configure which screen flows are available for each user group.

Next, you can set up menus on the menus page of the **User Groups** form. Creating a menu structure for user groups is critical to database security and data integrity. In the system, the menu structure is displayed in a tree structure that extends to three levels: the Main Menu level, Sub-Menu level, and Screen level. The Main Menu level may contain up to seven items. The Sub-Menu level may contain up to thirty items, and the items may be a mix of folders and screens. Finally, the Screen level may also contain up to thirty items, but the items must be screens.

Finally, you can set up scanner menus on the scanner menus page of the **User Groups** form to associate prompts to a menu structure. In the system, the menu structure is displayed in a tree structure that extends to three levels: the Main Menu level, Sub-Menu level, and DC Prompt level.

User IDs

Administration > Security > User Setup

Set up users with access to the system as members of user groups. You can also edit users as necessary. After setting up new system users, associate them with specific organizations. When the user logs in to the system, the default organization determines to what user group the user belongs for that system session. Additionally, associate users with KPIs, inboxes, and responsibilities.

My service requests

Review the details of open or closed service requests on the **My Service Requests** page.

Follow these steps to view service requests.

1. Log in to Infor EAM. The **My Service Requests** page is displayed.
2. Click **New Service Request** to create a new service request. Click Creating service requests on page 915 for more information.
3. Choose one of the following options:

View all service requests that match a predefined filter
Select the type of service requests you wish to view from **Show Me**. All service requests that match the selected criteria are displayed.

Create a custom filter
See *Defining Quick Filters* below.

4 View the service requests.

Defining Quick Filters

Filter the list of service requests to display only those requests that meet your specified criteria.

To define quick filters:

Note: The filter is applied in addition to any filter criteria specified in the **Show Me** field.

The number of records that were located using the specified filter criteria are displayed on the filter bar.

1 Filter
Select the field on which to filter from the first drop-down list.

2 Select an operator from the second drop-down list. See the following table for operator options:

Operator	Definition
= (equal to)	Search for items with a value equal to the entered value.
> (greater than)	Search for items with a value greater than the entered value.
< (less than)	Search for items with a value less than the entered value.
> = (greater than or equal to)	Search for items with a value greater than or equal to the entered value.
< = (less than or equal to)	Search for items with a value less than or equal to the entered value.
Contains	Search for items with a description that contains the entered value.
Begins with	Search for items with a description that begins with the entered value.
Ends with	Search for items with a description that ends with the entered value.
Is Empty	Search for items with a description that has no entered value.
Not Empty	Search for items with a description that has any entered value.

Operator	Definition
Not Equal	Search for items with a description that does not equal the entered value.

3 Specify the value for which to filter in the third field.
4 Click **Run**. The service requests matching the filter criteria are displayed.

Vehicle billing report

Menu Path

Work > Reports > Fleet > Vehicle Billing Report

Description

Displays billing information from the fleet customer

Parameters

Include Details
Select to print billing details.

Include Custom Fields
Select to print custom fields.

Print No Charge Bills
Select to print bills with no charges.

Start Date
End Date
Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.

Specify the **Organization**, **Fleet Customer**, and **Bill**.

Vehicle rental history report

Menu Path

Work > Reports > Contract Management > Vehicle Rental History

Description

Displays the vehicle rental history.

Vehicle ticket report

Description	Displays ticket information based on the fleet vehicle ticket
Parameters	Specify the **Organization**, **Ticket**, **Status**, **Type**, **Fleet Customer**, **Vehicle**, **Received Vehicle**, **Issued To**, **Cost Code**, and **Ticket Class**. **Include PM Details** Select to print PM details. **Include Billing Details** Select to print billing details. **Print Custom Fields** Select to print custom fields. **Include Exceptions** Select to print exceptions. **Include Billing Adjustments** Select to print billing adjustments. **Print Attachments** Select to print document attachments associated with vehicle tickets in addition to the vehicle ticket. **Select Records By** Select to sort by Issued Date, Returned Date, and Completed Date. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data. **Start Date** and **End Date** are required fields.
Report Type	Consumer

Vendor lead time report

Purchasing > Reports > Vendor Lead Time

Print the vendor lead time report. The lead time report displays lead time information from all purchase orders related to the selected supplier.

Views

Administration > Screen Configuration > Views

Use relational database views to expand the complexity and functionality of user defined grids in EAM. Define these database views by generating queries using SQL statements. Unlike user defined grids in EAM, views allow you to use outer joins and unions to combine data from two or more tables.

VMRS activities chart report

Description

Displays the details of equipment records based on the VMRS codes on actitivities.

Menu Path

Work > Reports > VMRS Activities Chart

VMRS activities

Work > Reports > Fleet > VMRS Activities

Description	Prints a list displaying activity details for VMRS work orders

Parameters	Specify the **Organization**, **Equipment**, **Trade**, **Department**, **Work Order**, **Status**, **Reason for Repair**, **Work Accomplished**, **Technician Part Failure**, **Manufacturer**, **System Level**, **Assembly Level**, and **Component Level**. The values available for **Assembly Level** are based on the system-level code. The values available for **Component Level** are based on a combination of the system-level code and the assembly-level code. **Show MEC Details** Select to display MEC work order details for multiple equipment work orders. **Activity Start Date** **Activity End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Consumer

VMRS codes

Work > Setup > VMRS Codes

The American Trucking Association's Vehicle Maintenance Reporting System (VMRS) is a set of codes used to track equipment and maintenance within the fleet/transportation industry. VMRS provides a universal language so that the various industry segments (such as maintenance employees, management, suppliers, and manufacturers) can communicate more easily and accurately. Values for all Code Keys are installed in the database.

When defining VMRS codes, you must first define a system-level code before you can define assembly-level or component-level codes.

Warranties

Equipment > Warranty > Warranties

Set up initial equipment information before using the equipment module. Track asset warranties and process warranty claims in Infor EAM. Many suppliers provide a warranty on new equipment for a specific period of time.

Associate warranty documents with specific pieces of equipment or with other equipment. Define warranty terms based on equipment usage or by date.

One or more warranty coverage records may be established for a piece of equipment for tracking purposes to ensure that stipulations of the warranty are adhered to both internally and externally. In general, there are two types of warranty coverage records that can be tracked for equipment: calendar-based and usage-based. Warranty coverage records can be associated with an asset, position, or system.

Calendar-based coverage records require a duration value expressed in days. The start and expiration of this type of warranty for a given piece of equipment is expressed in terms of calendar dates. Usage-based warranty coverage records require a duration value expressed in some unit of measure other than days. The warranty's unit of measure has to be defined as a logical meter for the equipment. The start and expiration of this type of warranty for a given piece of equipment is expressed in terms of usage.

Associate VMRS with warranties to track warranty information for vehicle components.

Warranty claim vs. settlement chart

Menu Path

Equipment > Warranty > Warranties > Warranty Claim vs. Settlement Chart

Description

Before you can set the parameters to generate the warranty claim vs. settlement chart, you must update the system Status of the warranty claim to Response Received. The system does not display this status as an option until the warranty claim has been given a system Status of Approved.

Warranty claims

Equipment > Warranty > Warranty Claims

Create warranty claims to recoup faulty parts or material and labor costs incurred when warranty-related repair work has to be performed in-house, and then enter settlement details for a warranty claim after the claim has been settled. Enter monetary values according to the amount of money you are able to recoup through the claim process.

Web service prompt engine

Administration > Screen Configuration > Web Service Prompts

System administrators can create user-defined screens that utilize the underlying web services on which the system is architected. The Web Service Prompt Engine displays the screen representing the prompt definition. The Web Service Prompt Engine also processes data entered for the prompt transactions through the underlying web services.

Because the Web Service Prompt Engine uses web services, the data is processed directly to the underlying tables as the transactions are submitted. Therefore, you receive immediate feedback if the transaction is successful as well as if it contains validation or web service errors. These errors can then be corrected in real time and re-submitted.

Once a web service prompt has been created, the system administrator must place the corresponding screen into the user groups menu structure. That process makes the new screen available through the menu structure, and the new screen appears like all other screens within the system. The screen name is equivalent to the prompt description. You need only query permissions for the new screen.

The following apply to screens based on web service prompts:

- They are standalone record view screens with no tabs and no Dataspy filtering features
- Common tabs and pop-ups (Comments, Documents, Addresses, etc.) are not available
- Screen Designer is not available. Screen Designer toolbar button is not available
- The only toolbar options available are Previous Screen, Save, Reset Screen, and Help
- Right-click options are not available
- Dataspy, Export to Excel, Quick Filter, and Save Layout options are not available
- Custom Fields are not supported
- The system does not automatically display the lookup defined on the selected screen for a chosen field. The system administrator must associate a Query Code or define a Retrieved Value for each lookup field.

Web service prompts

Administration > Web Service Prompt Engine > Web Service Prompts

Define web service prompts representing web services and fields rendered on the user-defined screen using the Web Services Prompt Engine. System administrators can use web services to create user-defined screens for use within Infor EAM. Web service prompts contain the definitions for these screens.

The following rules apply to forms for which web service prompts are available:

- The system displays the functions of all system-delivered Infor EAM List View and Record View pages.
- BSCOMM (Comments) is displayed.
- No user-created screens are available.

The system displays all screens meeting the above criteria if a web service has not been specified; otherwise, only screens related to the web service will be displayed.

Weekly booked hours by department report

Menu Path

Work > Reports > Weekly Booked Hours by Department

Description

Print equipment details for a piece of equipment, with the option to print a list of work orders, PM schedules and parts associated to the equipment.

Work backlog report

Menu Path

Work > Reports > WOK Backlog Report

Description

Displays a list of backlogged work orders.

WO backlog report

Work > Reports > WO Backlog Report

Description	Displays a list of backlogged work orders

Parameters	Specify the **Organization**, **Department**, **Trade**, **Type**, **Equipment**, **PM**, **Location**, **WO Type**, **Priority**, **Equipment Criticality**, **Status**, **Assigned To**, and **Scheduling Group**. **Warranty** Select to display the equipment warranty associated with the work order. **Show MEC Work Orders** Select to display multiple equipment work orders. **Sort By** Select one of the following options: to sort by Start Date, Equipment, or Location. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

WO backlog report-hospitality

Menu Path

Work > Reports > WO Backlog Report-Hospitality

Description

Displays a list of backlogged work orders.

WO cost list-hospitality

Menu Path

Work > Reports > WO Cost List-Hospitality

Description

Displays the costs of a work order.

WO cost summary-hospitality

Menu Path

Equipment > Reports > WO Cost Summary-Hospitality

Description

Includes itemized and total cost information (labor, materials, services, and tool costs) by equipment for open and closed work orders.

WO cost list

Work > Reports > WO Cost List

Description	Displays the costs of a work order
Parameters	Specify the **Organization** and **Work Order**. **Start Date** **End Date** Specify the starting and ending date for which to retrieve data.
Report Type	Basic

WO daily scheduling

Work > WO Planning > WO Daily Scheduling

Schedule daily work orders on the WO Daily Scheduling form.

WO quick entry

Create, update, and complete work orders on the **WO Quick Entry** form. When you create a work order, the system automatically enters a status of Released on the work order header. Insert and update activities, book labor for existing activities, and issue parts to an activity. Add or view work order comments and activity comments.

WO statistics

Work > Reports > WO Statistics

Description	Displays statistical backlog information including the number of work orders: backlogged according to **Date From**; scheduled to begin within the date range; backlogged at **Start Date** but completed within the date range; and scheduled to begin within the date range and completed within the date range
Parameters	Specify the **Organization** and **WO Type**. **Show Totals** Select to display the work order totals on the report. **Date From** **Date To** Specify the starting and ending date for which to retrieve data. **Date From** and **Date To** are required fields.
Report Type	Consumer

WO updates

Update details on a work order in a batch.

Work by employee

Menu Path

Work > Reports > Scheduling > Work by Employee

Description

Displays a list of all work orders where booked labor for an employee has been applied.

Work order list - detail (healthcare)

Menu Path

Work > Reports > Work Order List-Detail

Description

Displays a list of all work orders where RTYPE is JOB or PPM. This report does not display multiple equipment child work orders.

Work order repair costs chart

Menu Path

Equipment > Assets > Work Order Repair Costs Chart

Equipment > Positions > Work Order Repair Costs Chart

Equipment > Systems > Work Order Repair Costs Chart

Description

Prints the work order repair costs chart report.

Note: You may also access this report on the **Work Order Repair Costs Chart** tab of the **Positions** and **Systems** forms.

WO scheduling

Work > WO Planning > WO Scheduling

View the current work order schedule, calculate labor availability, and view labor utilization. Schedule unscheduled or backlogged work orders. Reschedule work orders as necessary. Additionally, you can view work order comments, change the work order status, and freeze or unfreeze activity schedules.

Work orders

On the **Work Orders** form, you can create regular work orders to repair broken equipment, modify equipment to meet safety and environmental standards, perform work orders during a normal workday,

and record information concerning equipment problems. Work orders can either be independent or part of a much larger project. First, enter header information on the **Work Order Record View** page. Then add activities to the work order, schedule labor, associate qualifications with work order activities, book labor and vendor hours, associate parts, enter meter readings, create child work orders, add permits, request tools, and associate inspection points as necessary. Add additional equipment to work orders for which similar work will be done to distribute costs across the equipment on the work order. You may also view the status of work orders and view work order information such as work order cost and service request details. Finally, close the work order after the work is complete.

Work orders

Work > Create Work Request/Work Order

Create work orders to repair broken equipment, modify equipment to meet safety and environmental standards, perform any other work order during a normal workday, and to record information concerning equipment problems. Work orders can either be independent or part of a much larger project.

Work requests

Create work requests for repairs on equipment. Review the status of all work requests for repairs on equipment.

After work requests are created, users with appropriate rights can review or approve work requests.

See the Requestor documentation for more information on requisitions.

Work setup

Administration > Work Setup

Define work setup options to format the module to your specifications.

Workspaces

Equipment > Additional Features > Workspaces

Define workspaces or areas where work is completed. Examples of a workspace include an office, a cubicle, and a meeting room. You can also associate employees and furnishings to these workspaces.

Workspace moves

Equipment > Additional Features > Workspace Moves

Move equipment, furnishings, and employees from one workspace to another. For example, move specific employees and their computers from one floor of the office building to another.

Workspace moves and associations list report

Description

Displays a report of all workspace moves and their associations.

Menu Path

Equipment > Reports > Workspace Moves and Associations List

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About this guide

This guide provides conceptual information on Infor EAM Databridge.

Intended audience

This guide is intended for system administrators, implementation consultants, product architects, and support specialists.

Prerequisite knowledge

To fully understand the information presented in this guide, you should first be familiar with the Infor EAM products.

Organization

This table describes the chapters of this guide:

Chapter	Description
Databridge installation on page ?	Instructions on installing Databridge and the Infor EAM application server, installing on multiple servers, and configuration.
Databridge system administrator on page ?	Instructions on setup, configuration, and system administration of Databridge.
Message management on page ?	Instructions on how use the message management features to administer Databridge processes for inbound and outbound events.
General ledger process administration on page ?	Instructions on managing and administering general ledger information, managing account detail information, and Flex SQL.

Related documents

This guide references other documents. You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor" on page 8.

You can find these documents in the Infor Xtreme Support portal:

- *Infor EAM Databridge Reference Guide*
- *Infor EAM Databridge Remote Agent Guide*
- *Infor EAM Installation Guide*
- *Infor EAM User Guide*
- *Infor EAM System Administrator Guide*