Chapter 10:

Settings and Tools

Objectives

After completing this section, you will be able to:

- Add / Edit / View / Delete Users
- Manage the Department Drop-Down List
- Add / Edit / View / Delete Access Groups and set up Global Permissions
- Add / Edit / View / Delete Email Groups
- Manage the Rate Codes Drop-Down List
- Manage Locations
- Set up the Labels and Forms used throughout TME
- Set up Global and Category Specific Attributes for Assets, Inventory, SPC and Production
- Manage TME System-Wide Settings

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Settings

The TME Administrator has permissions for all activities throughout the application and is responsible for setting up and maintaining the application. Certain functions such as setting up Users, Access Groups, Locales, etc., are generally only handled by the Administrator. Some features can only be accessed by the Administrator regardless of how Permissions have been set up.

The Settings module is the Administration Module. This is where the Administrator can configure the setup as well as manage the locales, print items, rate codes and item attributes. Access and Email Groups, Users and Departments are managed within the Contacts module. Both modules can be accessed via Go To from the Task Bar or the appropriate Menu Group.

The Settings module consists of six submodules: Rate Codes, Locales, Print, Variable Groups, Data Collections and Notifications. The Rate Codes submodule lists the various rate codes for work that can be selected when hours are logged against a work order. The Locales submodule contains the information of the different levels of locations (Campus, Building, Floor, Room and Location) that are available for selection for various items throughout TME. The Print submodule is where different labels that can be selected for different items are set up. The Variable Groups submodule contains the listing of the user defined variables (fields that can be set up as single instance attributes and/or multi-instance data collections) that have been created for Assets, Inventory (Items, Batches, Receipts and Transactions), Production Logs, Work Orders, WIP Work Orders, Purchase Orders, Requisitions and SPC Data Collection. The Notifications submodule provides the ability to customize email and text notifications that are generated throughout the system.

The Contacts module consists of four submodules: Companies, Contacts, Departments and Groups. The Users component is co-located with the Contacts (vendors, suppliers, manufacturers, etc.) within the Contacts submodule. The Departments submodule manages the Department drop-down list. Setting up system permissions, certification tracking and email groups is done via the Groups submodule.

Users

New Users can be added by clicking on New at the left side of the Contacts Viewer Toolbar. A blank Details popup screen will appear and will as a default be set to the General tab of the Information link (the Additional links for Access Groups, Email Groups, Time Clock Data and Notification Rules are not available until the new User record is saved).

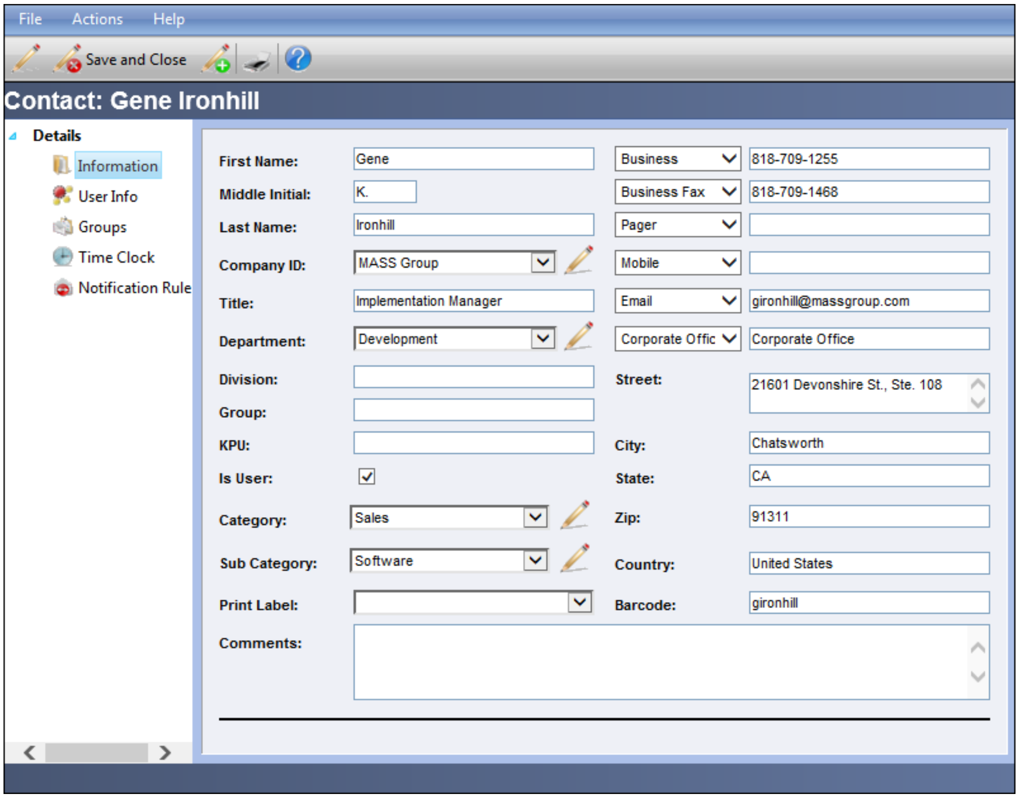


Figure 1 Contact Detail Screen for User

Enter information for all the fields. Select a Category, SubCategory, and/or Department from the drop down menus or enter a new one into the drop down menus by clicking on the Enter New Item icon and typing them in.

Save using the Detail Toolbar or Taskbar. The Additional links for User Info, Groups, Time Clock Data, and Notification Rule are now activated any time the Details screen for this record is open.

Enter User Info

Select a record within the Users Viewer and double click anywhere within the row or right click within the row and Click on the User Info Link and type in the details: ID (required), Password, Confirm (retype the Password).

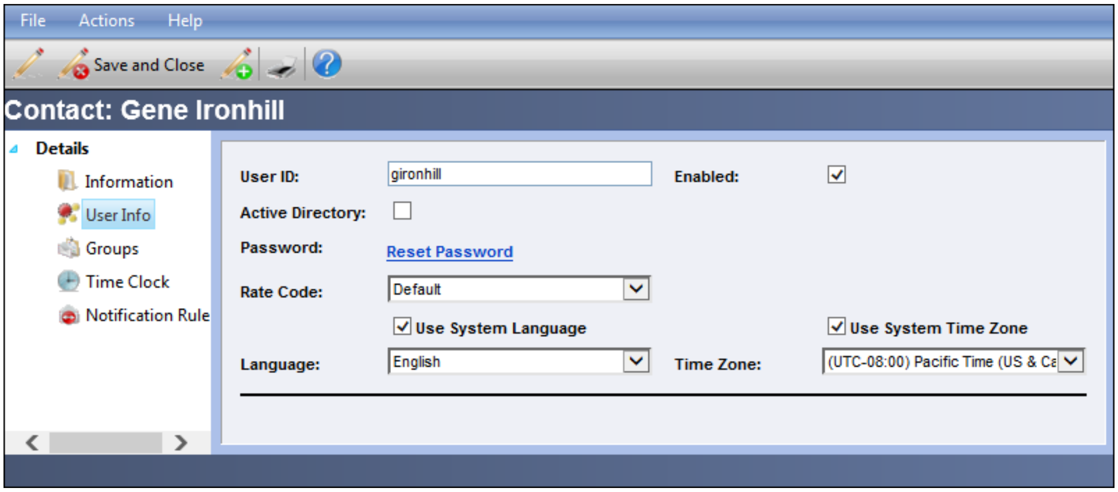


Figure 2 Contact - User Info Detail Screen

From the drop down menus, select the Language of the application as it will appear to the User, Rate Code that appears as the default when the User logs hours on a work order, and the Time Zone his/her actions are to be recorded in.

Click on the Enabled checkbox if the User is to be allowed to log in. If the checkbox is not checked, the User's information will remain in the system, but the User will not be able to log in and will not be visible throughout the system.

Click on the Active Directory checkbox if the user is to use his/her User Id and password from Active Directory. Keep in mind that the User Id must be identical. A field will appear requiring the entry of the Full Domain name. TME can utilize the Active Directory feature across domains.

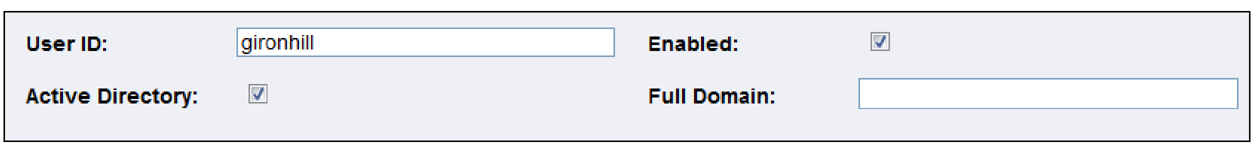


Figure 3 Active Directory Input

Make User Record Inactive/Active

Select a record within the Users Viewer and double click anywhere within the row or right click within the row and select "View." The User Details screen appears set to the Information Link. Click on the User Info link and deselect the Enabled checkbox to remove the checkmark. If the checkbox is not checked, the User's information will remain in the system, but the User will not be able to log in. To make the User active again, click back on the Enabled checkbox to replace the checkmark. Save using the Detail Toolbar or Taskbar.

Link User to Group(s)

Select a record within the Users Viewer and double click anywhere within the row or right click within the row and select "View." The User Details screen appears set to the Information Link.   Click on the Groups link.

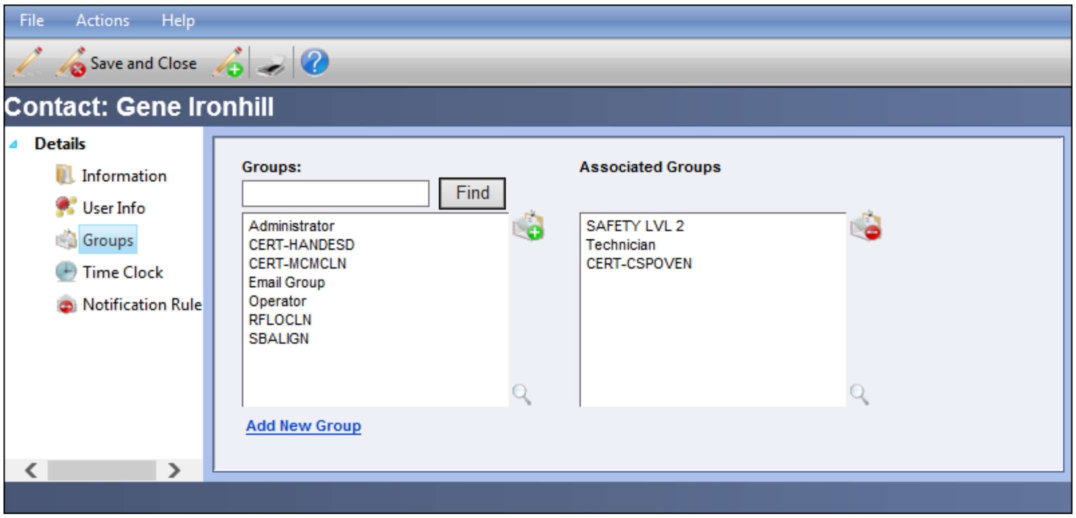


Figure 4 Contacts - Groups Detail Screen

Select the Access and or Email Groups (hold the Ctrl key if making multiple selections) from the Groups field and click on to the right of the field. The groups selected are now visible in the Associated Groups field. To remove the User, select the Groups from the Associated Groups field and click on to the right of the field.   To add a new Group, click on Add New Group.

If the Group has expiration dates set up, the expiration date will be set based on the default setting. If that needs to be changed, go to the Group Detail Screen, click on Members, open the User's record and change the date.

Time Clock Data

Click on the Time Clock Data link.

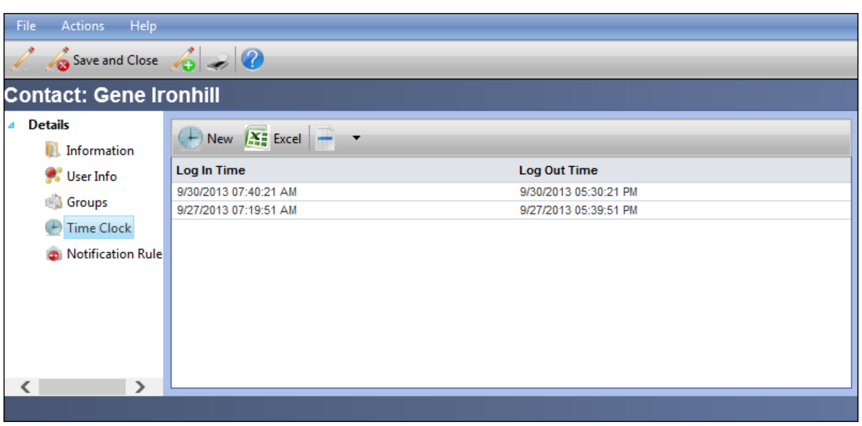


Figure 5 Contacts - Time Clock Data Detail Screen

To add a new record, click on  at the left side of the Viewer Toolbar. Type in the Log In Time and Log Out Time in the following Date Time format: 6/1/2009 3:10:46 PM. These records are editable by double-clicking on them and making the edits.

Notification Rules

The Notification Rules provides the means for selecting which of the secondary or tertiary email/text addresses a specific notification is to be sent, if at all.

To add a new record, click on  at the left side of the Viewer Toolbar. Select the notification from the Notification drop down list and the corresponding address from the Send To drop down list. Repeat for each Notification that needs to be sent to an alternate email/text address (or multiple) than the default set in the Email field.

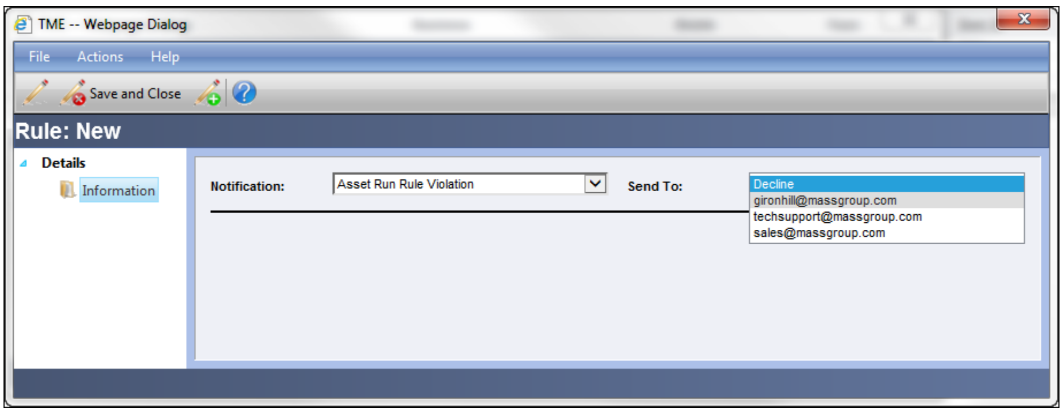


Figure 6 Contacts - Notification Rules Detail Screen

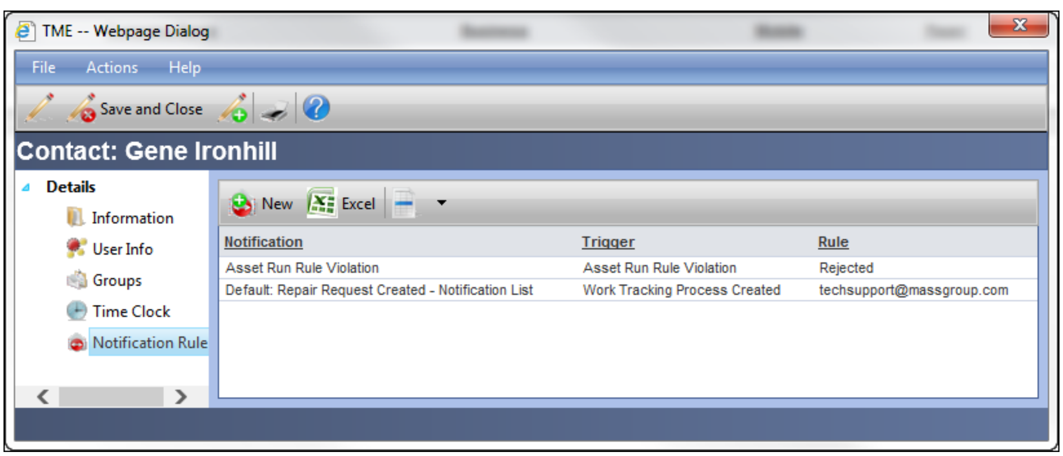


Figure 7 Contacts - Notification Rules Viewer

Exercise 1:

Add a User who will be an Administrator of this system and two other Users who will be in alternate Access Groups. Have all three included in an Email Group.

Departments

Users (especially subcontractors) may belong to different departments for which work is to be charged. This feature is designed to allow users to select the department that needs to be charged from a managed drop down list.

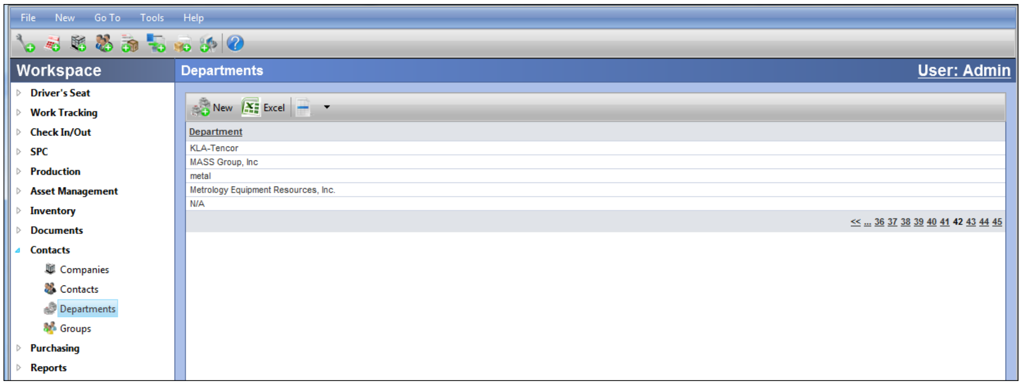


Figure 8 Departments Viewer

New Departments can be added by clicking on  in the Departments submodule of the Contacts module.

Type in the Name and/or Number of the Department. Save.

Groups

These are groups used to put together Users who have the same set of permissions or require identical notifications. It is also used to track certifications. In this sub-module located in the Contacts module, Administrators can add, edit and delete Groups. They can also add, view, edit and remove Users from the group. The Groups submodule also manages Email groups and Certification groups (a single Group can be one, two or all three of the types of groups).

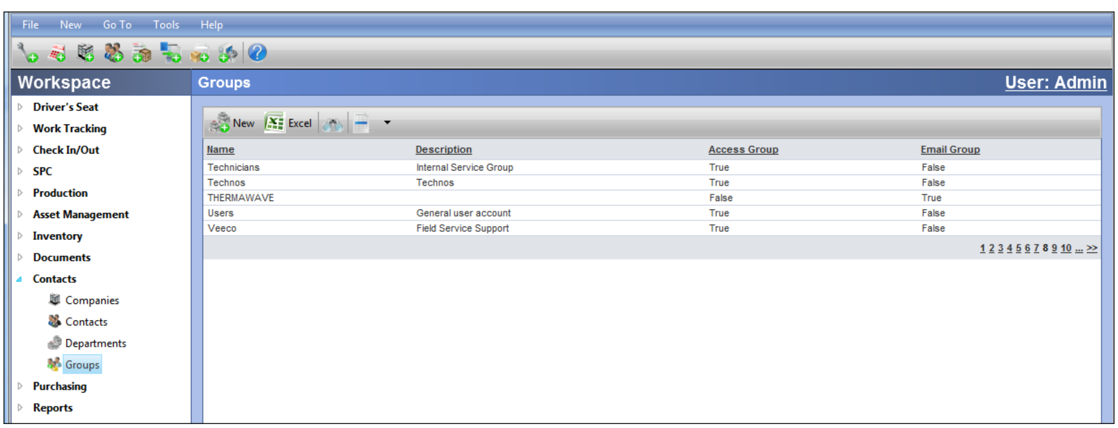
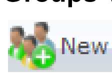


Figure 9 Groups Viewer

New Groups can be added by clicking on .

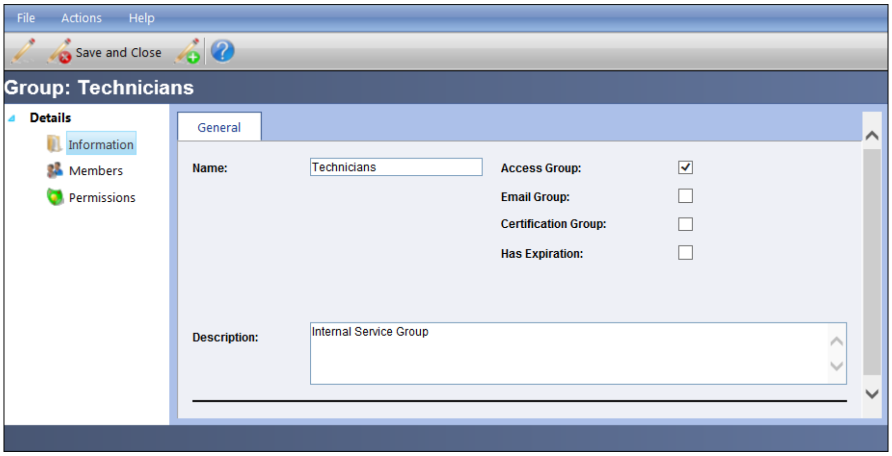


Figure 10 Group Detail Screen

Type in the details--Name (required) and a Description; select one of the following (or a combination thereof):

Access Group: This group determines User's (Contacts cannot be members) access to features and functionalities within TME. A link to Permissions will be provided on the detail screen whereby individual features and tasks are selected as permissible for members of the particular group. An Access Group can be linked to various objects (Assets, Inventory Items, Work Order Processes, Scheduled Work, WIP Operations, WIP Processes, etc.) in order to restrict access and visibility by this and other selected Groups. Along with the expiration date feature, Access Groups can be used to limit an Operator's ability to utilize Equipment when moving through WIP if membership is not maintained in designated Access Groups.

Email Group: Both Users and Contacts can be members of Email Groups. These Groups can be selected to receive specific Notifications throughout the system. Rather than selecting individuals, the TME Administrator can choose a Group and then revise membership to the Group as opposed to revising individual Notifications (there could be hundreds) anytime a User's role in the organization changes.

Certification Group: Users and Contacts can be members of Certification Groups. This Group is set up for reporting purposes only to track certifications and does not have an impact on the usage of TME. Organizations can track required certifications (and expiration dates) such as CPR and First Aid, HR Trainings, etc. If using Access Groups for purposes of certifying usage of equipment, it would be convenient to also make it a Certification Group as well in order to easily report upcoming expirations, memberships, etc.

Click on the Has Expiration checkbox accordingly (applies to Access and Certification Groups only).

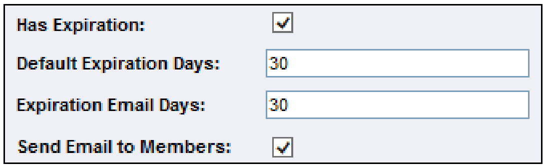


Figure 11 Expiration Settings

If there is to be an expiration (Groups are not required to have expirations), three additional fields will appear. The first is to set the default number of days between expiration dates. The second is to set the number of days prior to expiration that a daily notification will begin to be sent out. The third is to determine whether the member who's expiration is about to occur or has occurred receives an email notification (this is separate from the Notification list for which the link is available only if Has Expiration is checked).

Users may be members of multiple Groups. If a User is a member of more than one Access Group, the User will have the permissions as accumulated, i.e., if permission is provided to access the Assets submodule in one Group, but not another, a User who is a member of both has permission to access the Assets submodule. However, if the User's membership in the first Group has expired, than that User no longer has that permission.

Users will only be able to log in as a <u>non-expired</u> member of <u>at least one</u> Access Group.

Save. The Additional links for Members, Permissions (Access Groups only), and Notification (only is Has Expiration is checked) are now activated.

Link Group to Members

Link Members to a Group in the same manner that Groups were linked to a Member within the Contact's detail screen.

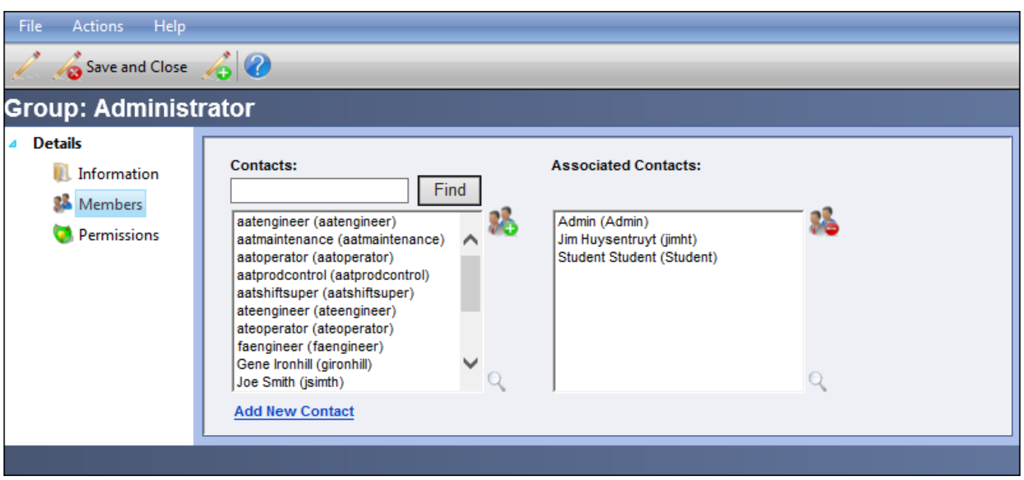


Figure 12 Members Screen for Group without Expiration Dates

However, if the Group has been set with expiration dates, the screen is different.

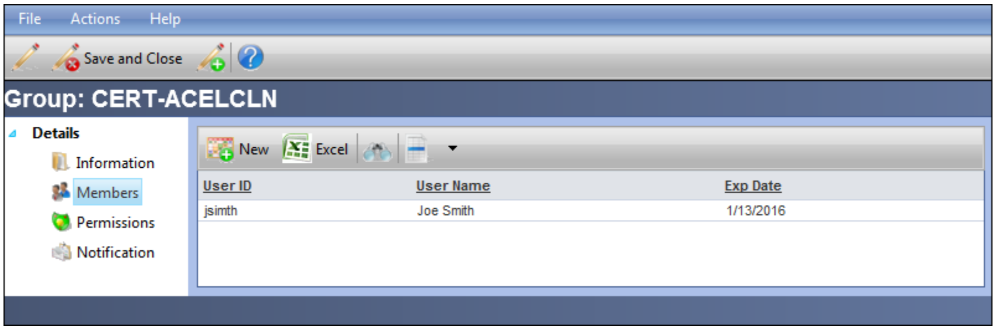


Figure 13 Members Screen for Group with Expiration Dates

Click on  to add a New Member. Choose the Contact from the LookUp screen and set the expiration date with the calendar tool.

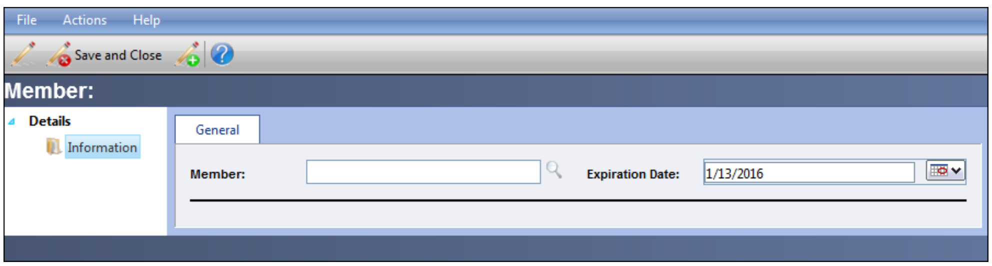
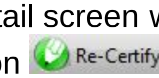


Figure 14 Member Detail Screen

Certification History

Click on Certification History to view the history of the expiration dates as they have been updated.

The expiration date can be manually changed from the Member detail screen which is not tracked in TME, or it can be set by clicking on the Re-Certify icon  on the toolbar. Leave the dates as populated or select via the Calendar control. This method does track the history of the expiration dates and will provide records on this screen.

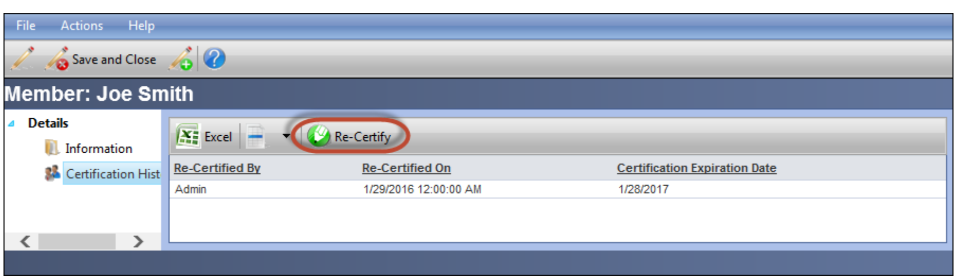


Figure 15 Certification History Screen

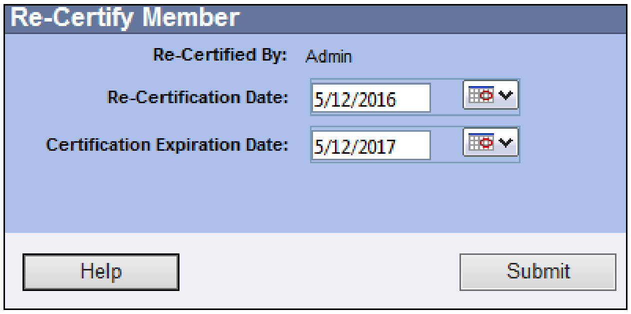


Figure 16 Recertify Member Screen

Notification

The Member Expiration Notification is used to send an e-mail to a User when the membership of another User is about to or has expired from the Group. This is in addition to the Notification that goes out to the member him/herself (provided that the Send Email to Members checkbox has been checked). To set up the Notification, click on the Notification link on the Group's Detail Screen.

Make sure the User information contains a valid e-mail address.

1. Click New to add a new Notification.

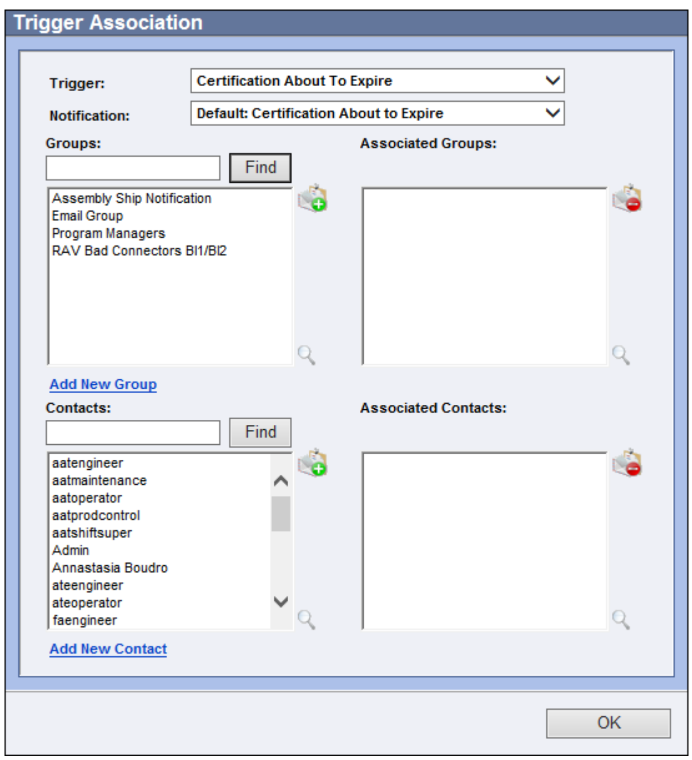


Figure 17 Trigger Notifications Screen

2. Select the first Trigger and the Notification.

3. If notifying an Email Group, select an Available Group (click on) and move it to the Associated Groups column.
4. If notifying an individual Contact, select the name from the Contacts list and move it to the Associated Contacts column.
5. Repeat for the next Trigger accordingly.
6. Click OK.

Setting Up Global Permissions

The Administrator can set up Global Permissions for each module thereby restricting which Access Groups have access to any given module and certain components of that module. Groups **will not** have access to a module unless Permission is set up. This is an "added" permissions system in that permissions must be provided for access and ability to take action, as opposed to removing permissions from a full set.

Click on the Permissions link.

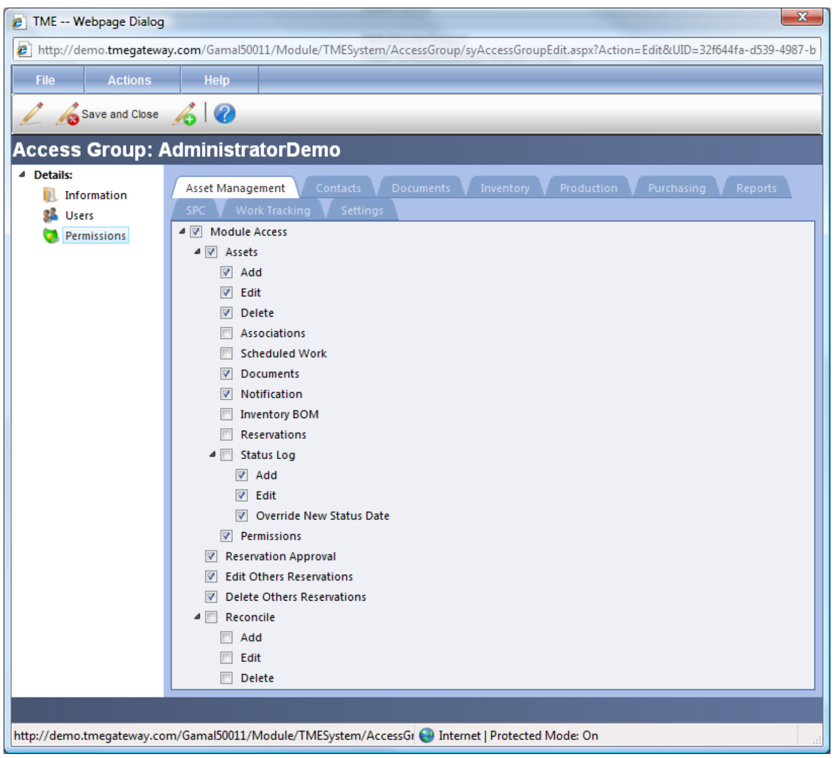


Figure 18 Groups - Permissions Detail Screen

Each tab contains a list of Permissions for a particular Module. The name of the Module is on the tab header. Click on the tab header of the Module to view the list. Click on the boxes to give permission to the members of the Access Group for the corresponding action. Checking the box for Module Access allows the group to have access to the Module itself and nothing more (i.e., the User can see that there is a

Contacts Module, but without permission to view the Sub-Modules, won't see the Viewers or any actual information). The options for the Sub-Modules must be checked if the group is to be able to view the item Viewers.

Once checked, the permission is immediately granted to the members of the Access Group. Save.

To discontinue a particular Permission for an Access Group, uncheck the box for the Permission. Once discontinued, the permission is immediately not available to the Access Group. Save.

Users may be members of multiple Access Groups. Note: if a User has permission to have access to a Module via one Access Group, but not another, the permission is granted.

Exercise 2:

Add Inventory and Maintenance Technician Departments and Access Groups. Link to your newly created Users and set the permissions for each Access Group. Verify that the Users only have the Permissions you have set.

Rate Codes

Users (especially subcontractors) may have different rate codes for hours spent working on different work orders. This feature is designed to allow users to select from a variety of rate codes using names instead of monetary amounts. By allowing the selection of different rates for the labor portion, the system can provide an accurate cost analysis of work orders.

Click on Rate Codes. New Rate Codes can be added by clicking on 

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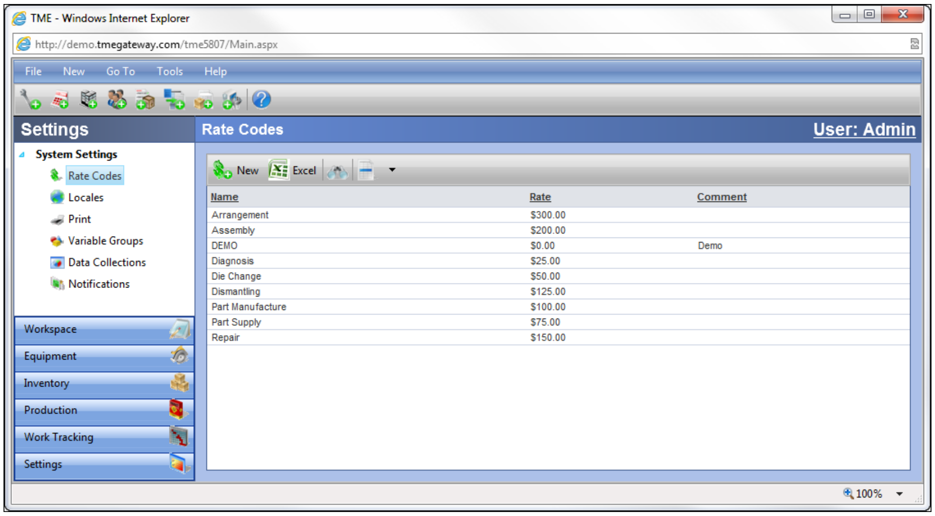

Figure 19 Rate Codes Viewer

Type in the details--Name (required), monetary amount (required--but may be $0) and, if needed, Comment.

Save and Close.

Locales

In this sub-module, Administrators are able to define the locales used in Asset Management, Maintenance and Inventory. TME follows a 5-tier location structure: Campus, Building, Floor, Room and Location. For every Campus, there may be multiple Buildings. For every Building, there may be multiple Floors, etc.

The labels, Campus, Building, Floor, Room, and Location may be changed (i.e., City, Shop, Section, Room, and Cabinet) to suit corporate language. Contact MASS Group, Inc. at 818-709-1255 for assistance.

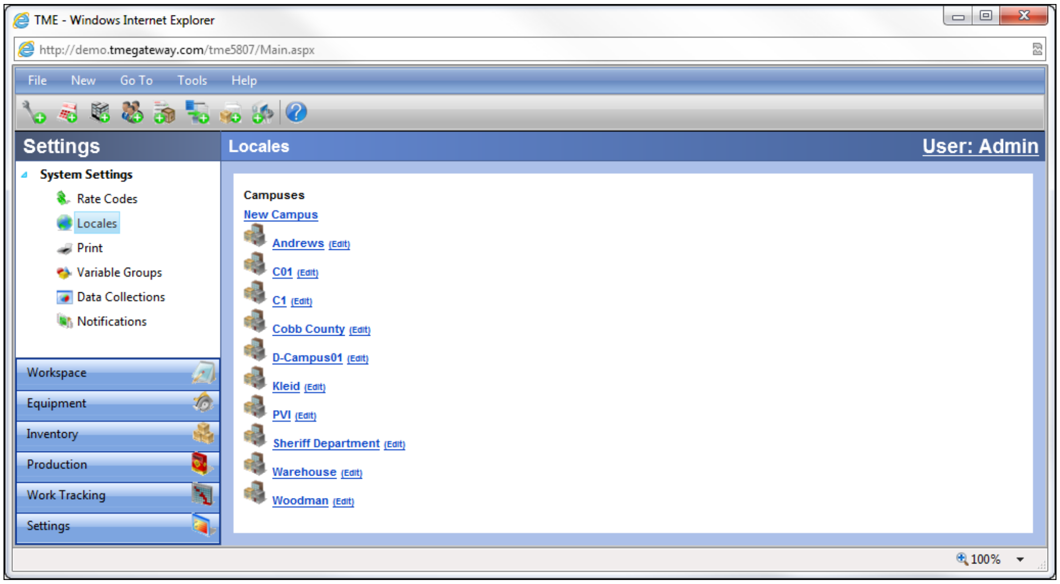

Figure 20 Locales Browser

Locale Browser

To view the full set of locations in a string, click on the arrow to the left of the Campus title to show the Buildings. Click on the arrow to the left of the Building to show the Floors. Continue expanding the tree structure until all branches are visible. Click on the arrows to the left of an expanded title in order to minimize it.

Add a Location

To add a new Campus, click on Add New Campus. The new Campus screen will popup.

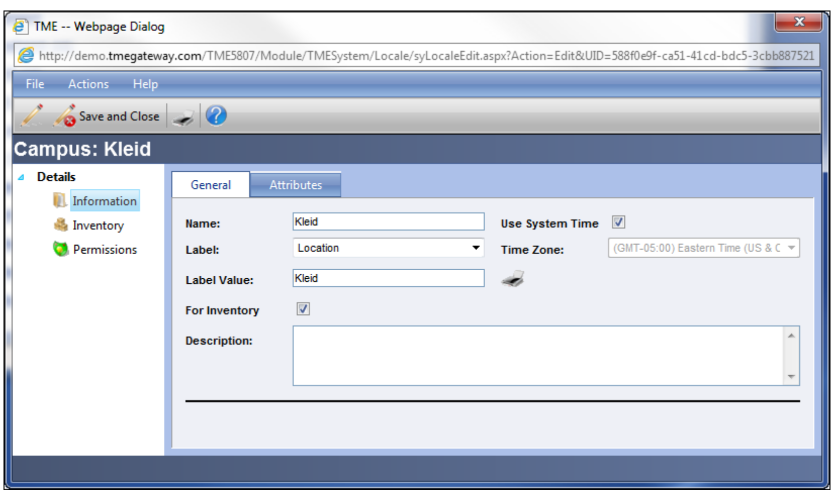

Figure 21 Locale Detail Screen

Type-in the name in the text box labeled “Name.” If Campus is not located in the same time zone as the TME server, deselect the Use System Time checkbox and select the correct time zone from the Time Zone drop-down list. Select a label type (labels discussed in Print section). To view and print the label, click from the Toolbar at the top. Check the For Inventory box if Campus may be utilized to store inventory and if desired, type in a description. Save.

Single instance data known as Attributes can be collected against a location. The Attributes are set up in the Variable Groups submodule (see Variable Groups section of this Chapter) and then selected to be associated to the locales via the Tools feature on the taskbar (See Tools \ Options section of this Chapter). To enter values for the Attributes, click on the Attributes tab and enter the data (See the Collection Data section of Chapter 2 on how to enter values for the various data types).

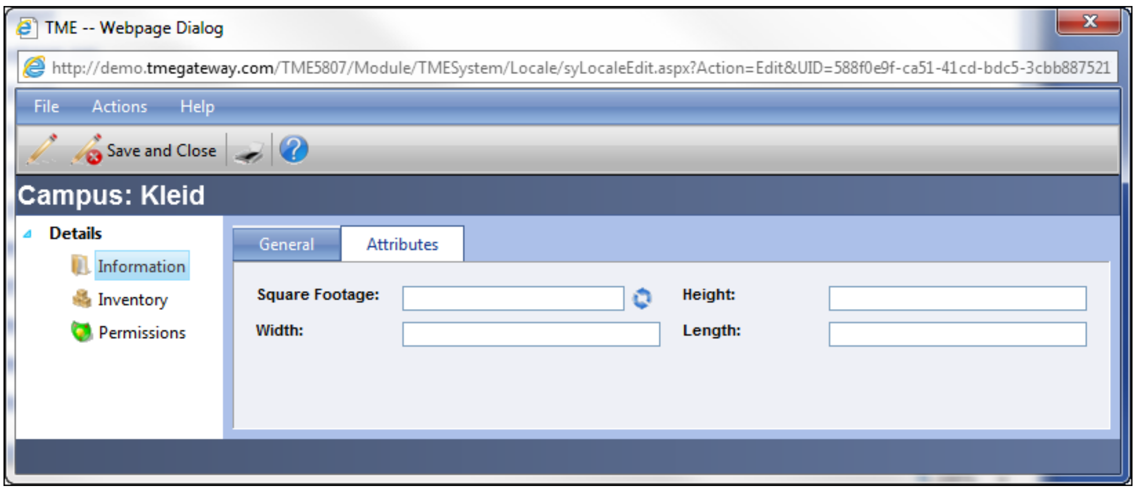

Figure 22 Sample Attributes for Locations

To build the full location string, click on the Campus name, and click on New Building at the top of the screen (new child locations may be added from any parent location type by clicking on the parent name and selecting New [Child Location]). Enter the information for the new building (same format as for Campus, however, can override whether or not Building can be used for inventory even if Campus is not by clicking on Override Parent and then For Inventory). Save.

Repeat for each level to build a full locale string.

Buildings have three extra fields to be used in conjunction with GIS integration: Elevation, Longitude and Latitude

Building GIS Coordinates

By including Longitude and Latitude for Buildings, Users will be able to see locales for Assets on Google Maps by clicking on the icon to the right of the locale on the Asset detail screen.

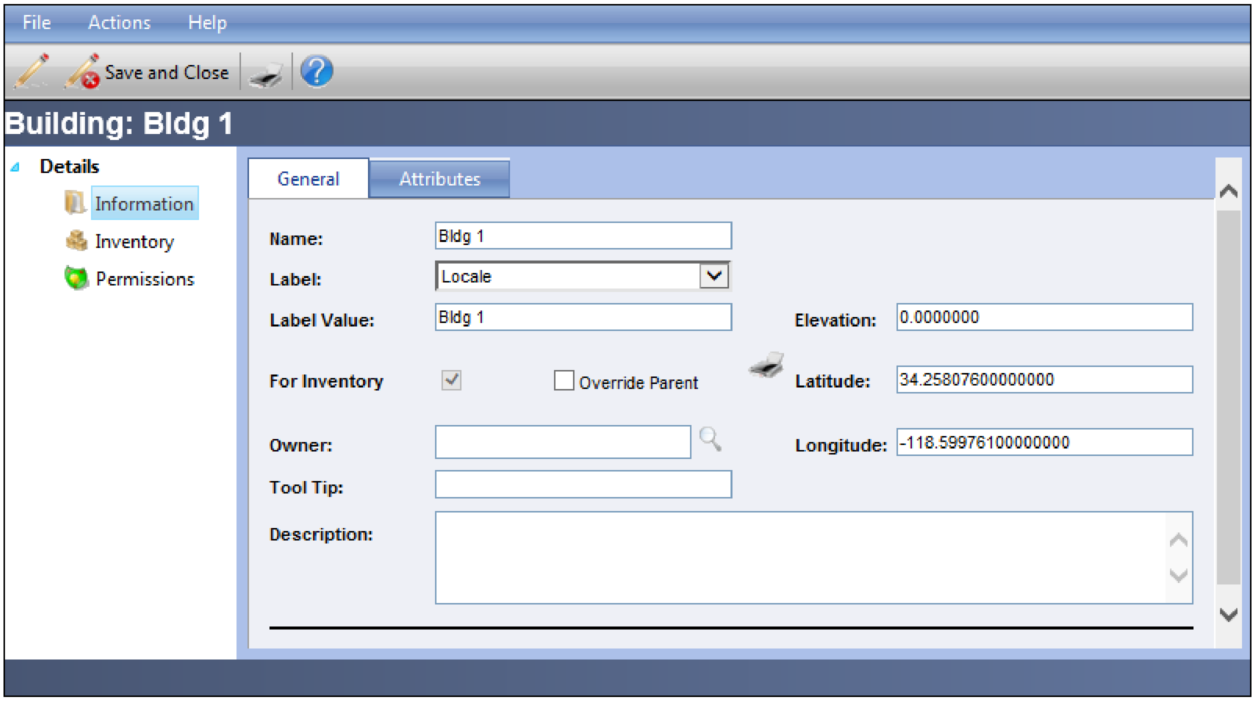

Figure 23 Building Detail Screen with Latitude and Longitude

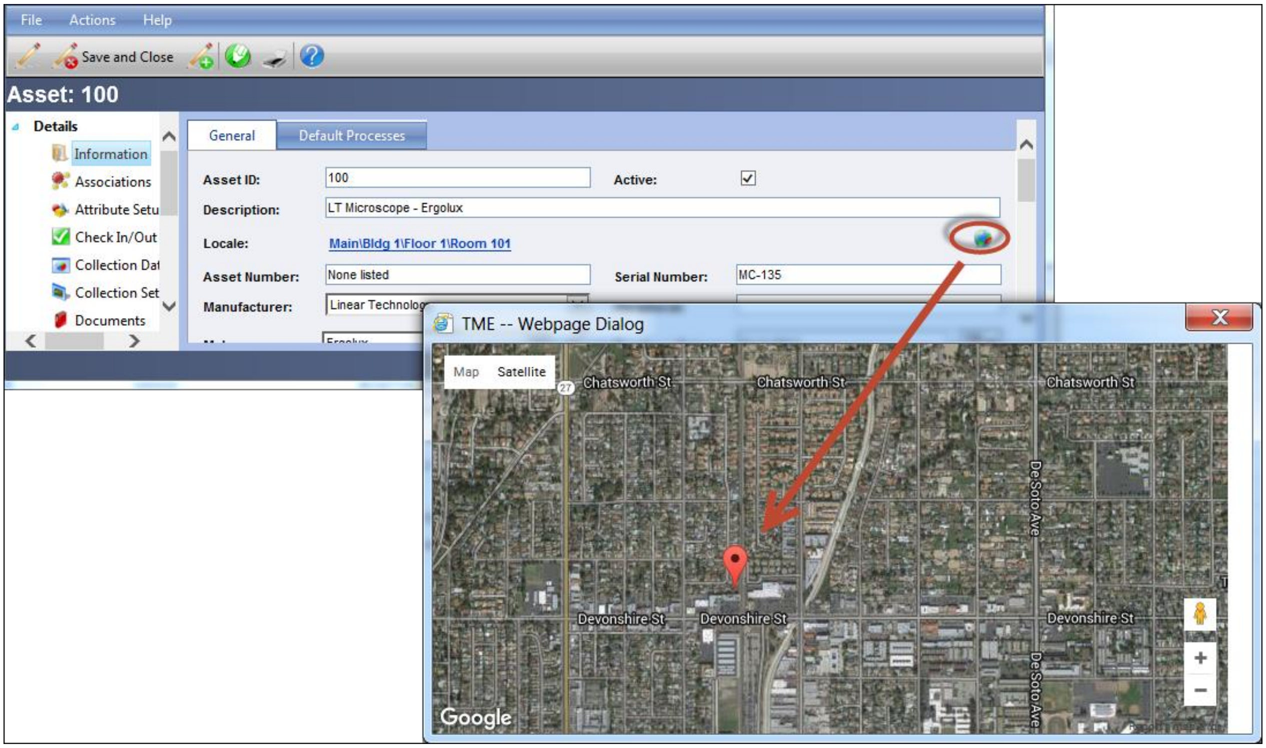

Figure 24 Asset Detail Screen with GIS Icon and Google Map

View/Edit/Delete a Locale

To view and/or edit a locale, drill down to the record to be changed by clicking on the Campus, then the Building, etc. Click Edit next to the item to be changed and edit within the Detail Screen accordingly. Save using the Detail Toolbar or Taskbar. To close the record without saving, click on File on the Detail Taskbar and then Close or click on the X at the top right corner of the Details Screen window.

To delete, click Edit next to the item and then delete via Actions on the Details Taskbar.

Make sure that there are no objects (Assets, Inventory Items, Work Orders, Scheduled Work, etc. associated to the section of locale (or in lower levels). This will break the object's locale and leave it an orphan. Move all objects first. Even better, edit the locale as opposed to deleting it.

Inventory Link

Locales are designated as "Inventory" locales by checking the Check For Inventory box on the Detail screen of that locale. Click on the Inventory Additional link to select the options for configuring how that locale will be used for inventory. If a Locale is not designated For Inventory, then no inventory transactions may take place with this Locale.

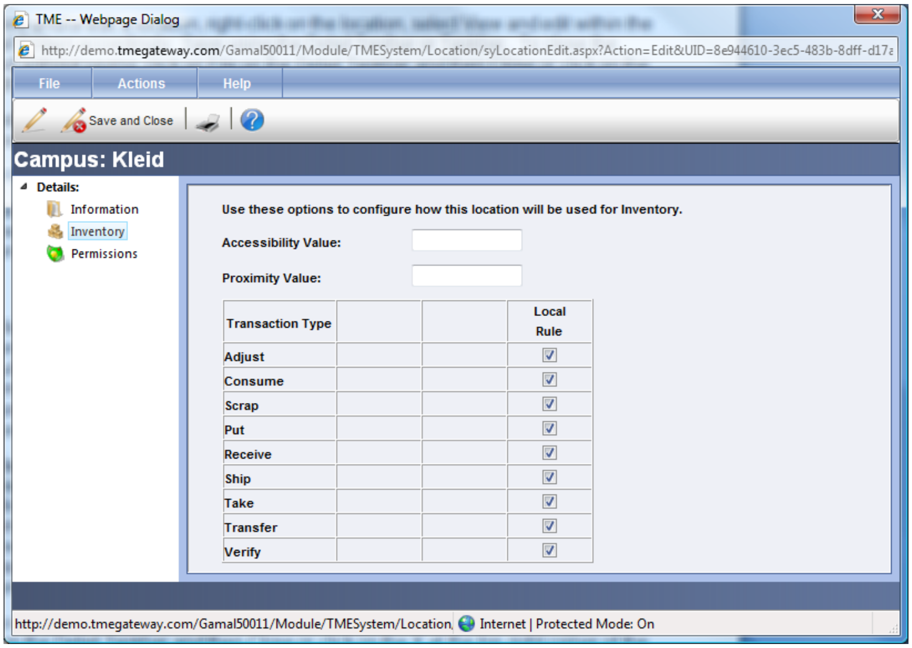

Figure 25 Locale - Inventory Detail Screen

The first two fields are text fields for typing in Accessibility and Proximity values. These values are determined based on corporate language and experience and are not calculations, just providers of information--i.e., Accessibility Values may include information to determine the need for a forklift or a computerized retrieval system; Proximity Values may include information to indicate if the location is easily reached on foot or if it's necessary to drive.

The table lists the available Inventory transaction types in the first column and provides a means for selecting which (if not all) of these are permissible transactions for this location. The second column shows what the parent location settings are. The third column allows the User to override the Parent permission--if the parent has permission, the override denies permission to the current location. If the parent does not have permission, the override provides the User with the ability to provide permission to the current location (must click on the Local checkbox).

Set Up Permissions for Locales

Permissions to access items (Inventory, Assets, and Work Orders) within specific Locales (or ability to select the locale while adding/editing an item) are based on Access Groups. To set up the Permissions, click on the Permissions link in the menu of the location's Detail screen..

Permissions, unlike For Inventory settings, are not distributed from parent to child. Each Locale within a string will need to be set accordingly.

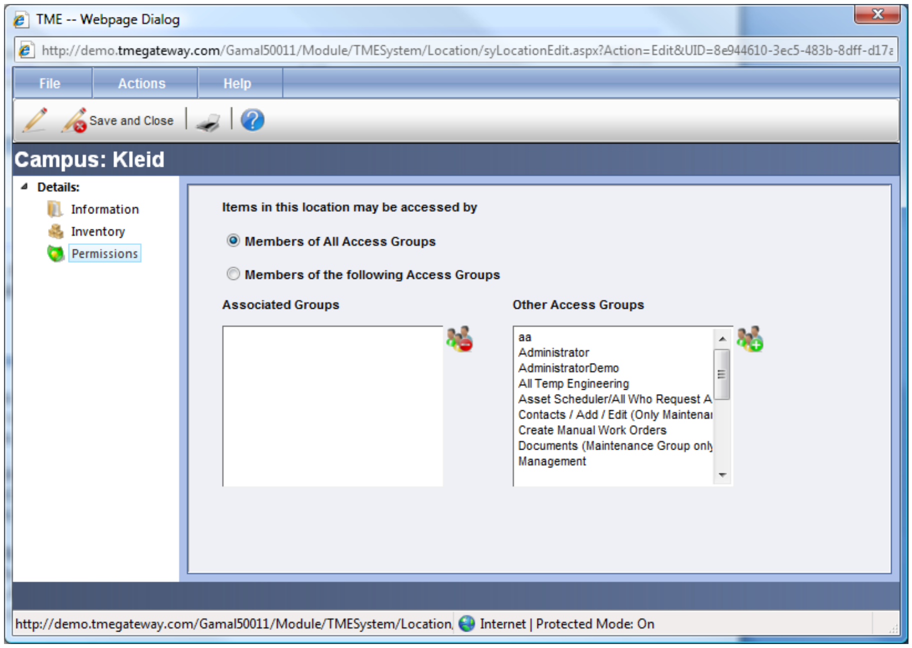

Figure 26 Locale - Permissions Detail Screen

To allow universal access to a locale, select Members of All Access Groups. To provide specific permission, select Members of the following Access Groups. Select the Access Group(s) accordingly.

Exercise 3:

Set up two full locale strings with full inventory and permissions set for one string and Inventory at the Location level with permission only for the Inventory Access Group.

Print

Throughout the application, print items such as forms and labels are available for printing and scanning. Labels may include just a barcode and an item name or additional information such as serial numbers, locales, etc. Forms may include signature lines, headers, graphics, etc. The Print submodule allows for the upload of different types of labels and forms for Assets, Inventory Items, Users/Contacts, Requisitions, Purchase Orders, Work Orders, WIP Work Orders and Locales using Rdl files based on specific SQL queries hardcoded into TME. Contact MASS Group at 818-709-1255 for assistance in creating the Rdl files.

Click on Print.

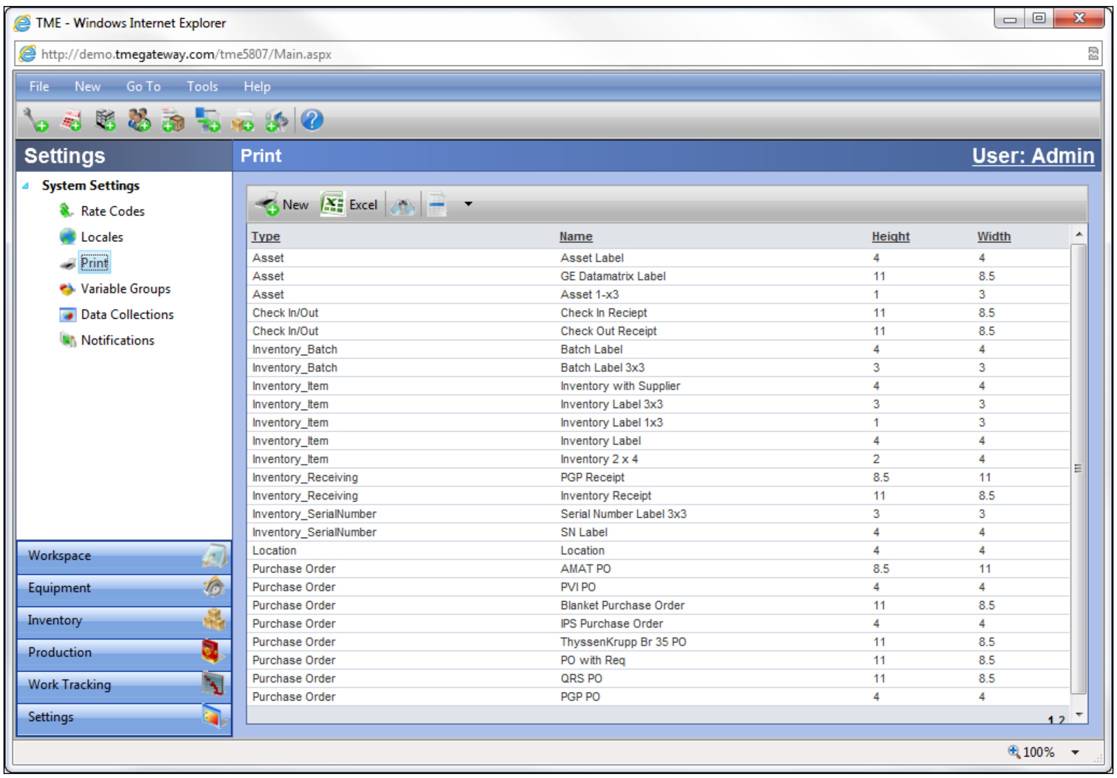

Figure 27 Print Viewer

New Print Items can be added by clicking on 

. Type in the details--Name (required), Height, and Width. Check the Active checkbox to make the Print Item available in the Label dropdown box within the Detail Screen for the Item Type. Select the Type of Label--User, Inventory, etc. Click on the Browse button to open the file explorer screen; navigate to the location of the rdl file needed; and double-click to select the rdl file. Click on the Upload link. The rdl code will populate the RDL: field. Contact MASS Group at 818-709-1255 for assistance in creating the Rdl files.

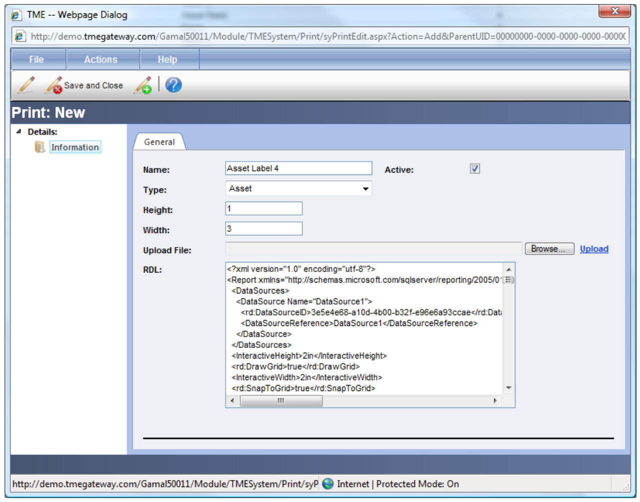

Figure 28 Print Detail Screen

Variable Groups

Attributes and Data Collections can be set up for various objects and records throughout TME.

Attributes are single instance collections of user defined data for an object while Data Collections are multi-instance versions. An example of the difference between the two is that user defined fields can be set up as Attributes for a vehicle (an Asset) to collect information such as vin #, number of cylinders, color, etc. User defined fields can also be set up as a Data Collection for that same vehicle to collection information such as mileage, service dates, tire pressure, etc., over a period of time.

The Data Collection feature provides the ability to conduct multi-instance data collection for various objects throughout TME. Variable Groups can be selected to form Data Collections. These can then in turn be associated with Assets, Inventory Items, Batch Numbers, Serial Numbers, Requisitions, Purchase Orders, Work Orders (WIP and Work Tracking), and Steps (WIP and Work Tracking). Users can use the Data Collections to collect meter readings (totalizer variable), upload calibration certificates (document variable) directly (to a work order, asset or even inventory item), etc.

The user defined fields are all set up in the Settings module in a submodule called Variable Groups whether they are meant for Attributes or Data Collections. The fields can be set up as Text, Number, Checkbox, List, Totalizer, Formula, SPC, SPC Formula, Message, or Document.

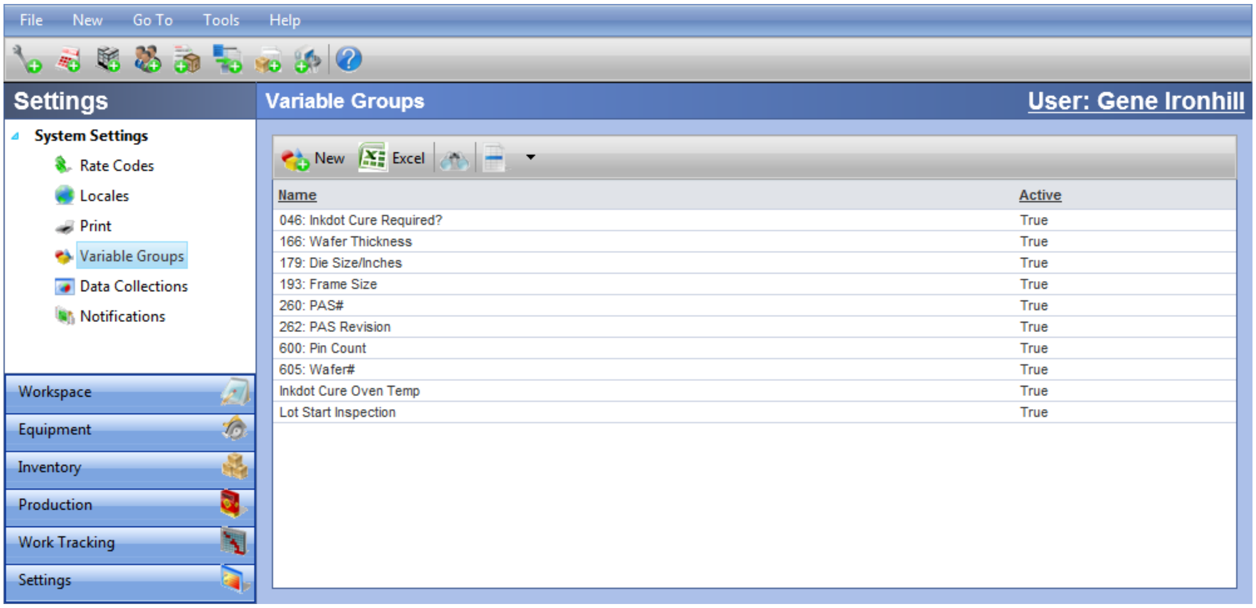

Figure 29 Variable Groups Viewer

The Variable Groups Viewer lists the Variable Groups (groups of user defined fields) that have been set up to be associated as Attributes to Assets, Inventory Items, Inventory Transactions (including Kit Building), Batch Numbers, Serial Numbers, Inventory Receipts, Inventory Receipt Items, Work Orders (via the selected Work Tracking Process, Scheduled Work or for all Work Orders via Tools > Options > Work Tracking), Work Order Steps, WIP Operations (via the selected Operation or for all Tools > Options > WIP), WIP Processes (via the selected Process or for all via Tools > Options > WIP), WIP Work Orders, Requisitions, Purchase Orders, Production and Locales.

These same groups can be used to create Data Collections for Assets, Inventory Items, Batch Numbers, Serial Numbers, Work Orders (Work Tracking and WIP), and Work Order Steps (Work Tracking and WIP).

New Variable Groups can be added by clicking on 

.

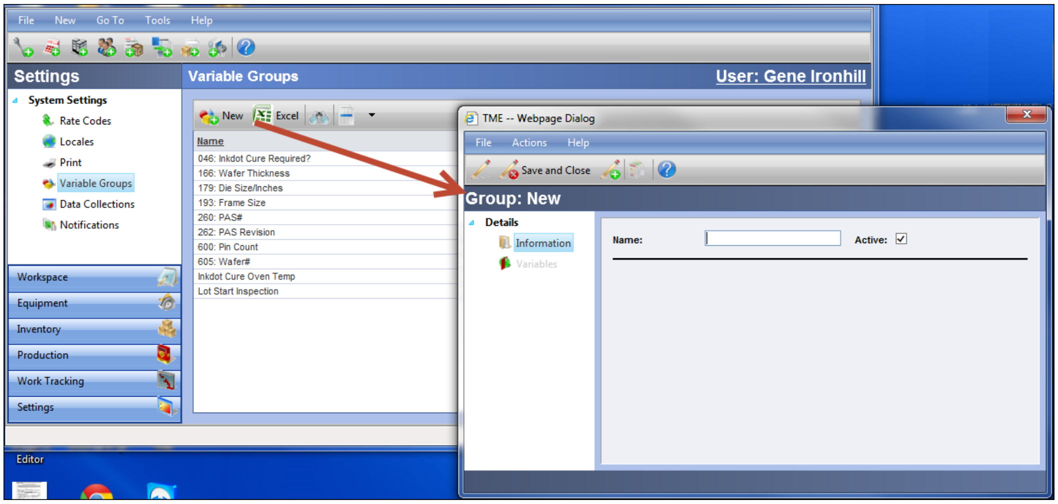

Figure 30 New Variable Group Detail Screen

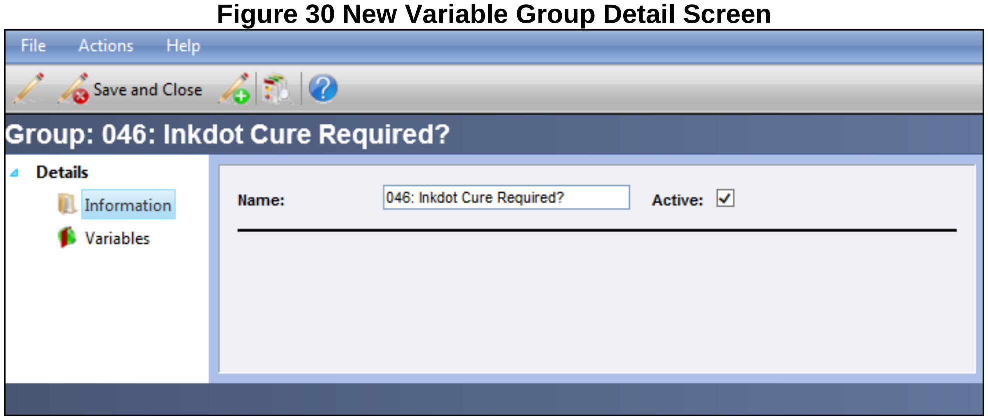

Figure 31 Titled Variable Detail Screen

Enter the Name of the Variable Group and keep the Active checkbox selected in order for the new group to be available for selection as Attributes for a record or to be included as part of a Data Collection. NOTE: be specific with the Name so that a User setting up Attributes or Data Collections will know one Variable Group from another.

Save using the Detail Toolbar or Taskbar to activate the Variables link.

To add variables to the Group, click on the Variables link and click on the New icon  on the tool bar.

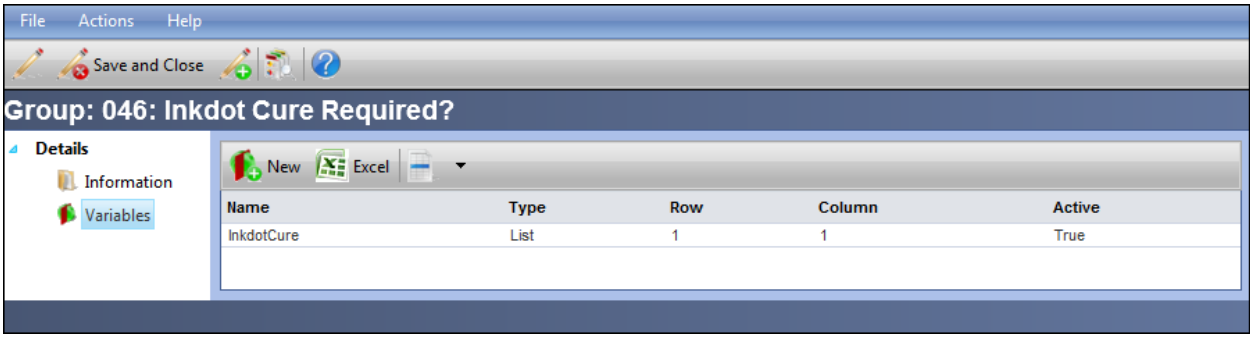

Figure 32 Variables Viewer

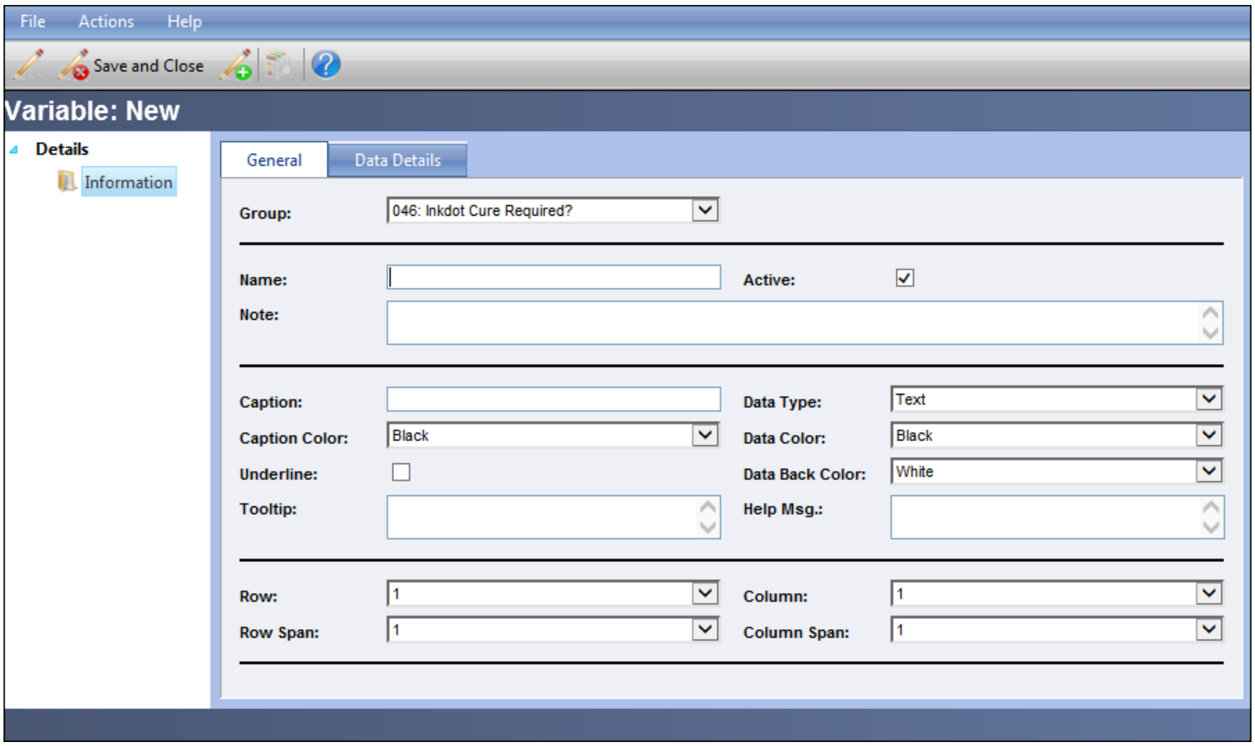

Figure 33 Variable Detail Screen

The drop-down list for Group will be prepopulated with the Variable Group name from which this variable screen was originally opened. If the variable needs to be moved to another Variable Group, select that Variable Group.

Type in the name of the Variable (must be unique across all Variable names) and keep the Active checkbox selected if this variable is to be available for use within TME.

Make sure that the name contains no symbols (other than underscore) or spaces and does not start with a number. For example, Width_of_Box Is fine, but Width of Box is not.

Enter any Notes if applicable. Type in the Caption which will be visible on the Attribute Screen or Data Collection screen for the item. The Caption does not need to be unique. Choose the Caption Color from the corresponding drop-down list and check the Underline checkbox if the Caption is to be underlined.

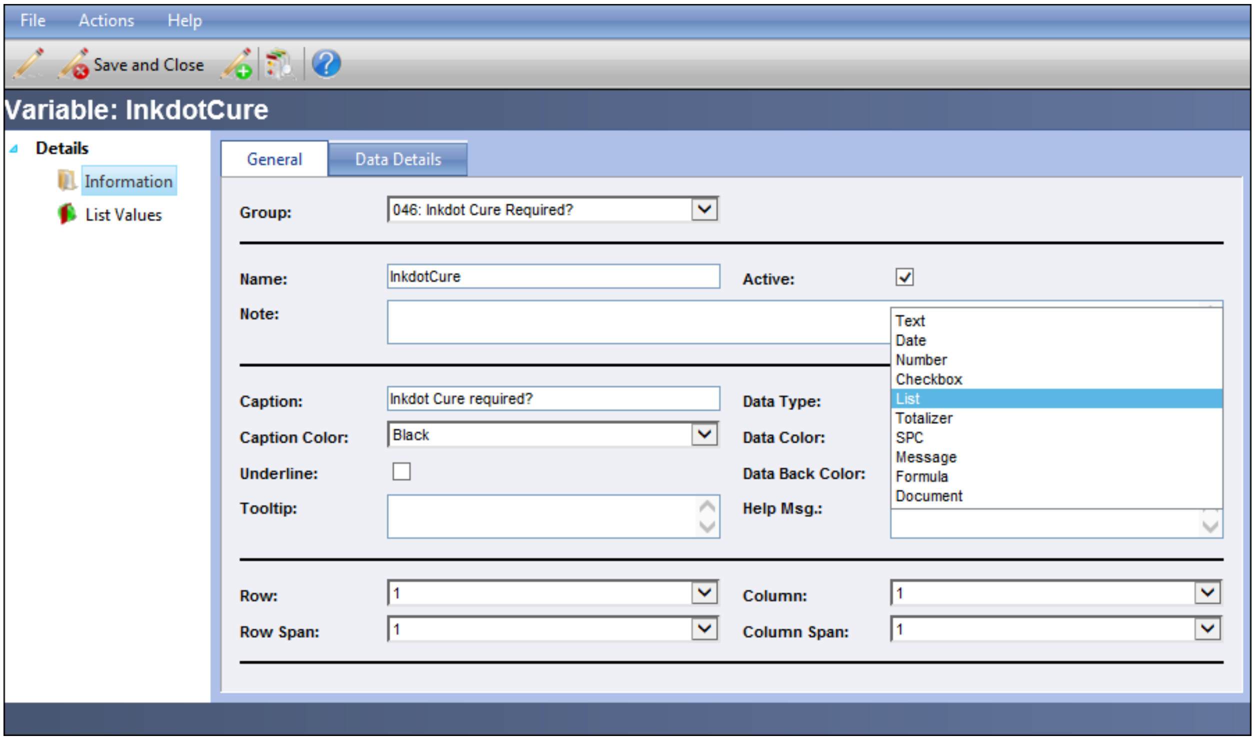

Figure 34 Variable Detail Screen with Values Entered

Select the type of variable from the Data Type drop-down list.

- Text: User enters an alphanumeric string
- Number: User enters numbers (can include a decimal point) only
- Checkbox: Field is a checkbox for the User to select or deselect
- List: Field is composed of a list of items from which the User can select a single item
- Totalizer: Continuous collection of readings (replaces Asset Meters for previous versions of TME) for an object or even a group of objects as a Totalizer can be associated with more than one
- Formula: Field that will perform calculations based on previously defined numeric (Number or SPC) variables contained in the same Variable Group
- SPC: Provides SPC data collections capability against Assets, WIP Work Orders, as well as other objects, i.e., inventory item, for which a Data Collection can be associated
- SPC Formula: Field that will perform calculations based on previously defined numeric (Number or SPC) variables contained in the same Variable Group and then treats the calculated value as a single sample size SPC variable

- Message: Inserts a message onto the Attributes/Data Collection screen, can be used to provide instructions for entering the values for other data types, reminders, definitions, etc.
- Document: provides the ability to upload a file directly from the User's computer/network to the record. This file is not stored in the Documents module, it is meant for a single upload (as an Attribute or per each collection of data via Data Collection).

Choose the Data Color (font color of the data entered by the User) and the Data Back Color (background color of the data entered by the User). NOTE: for the Message data type, change the Data Back Color to Transparent if the Message is not to look like it is in a white box.

To have a Tooltip appear when the cursor hovers over the Caption, type in the message within the Tooltip box. To have a Help icon available onscreen adjacent to the variable field for the User to click on, enter the information into the Help Msg field.

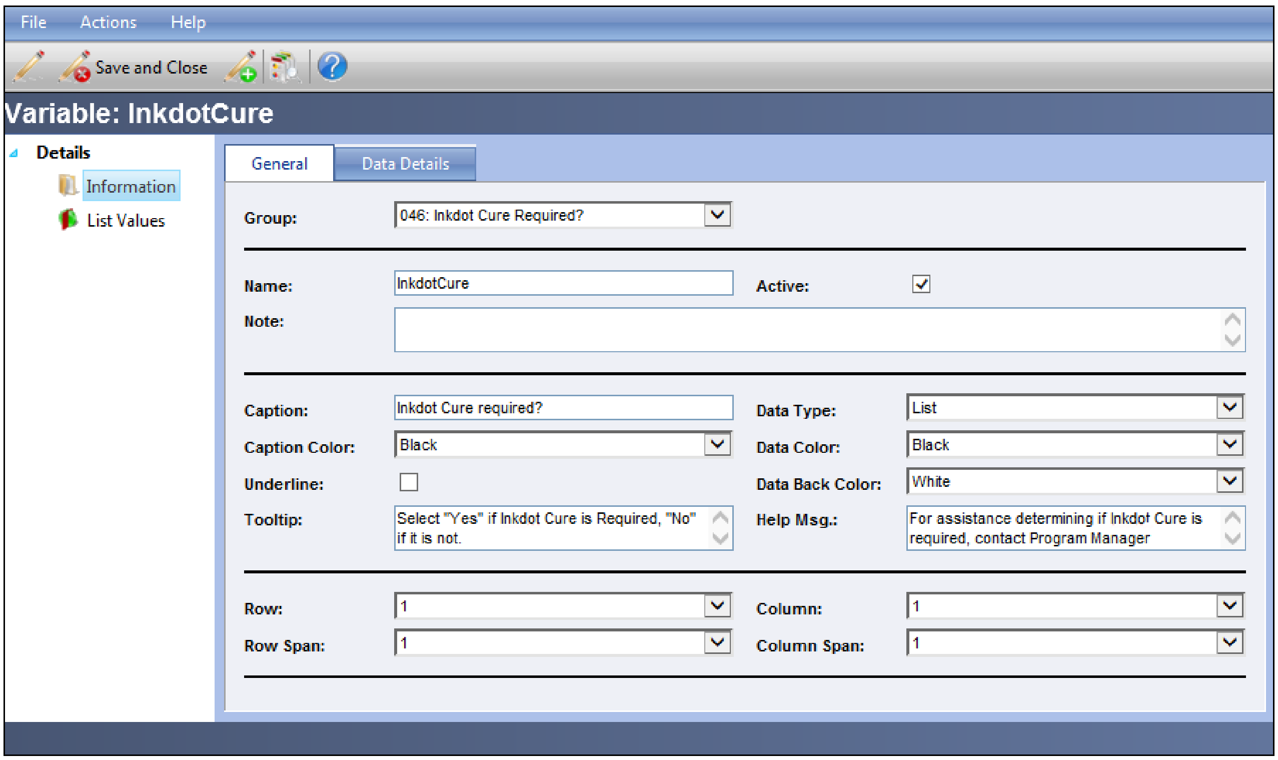

Figure 35 Example of Tooltip and Help Message Set Up

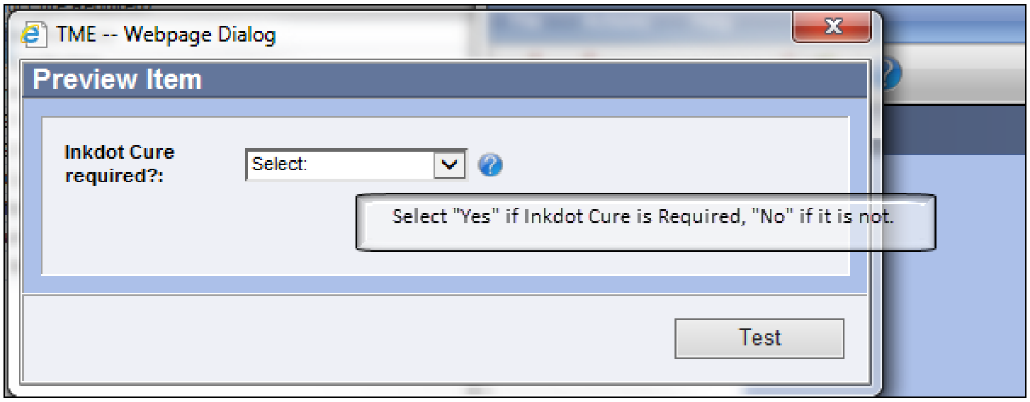

Figure 36 Preview of Tooltip As It Would Appear Onscreen

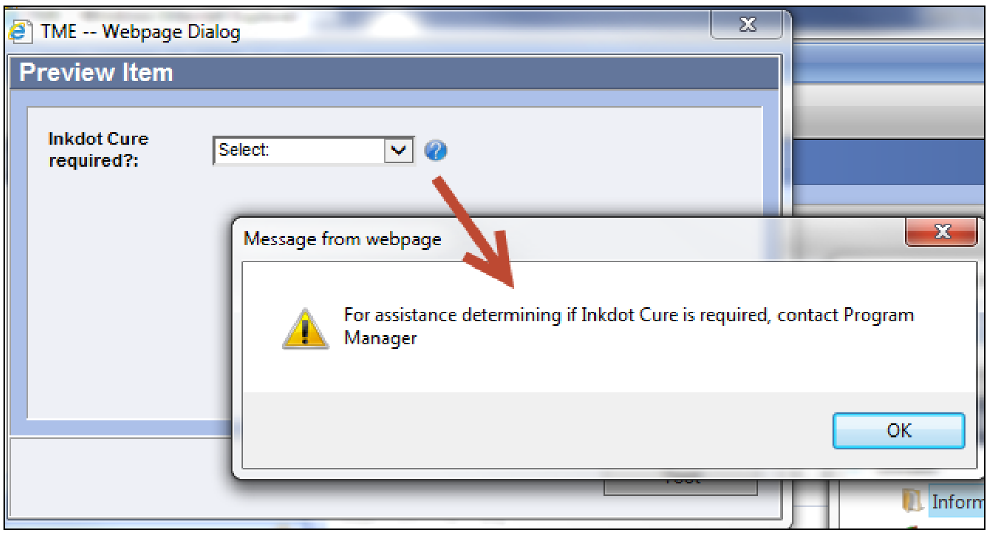

Figure 37 Preview of Help Message As It Would Appear Onscreen

All Variables must be assigned placement within the Variable Group--no two Variables can occupy the same space. Select the Row (1 through 50 available) and Column (1 and 2 available--maximum of two columns onscreen) numbers from the corresponding drop-down lists. If a Variable is to be on a row and span two columns, select the desired Row number along with Column "1" and a Column Span of "2." If a Variable is to take multiple rows, select the desired Row where the Variable is to begin and choose the Row Span (1 through 10 available). Most likely, the Variable will need to cover both columns at the same time, so choose Column "1" and a Column Span of "2."

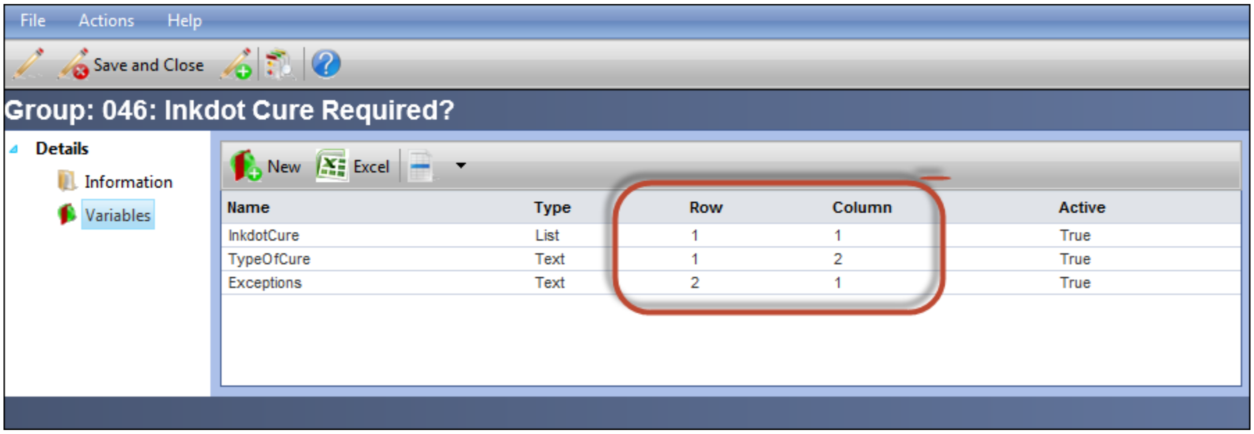

Figure 38 Example of Row and Column Settings

Data Details

Each variable has an available Setup located on the Data Details tab.

For every Variable, if it is required that the User fill in data for the Variable before a record can be saved, click on the “Is Required” checkbox.

Text box, date or number

- If the Variable is to have a default value prepopulated onscreen, enter that value into the Default Value field; the Date value field includes the option to use a variable date (See Appendix 2 Variable Dates for more information).
- To incorporate limits, select the Has Limits checkbox and enter Lower Limit and an Upper Limit values. The User will get a popup notification and will not be able to save the record if the data does not fall within the limits.

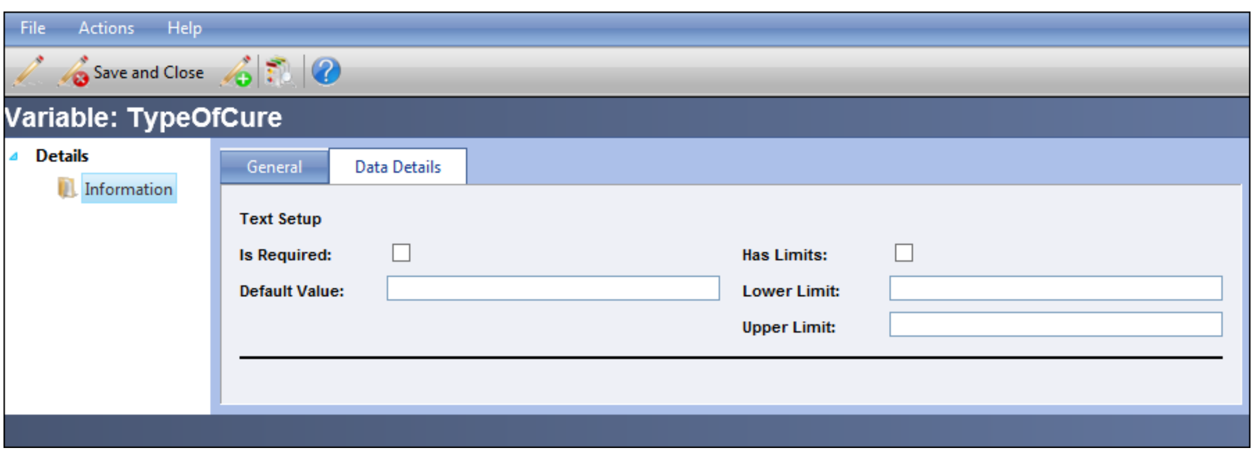

Figure 39 Text Variable Data Details Screen

Checkbox

- If the Checkbox default is to be set as checked when a record is created, click on the Default Value checkbox.
- If the Checkbox is required to be checked in order to be able to save the record, click on the Is Required checkbox.

Figure 40 Checkbox Data Details Screen

List

- The List variable is one of two Variables that has an additional link. Prior to setting up the Data Details but after saving the Variable, click on the List Values link to add values to the list. Click on and type in the Value that is to be included in the list. The order of the values as they appear in the drop-down list can be changed by clicking on the Up and Down arrow icons. A value can be removed by clicking on the corresponding .
- From the Data Details screen, choose the Default Value that will appear upon the creation of a record.
- If TME is to use a SQL statement to create the list of values, enter it into the SQL Statement field. Contact the TME Administrator or MASS Group for assistance.
- The Join checkbox determines whether or not the value is to logged as is visible to the User or if the UID for the value is to be logged. If Join is selected, the UID for the selection will be logged and if the name of the selected entry is changed, the new name will appear when viewing the Data Collection results. Otherwise, the value will be recorded and remain as originally selected. For example, if the list is comprised of TME Users and Olivia Davis is selected and her last name is changed to Smith, Olivia Smith will appear when viewing the Data Collection if the Join was selected. Otherwise, it will remain Olivia Davis.

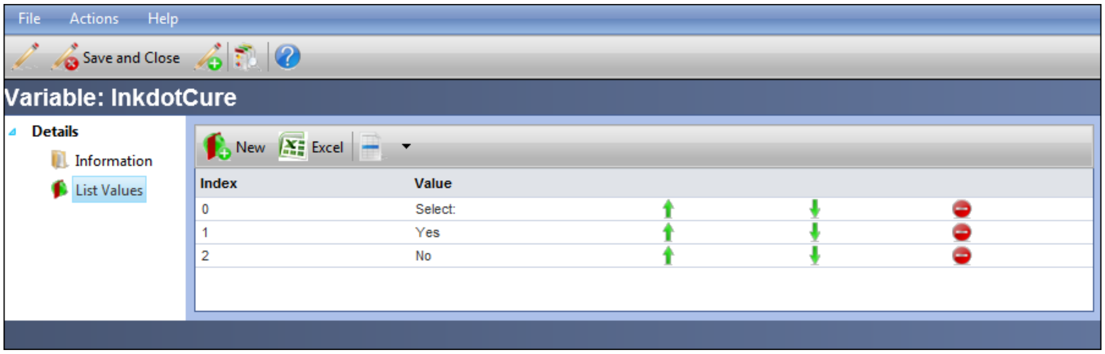

Figure 41 Non-SQL List Data Details Screen

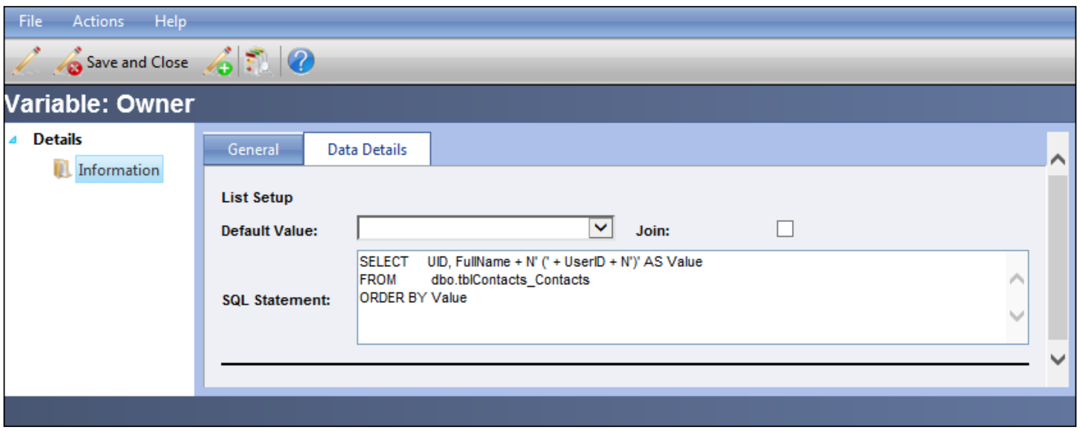

Figure 42 SQL List Data Details Screen

Totalizer

- Enter the minimum and maximum values allowed to be entered by the User. The data will not be saved if the entry exceeds these values and the User will receive a popup notification.
- The Rollback value is the limit of how much less the reading may be than the previously entered reading. The Increase value is the limit of how much greater than the previously entered reading the current reading can be.A User will not be able to submit a reading that is higher than the Increase limit or a reading that is lower than the Roll Back limit.
- **NOTE: the totalizer variable can be associated with more than one object, the readings apply to all of the objects associated with the totalizer. Be sure that is understood prior to adding a Data Collection that contains one or more totalizer variables to multiple objects. If a one to one relationship is required, then a Variable Group containing a Totalizer variable must be set up for each object.**

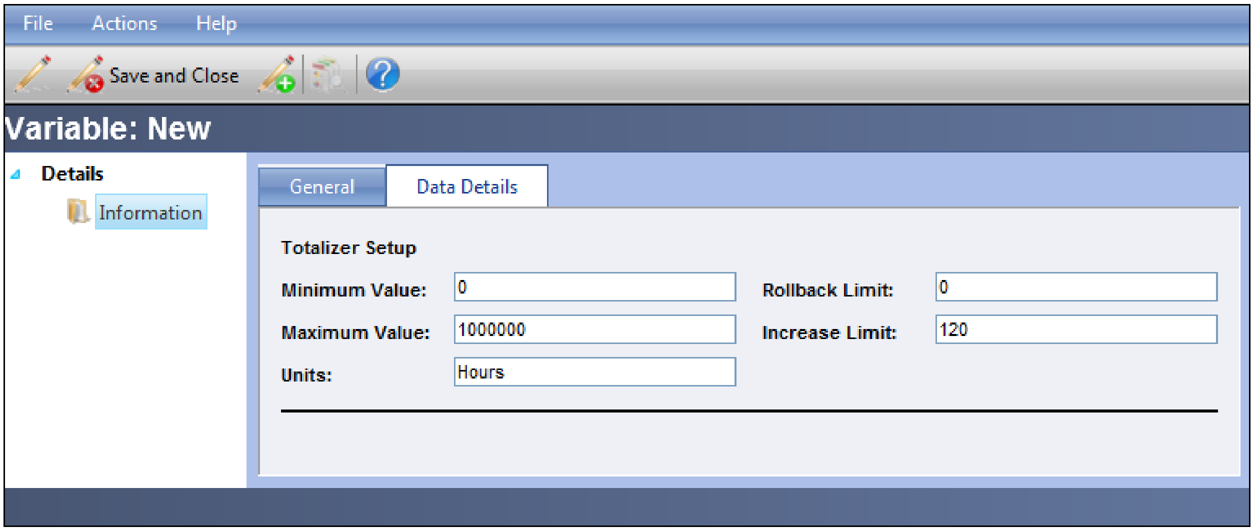

Figure 43 Totalizer Data Details Screen

Formula

- Build the calculation using Number or SPC variables that have already been defined as part of the Variable Group. Click on the Formula Builder link to open the Formula Builder screen. Click into the Formula field then build up the calculation by selecting from the Available Number and SPC Fields and characters. For example, select (and then Variable A, then the * symbol followed by the number 2 followed by) and the / symbol and then Variable B to create: (Variable A *2) / Variable B. If a User sets Variable A as 5 and Variable B as 10 and then calculates the formula, the result is (5 * 2) / 10 = 1. Click on the Test button to check that the calculation works as intended. The Formula Tester provides fields for entering values for the Number variables. Click on the Test button for the formula to calculate. Click Close to return to the Formula Builder and Close to save the formula and return to the Data Details screen.

- To incorporate limits, select the Has Limits checkbox and enter Lower Limit and an Upper Limit values. The User will get a popup notification and will not be able to save the record if the data does not fall within the limits.

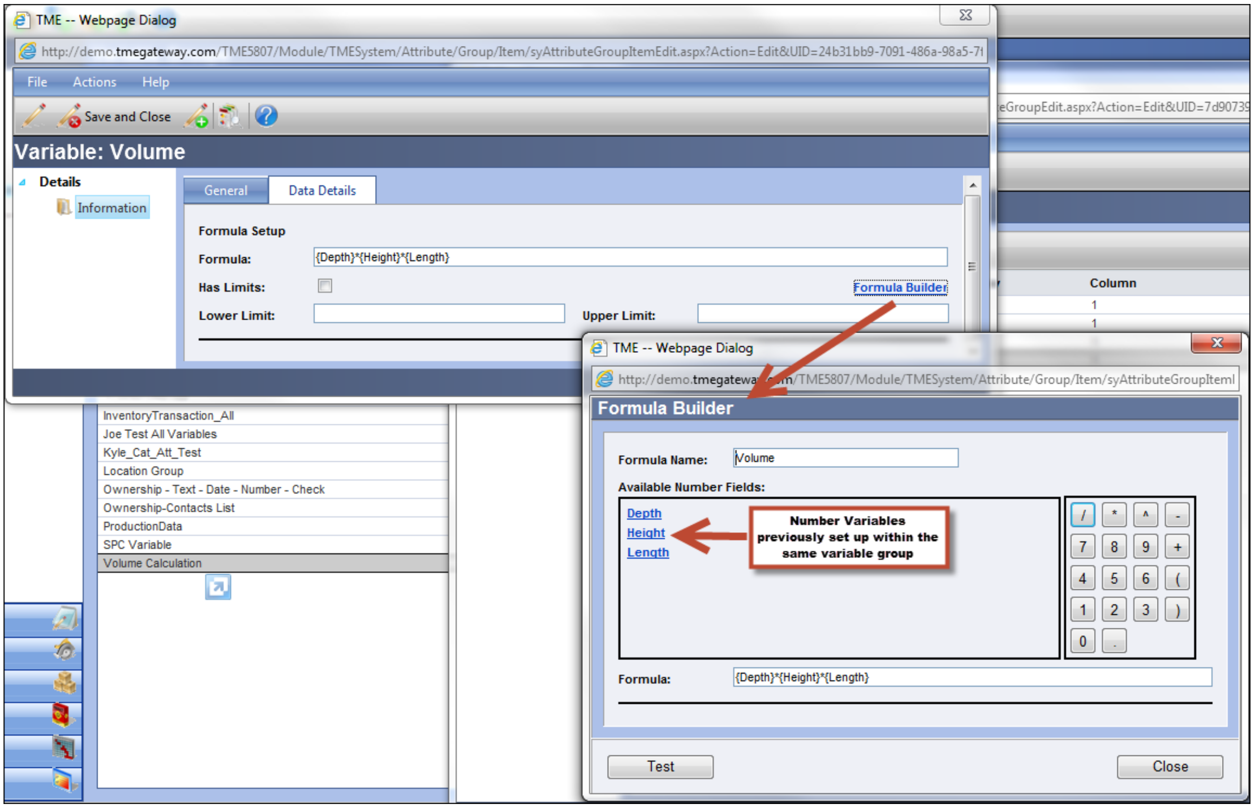

Figure 44 Formula Data Details Screen and Formula Builder

SPC and SPC Formula

- SPC: Enter in all of the information applicable to the SPC variable (SPC Parameter in previous versions of TME). These are standard entries for SPC data collection. For additional questions on how to set up SPC, contact the TME Administrator.
- SPC Formula: This is a combination of the Formula and SPC variables. Define Number and/or SPC variables in the Group and build the formula using those variables. Enter the SPC configuration as TME will treat the result as a single size sample SPC variable.

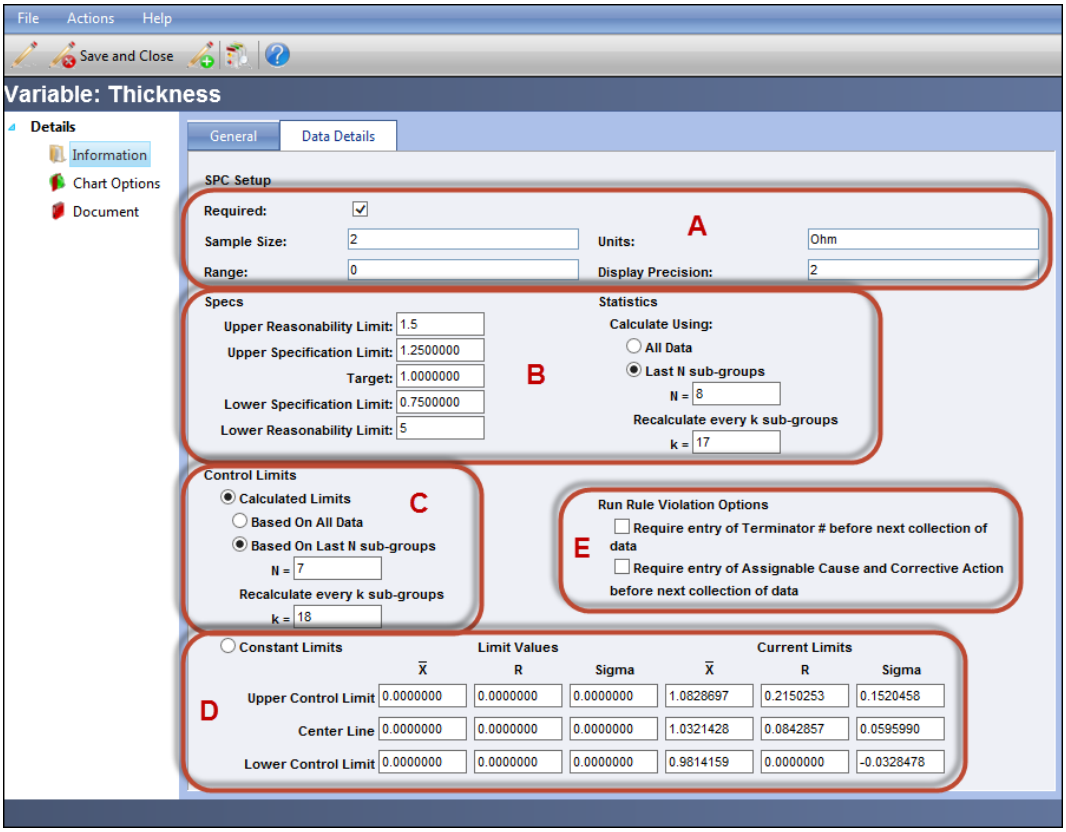

Figure 45 SPC Variable Data Details Screen

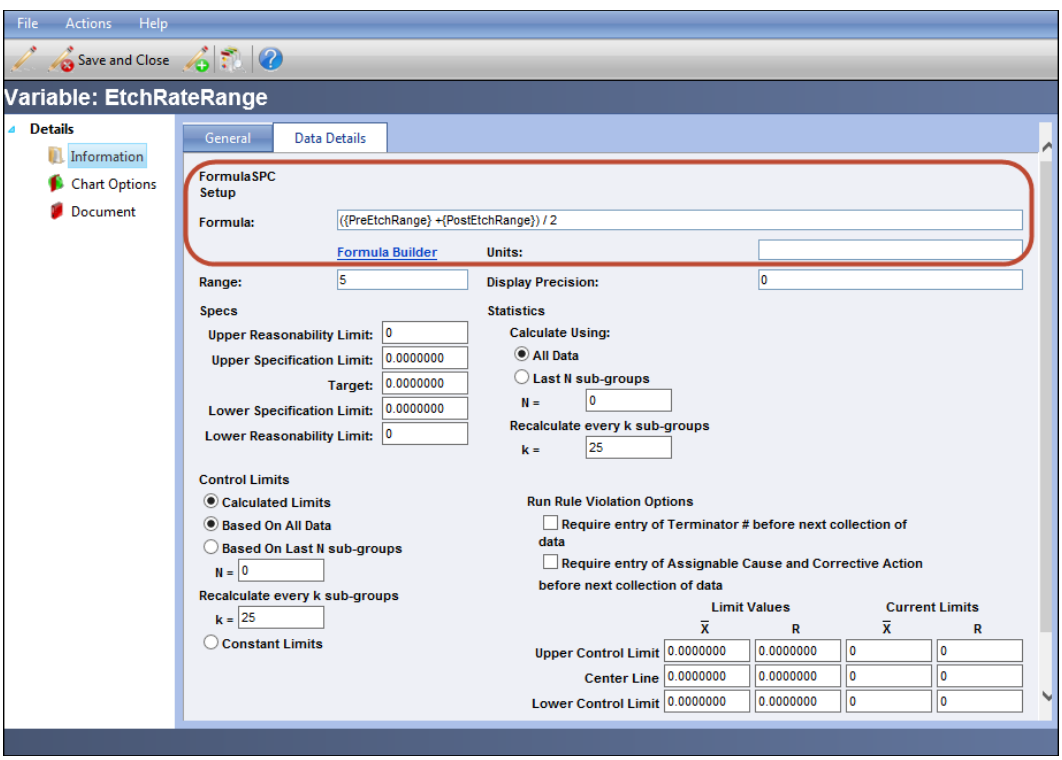

Figure 46 SPC Formula Variable Data Details Screen

Section A

The sample size is the number of points of data to be entered and the Units is the unit of measure taken for the points.

Display Precision defines how many units past the decimal point are to be shown on the chart. For example, a value of two will set the chart to display to the tenths, a value of three will display to the hundredths, etc.

The Range chart automatically calculates the range as the difference between the lowest and highest points for sample sizes greater than one. In this instance, there is no need to input a value into the range field.

When the sample size is “1,” then the Range field needs an input value so that the Moving Range can be calculated.

A typical Moving Range (MR) Chart uses a default value of 2, which means each data point plots the difference (range) between two consecutive data points as they come from the process in sequential order. In the calculation below, the value input into the Range field is represented by the variable m.

Calculation of Moving Range

The difference between data point, x_i, and its predecessor, x_{i-1}, is calculated as $MR_i = |x_i - x_{i-1}|$. For m individual values, there are $m - 1$ ranges.

Next, the arithmetic mean of these values is calculated as

$$\overline{MR} = \frac{\sum_{i=2}^{m} MR_i}{m-1}$$

Section B

The Specs fields are used to set the Reasonability and Specification limits as well as the Target. The Specification Limits are also sometimes referred to as Engineering Limits.

The Reasonability limits are set at values for which a point cannot possibly go beyond. For instance, the thickness of an object can’t be less than zero or greater than the height of the mold. Whereas the specification limits are the allowable deviations from the target, i.e., what is an acceptable measurement below or above the target value.

The Statistics fields are used to set up how often the cp and cpk values are recalculated and for how many sample points.

Select either All Data or Last N sub-groups. If calculating off of a portion, then enter the value of N as the number of most recent consecutive samples by which to have TME make the calculation. For example, if 25 is entered, the cp and cpk values will recalculate using the last 25 samples.

Set how often the calculations are to take place (whether with All Data or Last N subgroups) by entering a value for k for Recalculate ever k sub-groups. For example, if 25 is entered, the cp and cpk values will recalculate ever 25th sample.

The values for N and k do not need to be identical.

Definitions for cp and cpk per Wikipedia.org:

$\hat{C}_p = \frac{USL - LSL}{6\hat{\sigma}}$	Estimates what the process is capable of producing if the process mean were to be centered between the specification limits. Assumes process output is approximately normally distributed.
$\hat{C}_{pk} = \min\left[\frac{USL - \hat{\mu}}{3\hat{\sigma}}, \frac{\hat{\mu} - LSL}{3\hat{\sigma}}\right]$	Estimates what the process is capable of producing, considering that the process mean may not be centered between the specification limits. (If the process mean is not centered, $\hat{C}_p$ overestimates process capability.) $\hat{C}_{pk} < 0$ if the process mean falls outside of the specification limits. Assumes process output is approximately normally distributed.

Section C

The Control Limits can be set to Calculate automatically in Section C or defined as constants in Section D. Control Limits are calculated by TME at three standard deviations from the mean in either direction. The closer the samples are to the target, the tighter the control limits and the more stable the process is. When samples go beyond the control limits, that usually signifies that the process is not consistent.

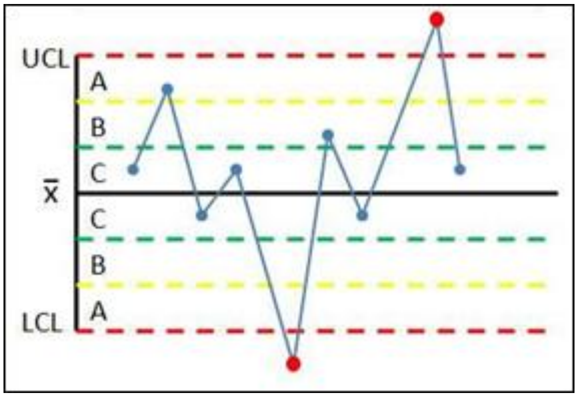

Figure 47 Example of Charted Control Limits

Each zone (A, B, and C) is one standard deviation from the target ($\bar{X}$), the control limits are three standard deviations from the target.

For statistics and control limits, TME calculates standard deviation as: $s = \sqrt{\frac{\sum (X - \bar{X})^2}{n-1}}$ for all points until point #32. Then it switches to dividing by n instead of n – 1.

If TME is to calculate them automatically, select the Calculated Limits radial button. As with the Statistics settings from Section B, set whether the calculations are based on All Data, a portion of the data (put in value for N) as well as how often the Control Limits are to be recalculated (put in a value for k).

Section D

If the Control Limits are to be set at constant levels, select the Constant Limits radial button. Enter Limit Values for the Upper and Lower Control Limits. The Center Line will be automatically calculated by TME. Enter the Control Limits for R (the Range).

The fields for the Current Limits will populate once data has been collected and will reflect the current limits—if the Control Limits were set up as constant, then they will match the Limit Values from this section. Otherwise, they will represent the calculated Control Limits as set up in Section C.

Section E

The Run Rule Violation Options when set require that certain actions be taken once a violation has occurred.

The first checkbox, requires the entry of a Terminator # before the next collection of data can be made. If it is not provided, the caption for the variable on the data entry screen will be in red font and the fields disabled so that values can't be entered. The Operator must open the chart and the point's detail screen and type in the Terminator #

(these are defined by the User's organization, not MASS Group). If the User tries to submit without providing data, a popup screen will appear notifying the User what must be done. See Appendix 7: OCAP for more information regarding Terminator #s.

The second checkbox is similar to the first; it requires that Assignable Cause and Correct Action fields are filled in before the next collection of data can be made.

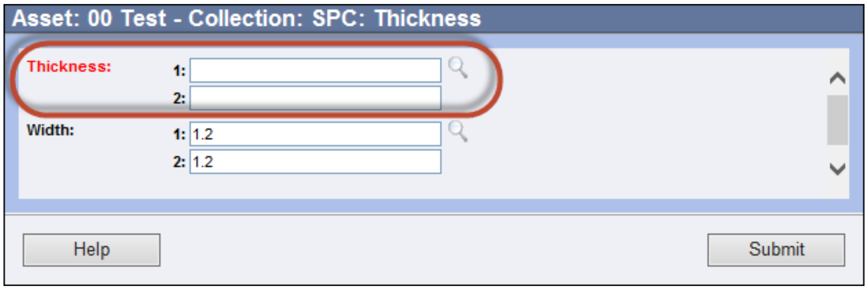

Figure 48 Highlighting Caption to Show Requirement(s) Need to Be Met

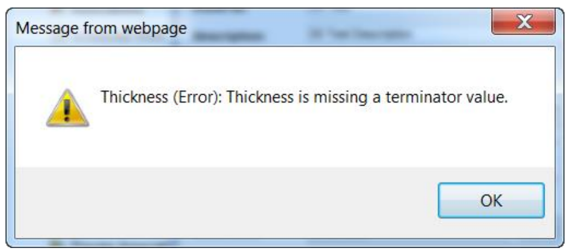

Figure 49 Error Screen: Requirements Needed to Continue Data Collection

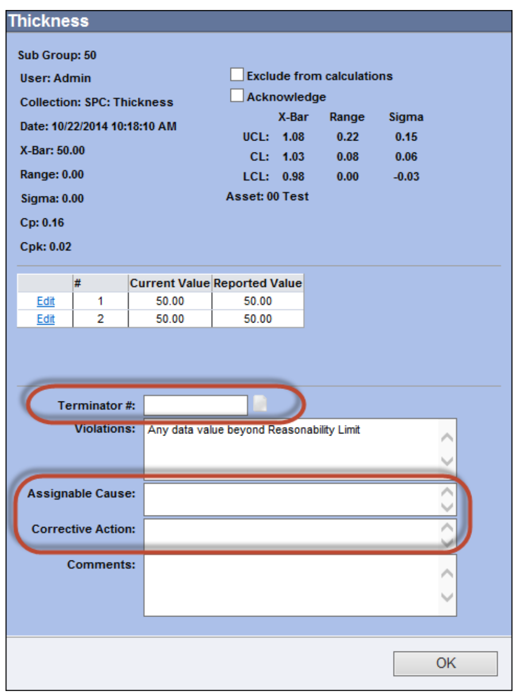

Figure 50 Point Detail Screen - Required Field(s) Highlighted

SPC Formula Builder

To create the formula for an SPC Formula variable, click on the Formula Builder link on the Data Details tab. It works the same way as with the standard Formula datatype as described earlier.

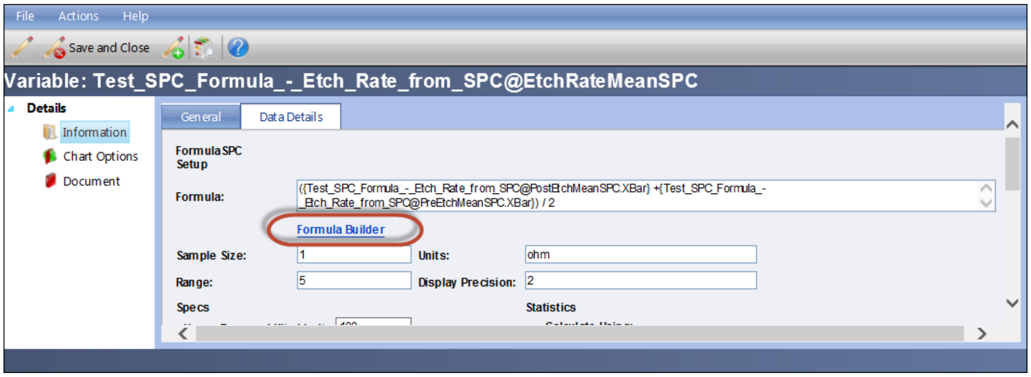

Figure 51 Formula Builder Link

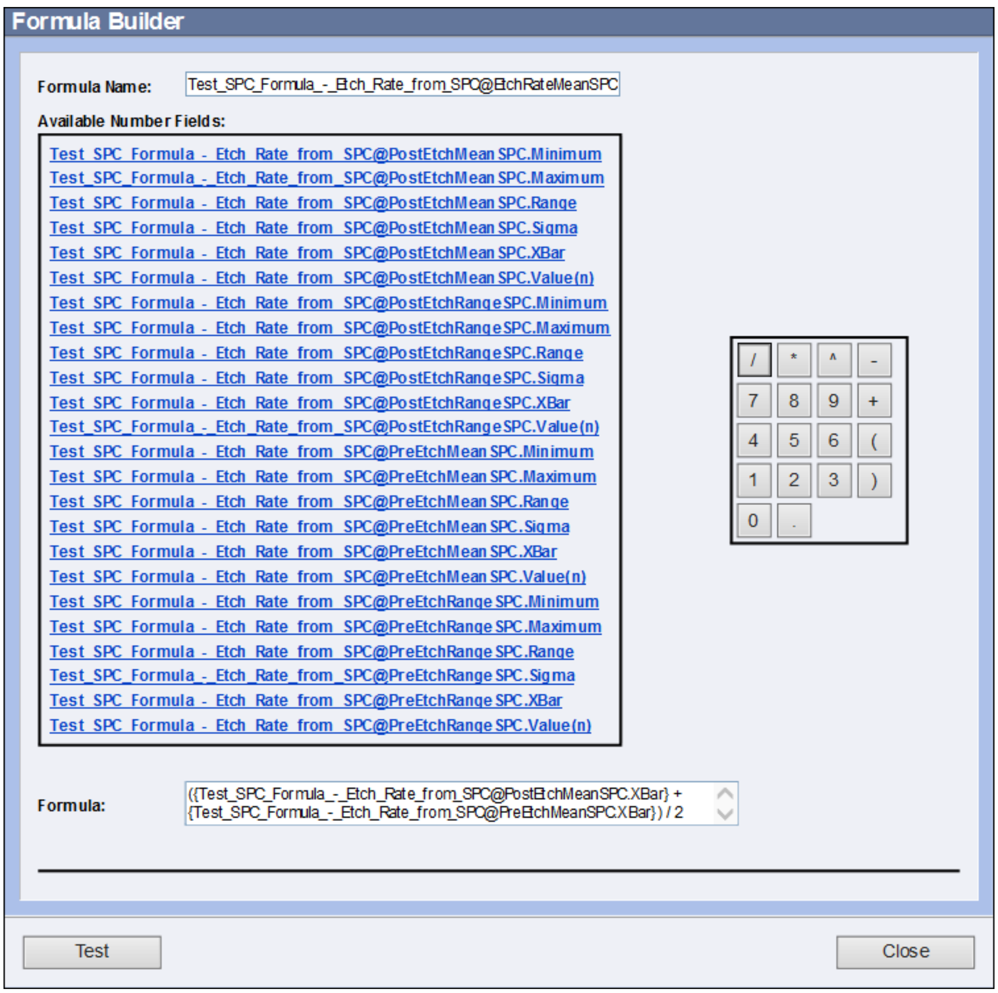

Figure 52 Example of Formula Builder Using SPC Variables

Chart Options

The link for Chart Options will appear once the Variable has been saved the first time. This screen represents the set up options for the actual chart itself.

If the scale of the y-axis is to be set to always include all points on the chart, no matter how high above or below the target, select Auto Scale. Otherwise, select Fixed Scale and enter the High and Low values for the Xbar and R charts. If a point goes beyond scale, lines going to and from the points will be visible from the adjacent point(s), but the point itself will not be visible or accessible for editing.

The options define at what point the Control Limits (whether Constant or Calculated) become visible on the chart.

Hide Control Limits Before Subgroup "10" means that the limits will not be visible until the 10th Sample is entered.

Mimic the Control Limits of SubGroup "15" onto all previous SubGroups means that the Control Limits that are set at the 15th Sample will be applied to all previous Samples regardless of what their Control Limits were.

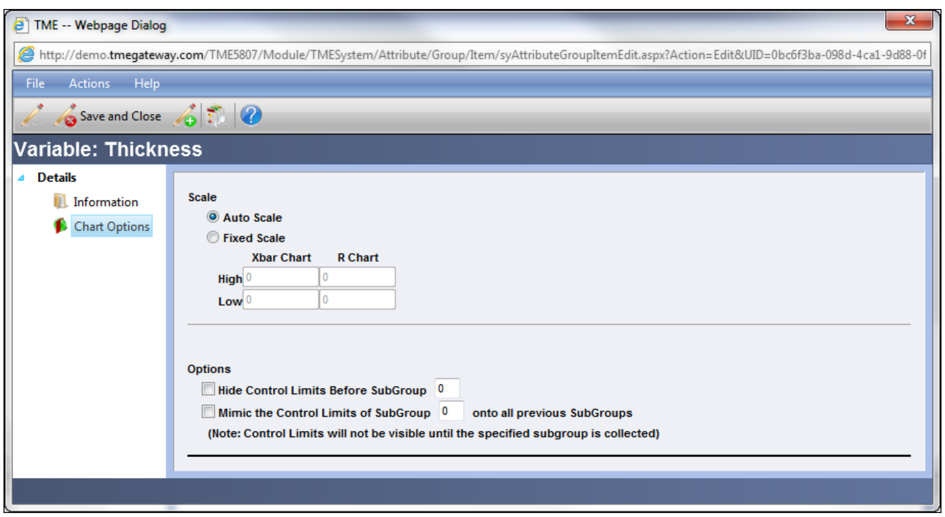

Figure 53 SPC Variable Chart Options Screen

Document

The link for Chart Options will appear once the Variable has been saved the first time. This screen allows a <u>single</u> document to be attached to the Variable (SPC, SPC Formula only). This document is viewable on the Point's Detail screen next to the Terminator # field. It is designed to be used to meet OCAP (Out of Control Action Plan) standards by providing the Operator with immediate access to the OCAP for the particular Data Collection. Please see Appendix 7 OCAP for more information.

Message

- Type in the Message that is to appear onscreen for the User in the Message field.

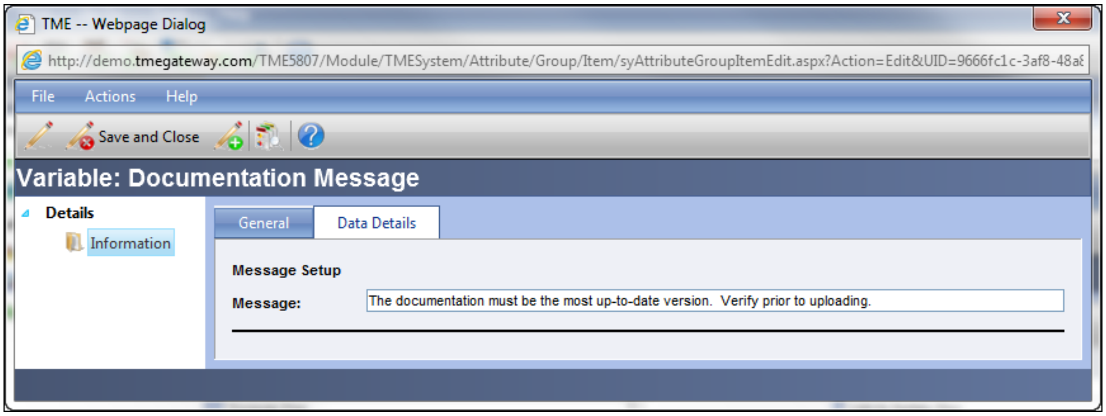

Figure 54 Message Variable Data Details Screen

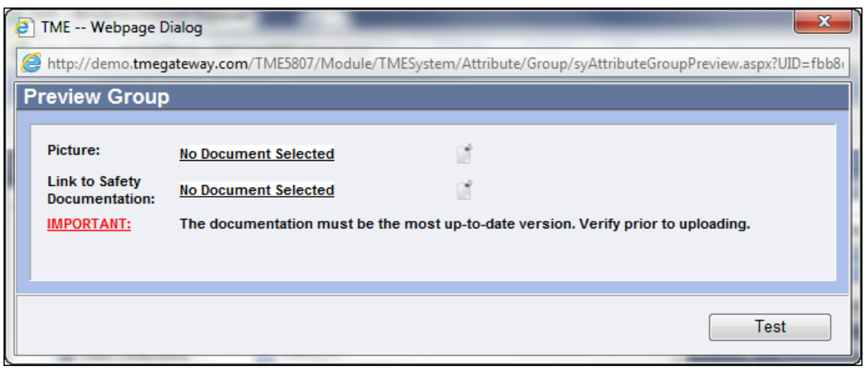

Figure 55 Example of Message As It Will Appear Onscreen

Document

- Choose Upload from the Type drop-down list if the User is to upload a file or Path if the User is to input a URL address leading to a file.

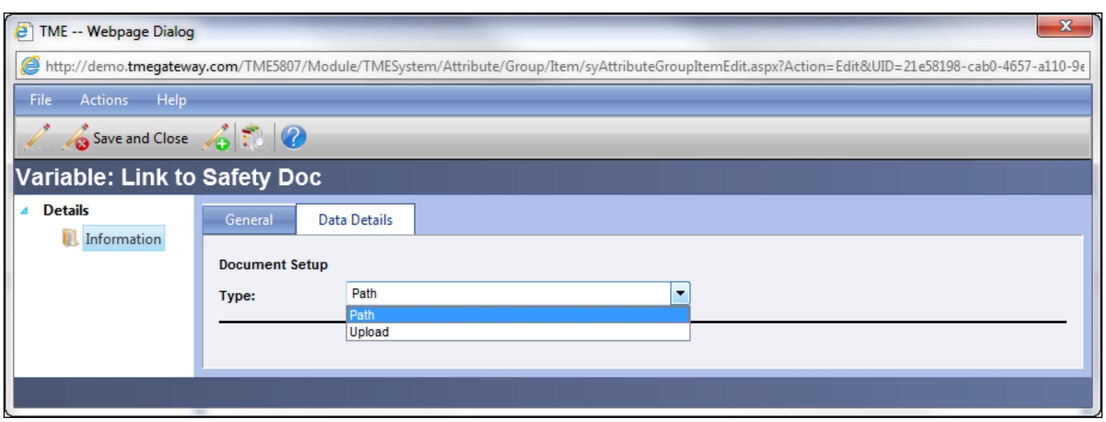

Figure 56 Document Variable Data Details Screen

Copying a Variable Group/Variable

A Variable Group and Variables can be copied by opening the Variable Group or the Variable details screen, clicking on Actions on the Taskbar and selecting Generate Copy.

If copying a Group, the screen will refresh to that of the copy and the Name will have ".copy" attached to it. The variables will have copied over as well.

If copying an individual variable, the screen will refresh to that of the copy and the Name will have ".copy" attached to it. The positioning information will need to be adjusted as it can't be identical to that of the original (can't have variables occupying the same position onscreen).

How to View a Variable Group/Variable

To view a sample of what the Variable Group or Variable will look like on screen, open the detail screen, click on Actions on the Taskbar and select View Sample (or click on the View Sample  icon on the Toolbar). A Preview screen will appear showing how the variables will look onscreen to the User collecting the data.

How to Associate Attributes to Objects

The following objects can have Attributes associated with them: Assets, Inventory Items, Inventory Transactions (including Kit Building), Batch Numbers, Serial Numbers, Inventory Receipts, Inventory Receipt Items, Work Orders (via the selected Work Tracking Process or Scheduled Work or for all Work Orders via Tools > Options), Work Order Steps, Requisitions, Purchase Orders, Production and Locales. Setting up Attributes to WIP Work Orders is discussed in the WIP Setup Chapter.

Attributes are set up for each record in one of two places--

1. If the Attributes are to apply for a single Asset, Inventory Item, Batch Number, Serial Number, Work Tracking Process, Scheduled Work, WIP Work Order or WIP Batch Number, the attribute is set up on the detail screen via the Attribute Setup link. The variable groups can be selected and the attribute fields will appear on the Attributes tab on the Information portion of the detail screen.

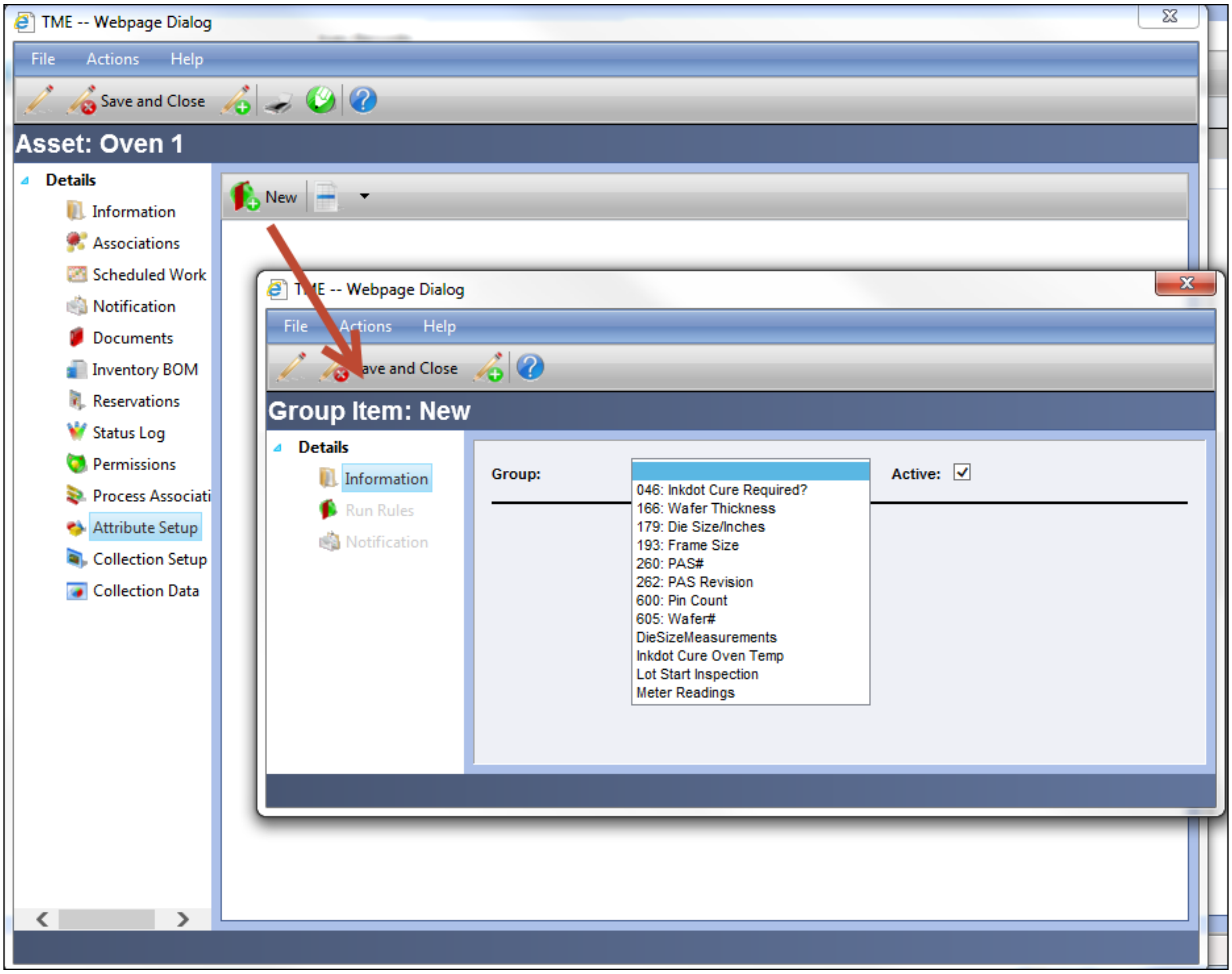

Figure 57 Attribute Setup Screens for a Single Object (Asset)

2. If the Attributes are to apply to multiple records of the above listed objects or to Requisitions, Purchase Orders, Inventory Transactions, Inventory Receipts, Inventory Receipt Items, Production or Locales the set up is done via Tools > Options on the appropriate tab for the module.

   For Assets and Inventory Items, there is not only a link for Attributes (All Assets) or (All Items), but Attribute Setup links for each of the item Categories and SubCategories. Once the Attributes have been selected for all Assets or Inventory Items, those fields will be available on the Attributes tab on the Information portion of the detail screen of each item. If set up by Category or SubCategory, the fields will only be available for items contained within the corresponding Category or SubCategory.

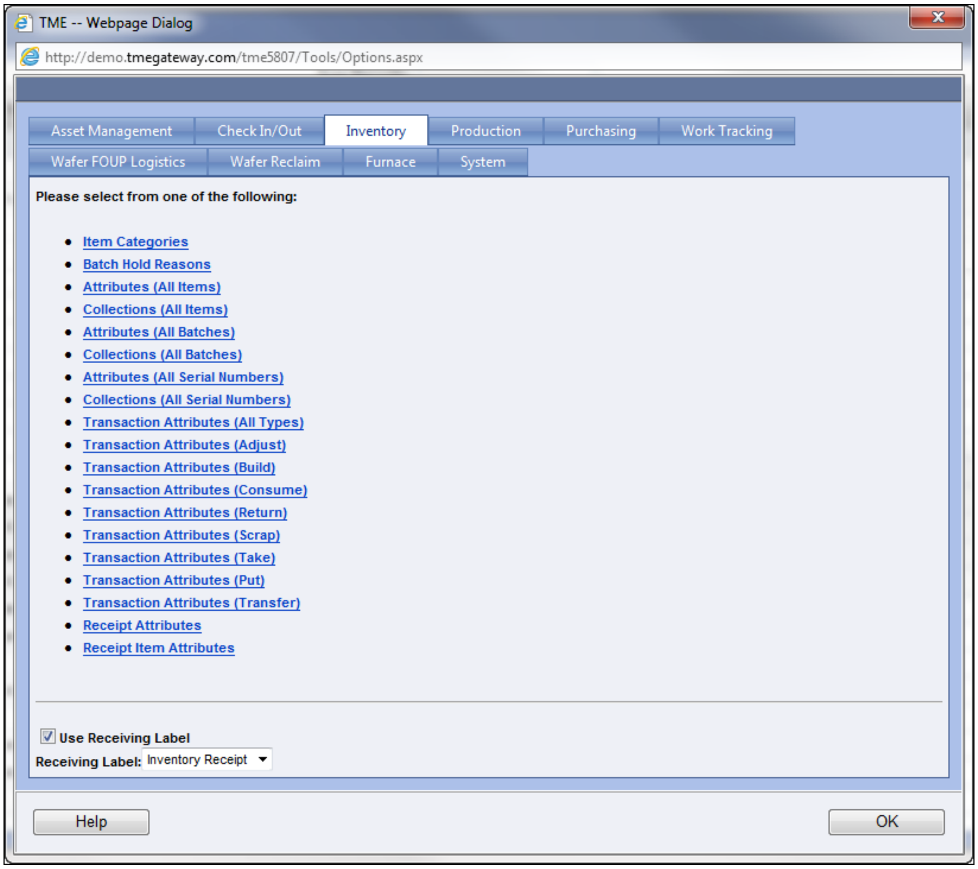

Figure 58 Tools \ Options Screen for Inventory

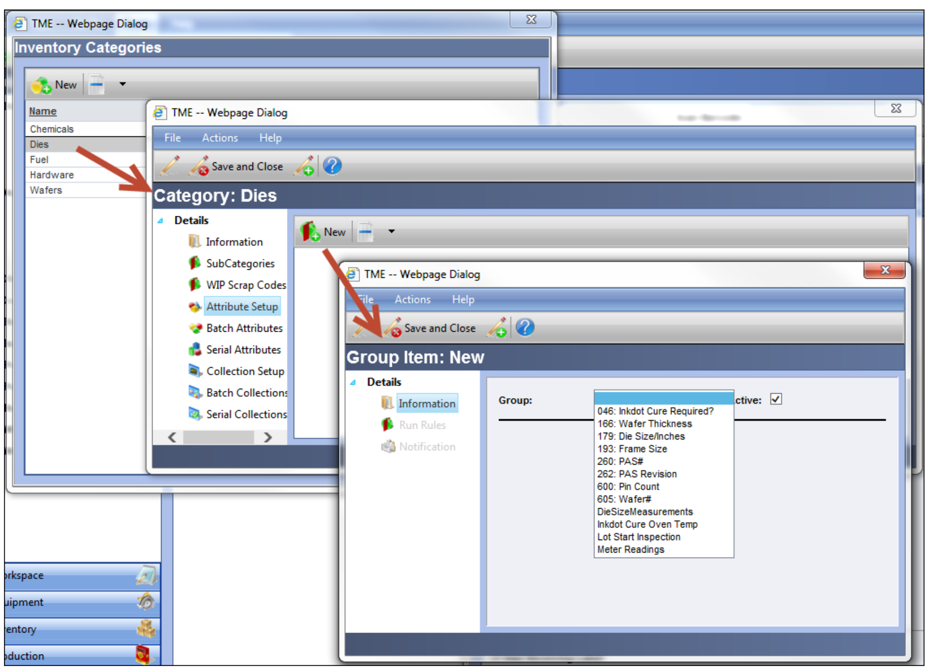

Figure 59 Attribute Setup for a Category of Objects (Inventory Items)

Data Collection

The Data Collection is built by selecting the Variable Groups that make up the collection.

New Data Collections can be added by clicking on the New icon at the left side of the Viewer Toolbar. A blank Details popup screen will appear and will as a default be set to the General tab of the Information link (the Additional link for Groups and Permissions are not available until the new Collection record is saved).

Enter the Name of the Data Collection and keep the Active checkbox selected in order for the new group to be available for association to an object such as an Asset.

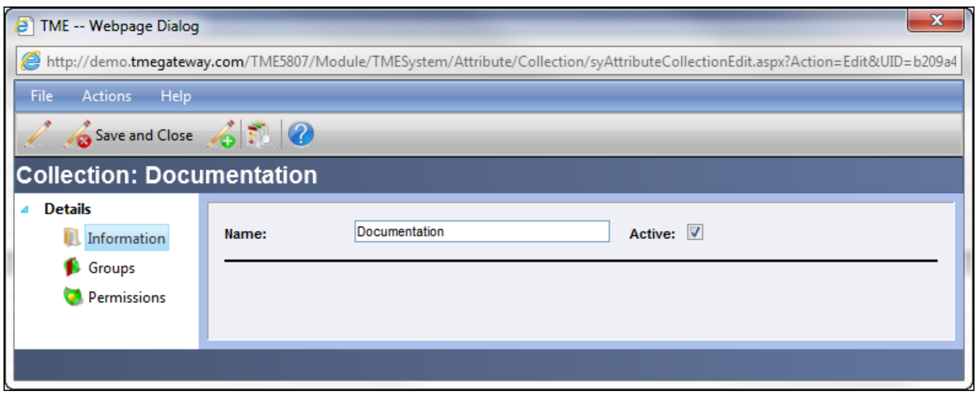

Figure 60 Data Collection Detail Screen

Click on the Groups link on the Data Collection Detail screen. Click on the New icon on the toolbar and a blank Details popup screen will appear and will as a default be set to the General tab of the Information link Select the Variable Group from the Group drop-down list. Keep the Active checkbox selected in order for the selected Variable Group (and therefore its variables) to be visible onscreen to the User when the particular Data Collection has been chosen.

NOTE: the totalizer variable can be associated with more than one object, the readings apply to all of the objects associated with the totalizer. Be sure that is understood prior to adding a Data Collection that contains one or more totalizer variables to multiple objects. If a one to one relationship is required, then a Variable Group containing a Totalizer variable must be set up for each object.

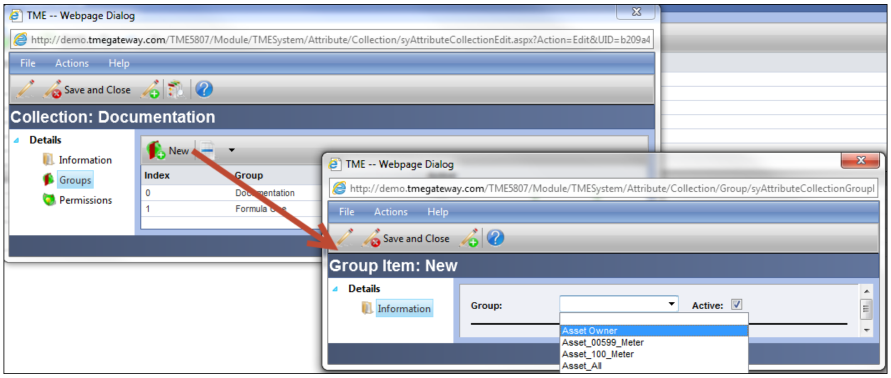

Figure 61 Adding Variable Groups to Data Collection

How to Associate Data Collections to Objects

The following objects can have Data Collections associated with them: Assets, Inventory Items, Batch Numbers, Serial Numbers, Work Orders (Work Tracking and WIP), and Work Order Steps (Work Tracking and WIP). Data Collections associated to WIP are discussed in the WIP Setup Chapter.

Data Collections are set up for each object in one of two places--

1. If the Data Collections are to apply for a single Asset, Inventory Item, Batch Number,Serial Number, Process (Work Tracking and WIP), or Scheduled Work, the Data Collection is set up on the detail screen via the Collection Setup link. The variable groups can be selected and the Data Collections will be available for selection for that particular object.

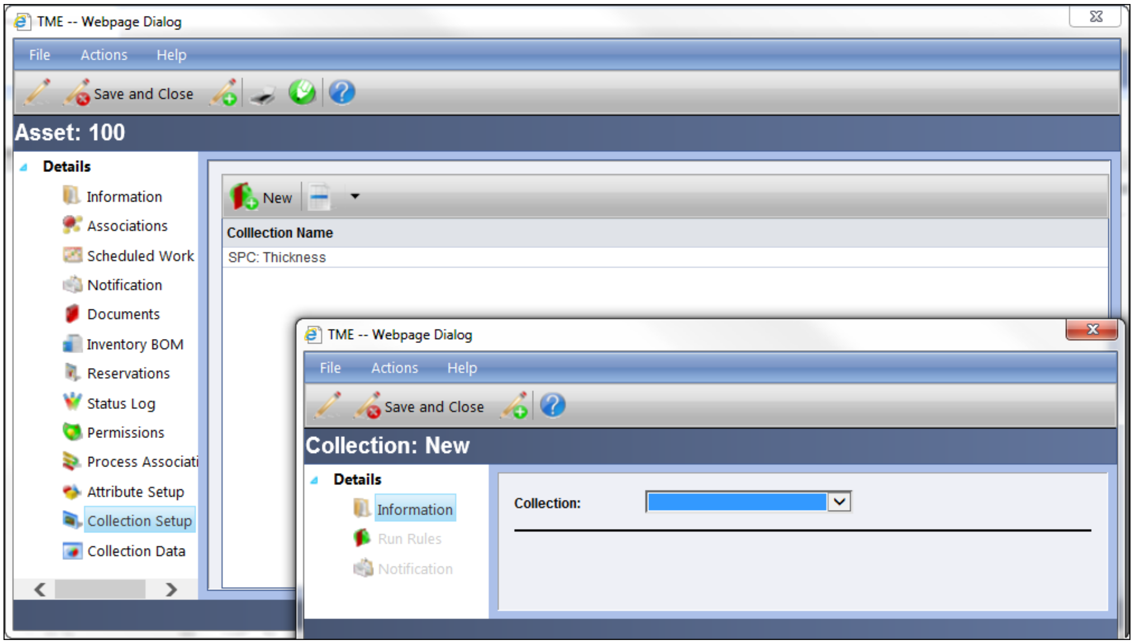

Figure 62 Data Collections Setup for a Single Object (Asset)

2. If the Data Collections are to apply to all records for Assets, Inventory Items, Batch Numbers, and/or Serial Numbers, the set up is done via Tools > Options on the appropriate tab for the module.

   For Assets and Inventory Items, there is not only a link for Collections (All Assets) or (All Items), but Collection Setup links for each of the item Categories and SubCategories. Once the Data Collections have been selected for all Assets or Inventory Items, those collections will be available for selection when collecting data for those items. If set up by Category or SubCategory, the collections will only be available for selection for items contained within the corresponding Category or SubCategory.

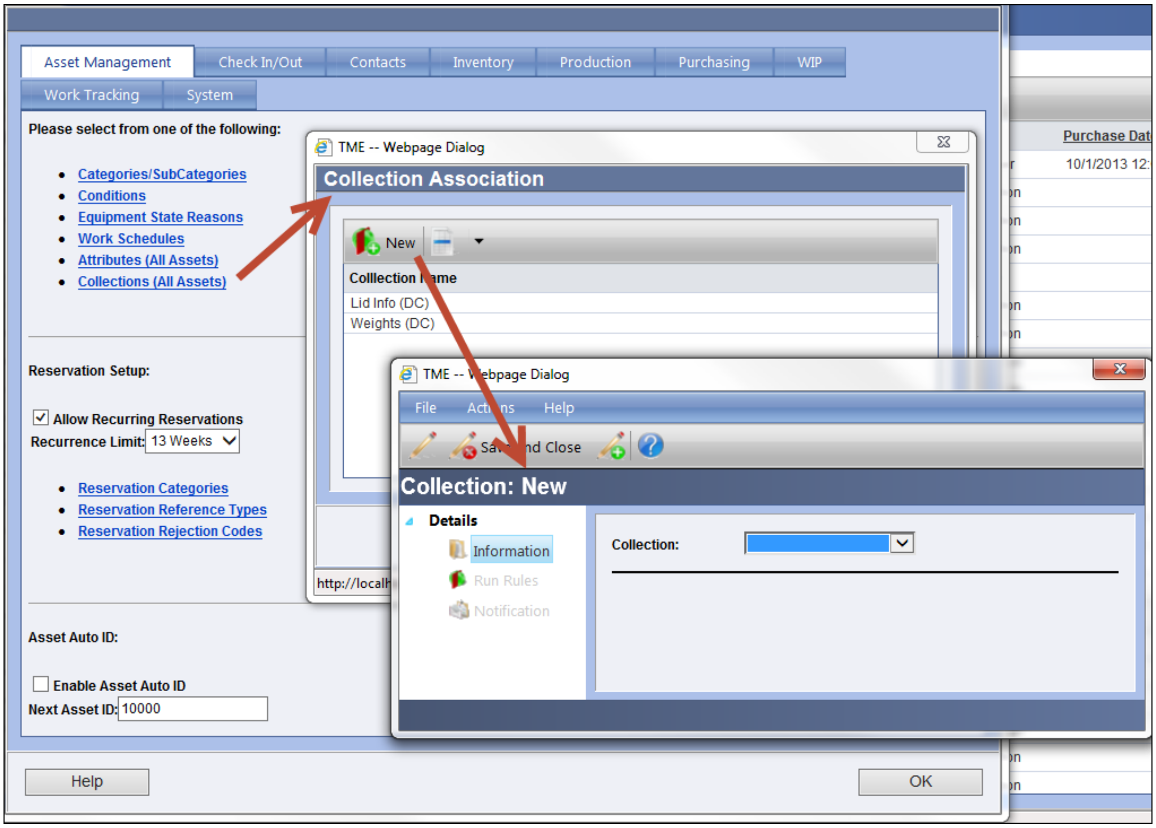

Figure 63 Data Collections Setup for Multiple Objects (All Assets)

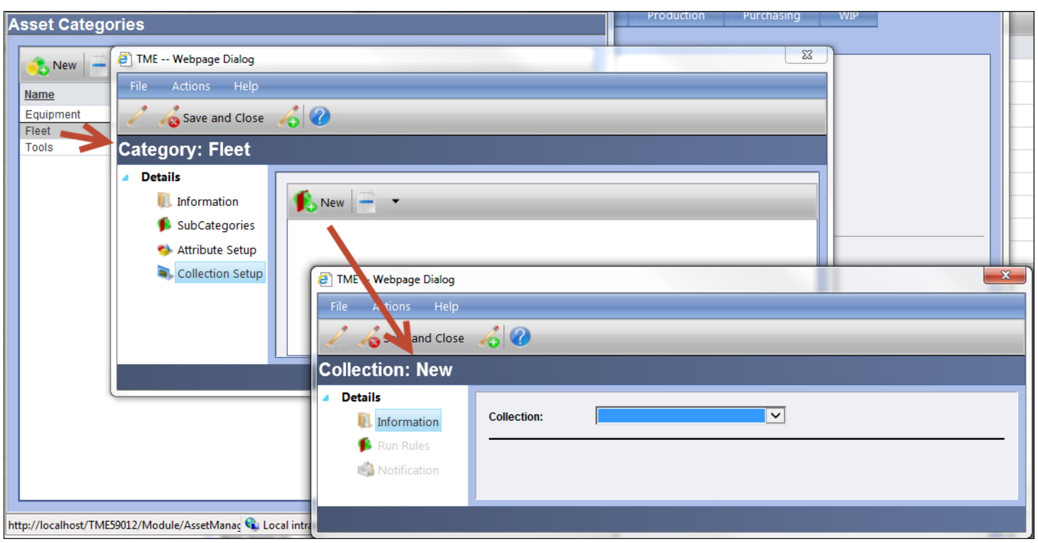

Figure 64 Data Collections Setup for a Category of Objects (Assets)

To view the data that has been collected, click on the Collection Data link on the detail screen of the object. The viewer of all data collection records for that item will appear. Double-click on the record in question to open the detail screen and review/edit the data. If the data is edited, the Modified By and Modified Date fields will update accordingly. The original data will not be stored.

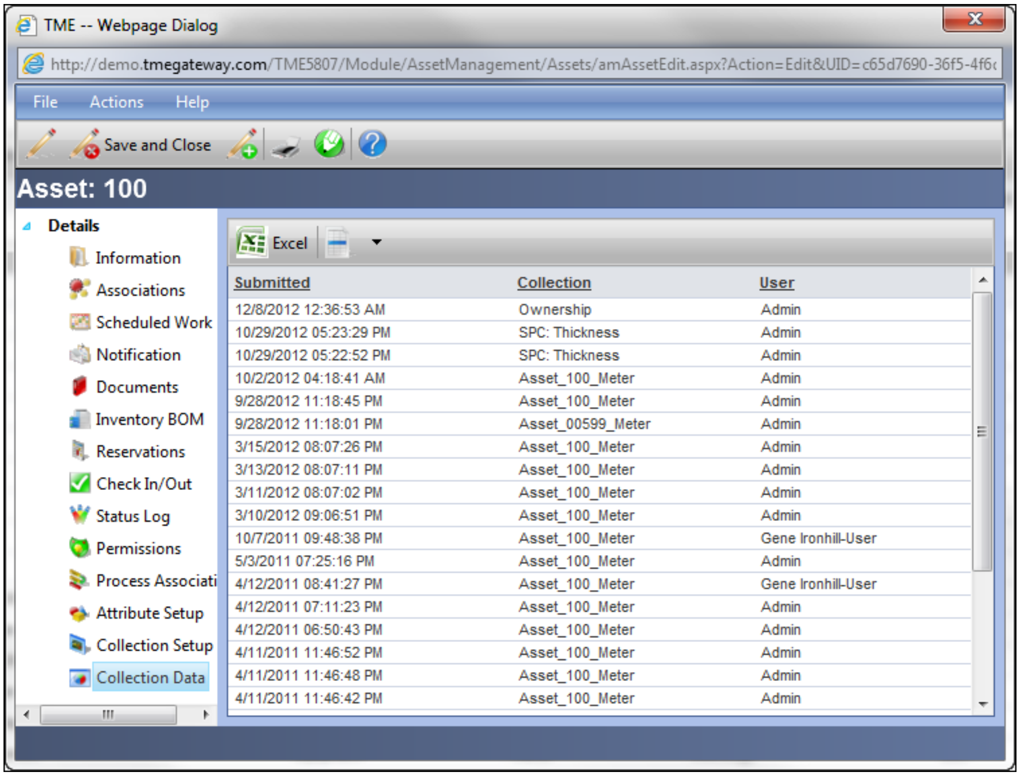

Figure 65 Collection Data Screen for an Object (Asset)

Run Rule Violations Setup

Attributes and Data Collections can have Run Rules set up so that at the time of data entry, an action can take place if the value collected violates the run rule.

To set up the run rule for an Attribute or Data Collection, open the detail screen from the Attribute or Collection Setup Viewer (from the detail screen of an individual object, i.e., an Asset, or from the links for multiple objects at Tools > Options). Click on the Run Rules link.

The screen for the new Run Rule will appear. Make sure the Variable Group is correct and choose the variable for which the Run Rule will apply. Different variables will have different options available.

Provide a name for the Run Rule. This name will appear in the Run Rule viewer and allow Users to easily differentiate one run rule from another without having to open each rule.

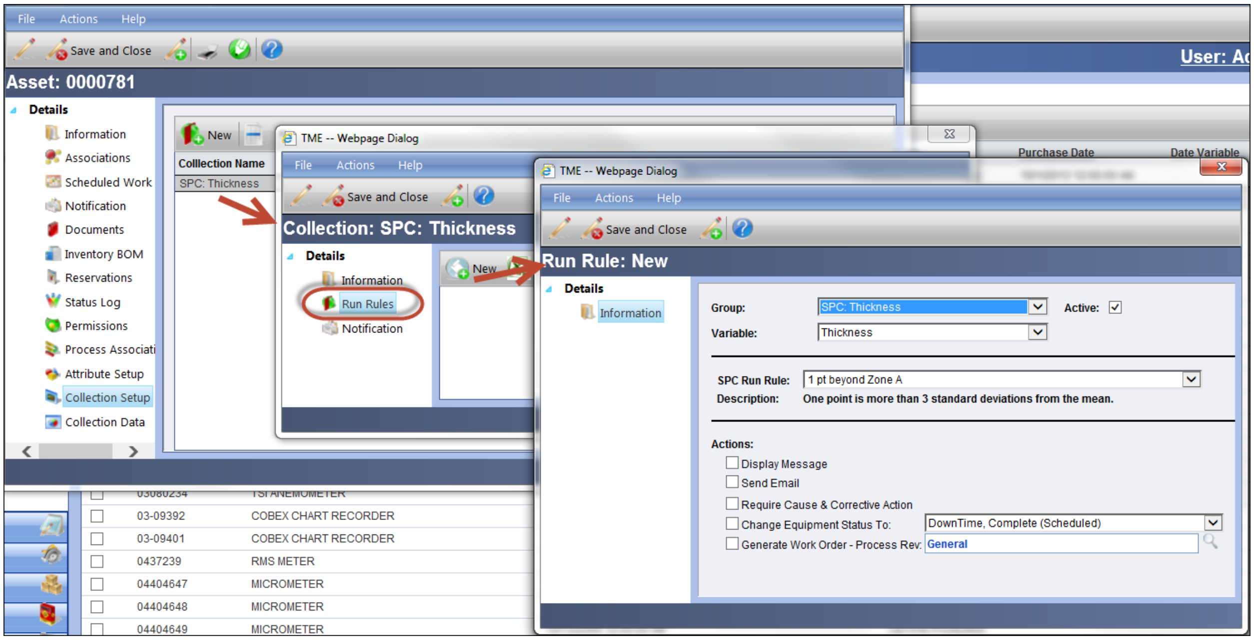

Figure 66 Run Rule Setup for SPC Variable

<u>SPC Variable Data Type</u>

For an SPC variable, the rules are preset using Western Electric Rules. Select from the SPC Run Rule drop-down list and the description of what the rule means appears underneath.

Choose the Action(s) that are to take place at the time that a violation of the rule occurs.

- Display Message: a popup screen will appear notifying the user that a violation has occurred and what the violation was
- Send Email: an email goes out to those set on the Notification for the Run Rule (click on the Notification link under Run Rules link to set up)
- Require Cause & Corrective Action: a popup screen will appear with fields for the User to fill in with the Cause and Correction Action taken

The following Actions only appear when the SPC Attribute or Data Collection is associated to an Asset:

- Change Equipment Status To: select the Major and Minor Status that the equipment will immediately change to from the drop-down list
- Generate Work Order – Process Rev: choose the Process/Revision from which the Work Order will generate

<u>List, Number, Formula, Text, Checkbox Variable Data Types</u>

For List, Number, Formula and Text variables, the rules need to be set up with Criteria

(Equal To, Contains, Not One Of, etc.) and the entry Value (for a List, it can be selected). For Checkbox variables, the Criteria is Equal To or Not Equal To a value of True or False.

The available Actions are the same as those for the SPC variable, minus Require Cause & Corrective Action.

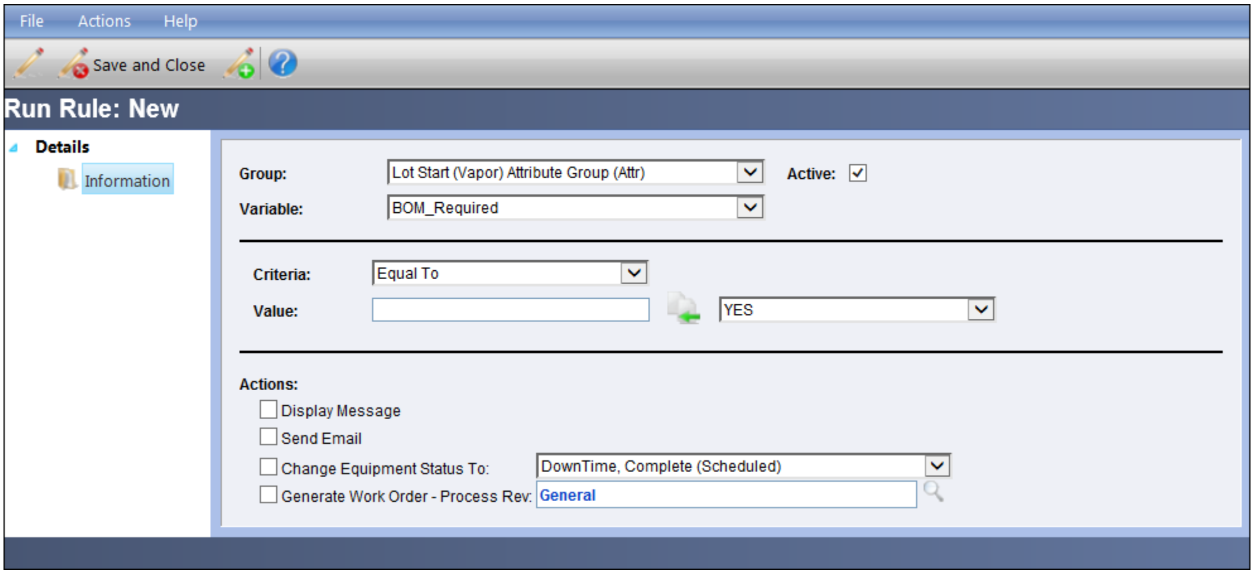

Figure 67 Run Rule Setup for List Variable

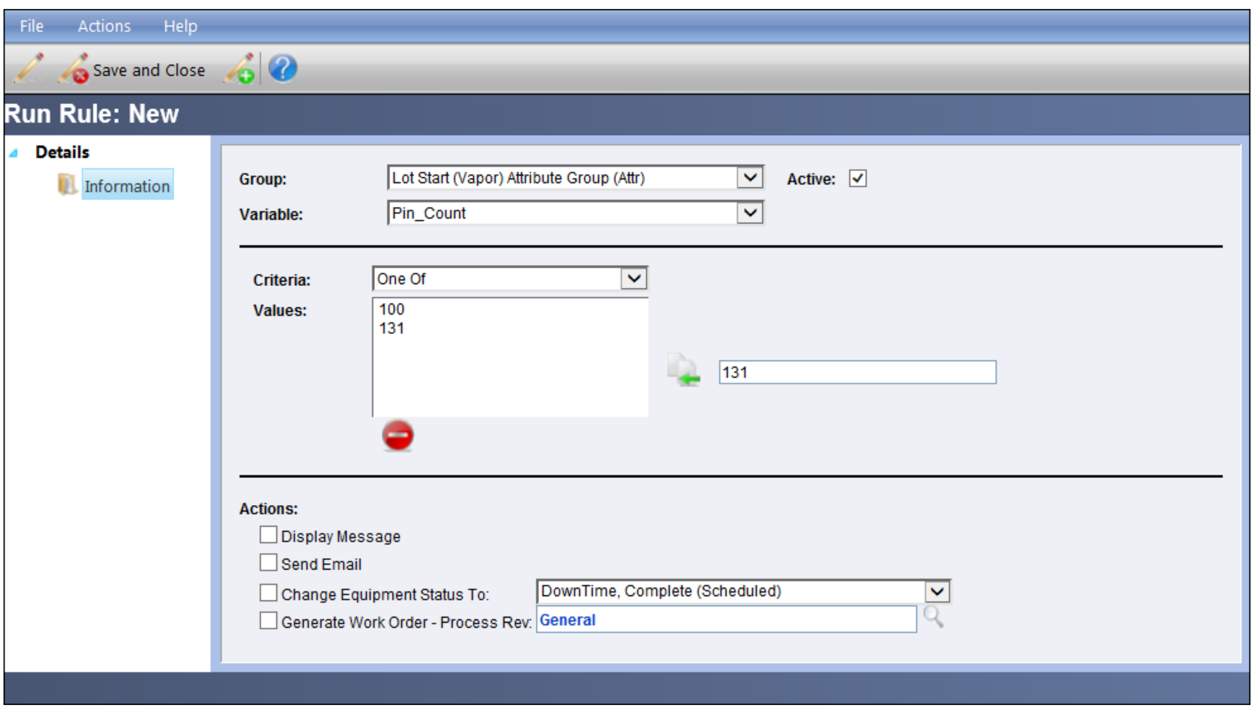

Figure 68 Rule Setup for Number or Text Variable

Date Variable Data Type

For a Date variable, the Criteria is date relevant and the value can be set as a specific date or as a Variable date (See Appendix 2 Variable Dates for more information).

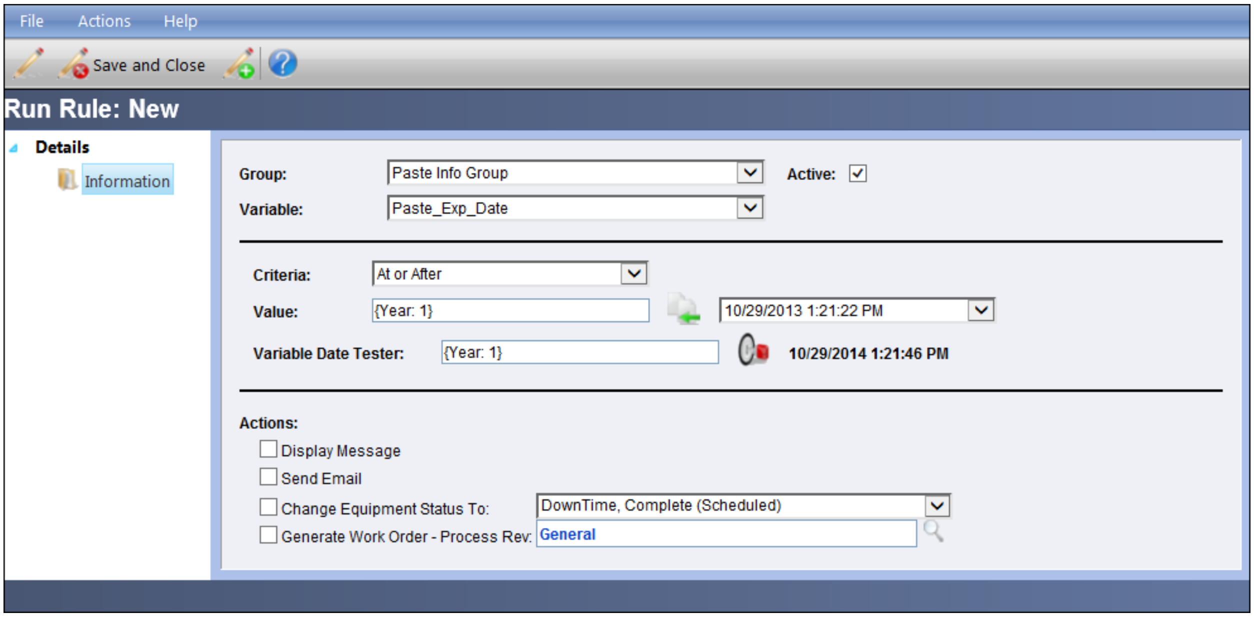

Figure 69 Rule Setup for Date Variable

Totalizer Variable Data Type

For a Totalizer variable, the Run Rule feature is not available. It utilizes the limits indicated as part of the setup of the variable.

Permission to Collect Data

Permissions to collect data via the Data Collection throughout TME (within a Work Order, Asset, etc.) are based on Access Groups. To set up the Permissions, click on the Permissions link on the Data Collection Detail screen.

Click on the radial button for Members of the following Access Groups.

Select the Access Groups (hold the Ctrl key if making multiple selections) from the Access Groups field and click on the Add Access Group icon to the right of the field. The groups selected are now visible in the Associated Groups field. To remove a group from the Associated Group(s), select the Access Group (hold the Ctrl key if making multiple selections) from the Associated Groups field and click on the Remove Access Group icon to the right of the field.

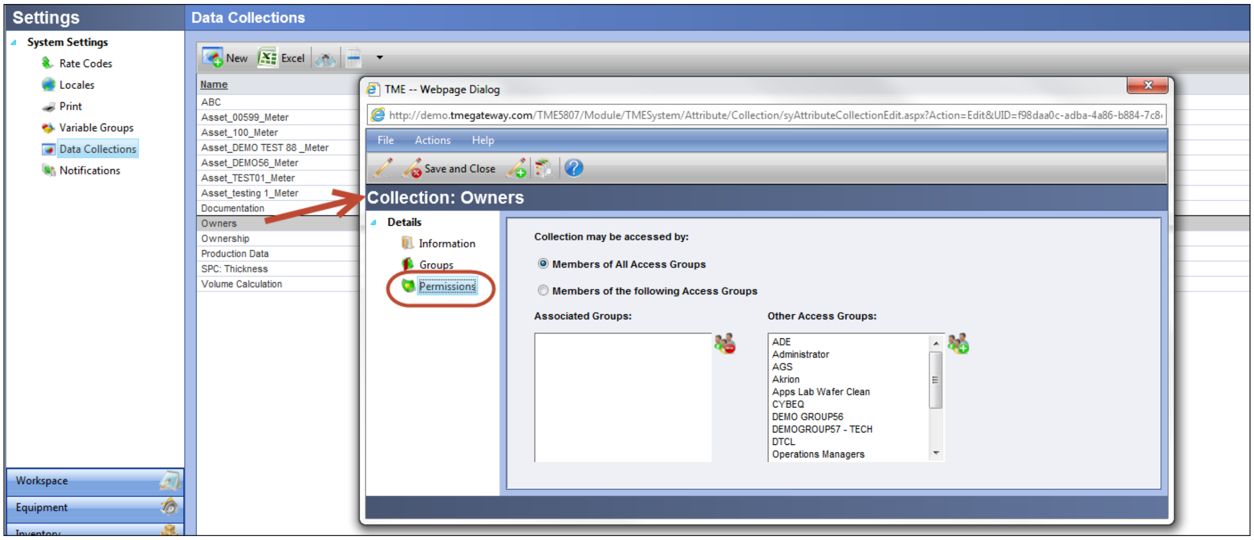

Figure 70 Data Collection Permissions Screen

Notifications

Users can receive notifications by text or email messaging for various functions throughout TME--creation of work orders, Asset going into downtime state, below minimum reached on an Inventory Item, etc.

The messages and subject lines of these Notifications are set up in this Notifications submodule in Settings. Setting up the Notifications to be sent to specific email or text addresses is done within the User's individual profiles.

A) *Setting up the Notification*

The Notifications Viewer lists the notifications set up for the various triggers in TME.

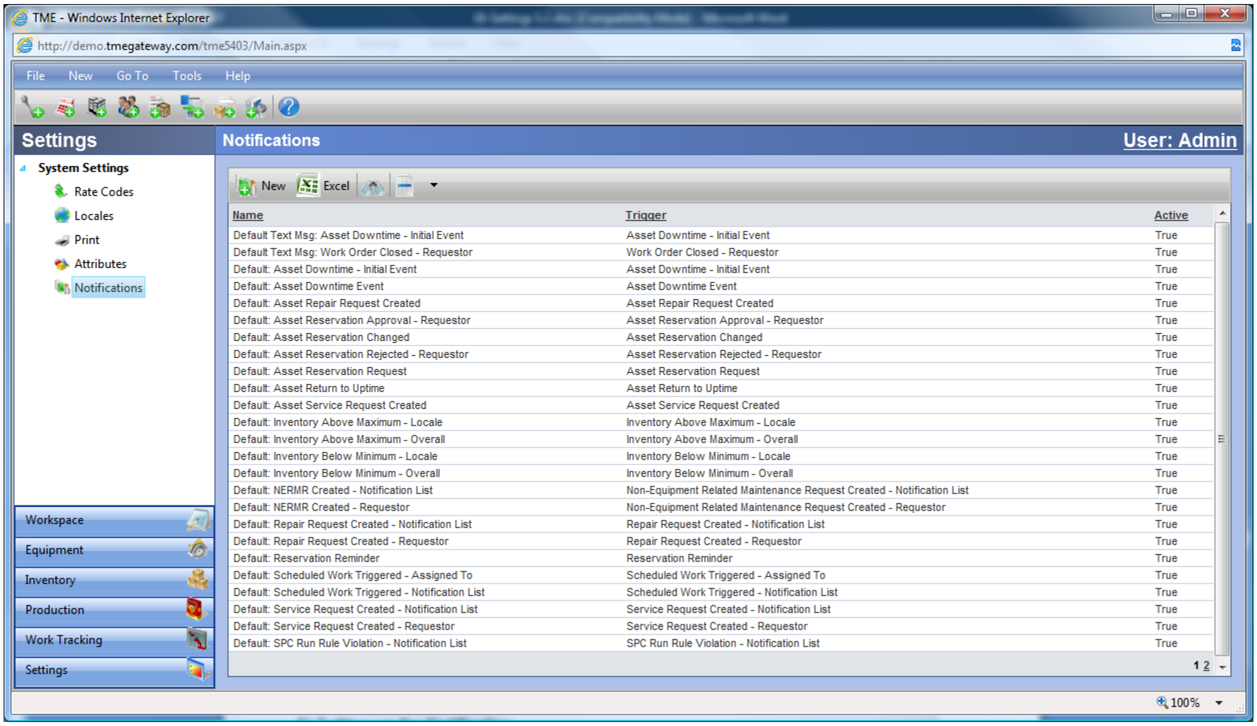

Figure 71 Notifications Viewer

New Notifications can be added by clicking on .

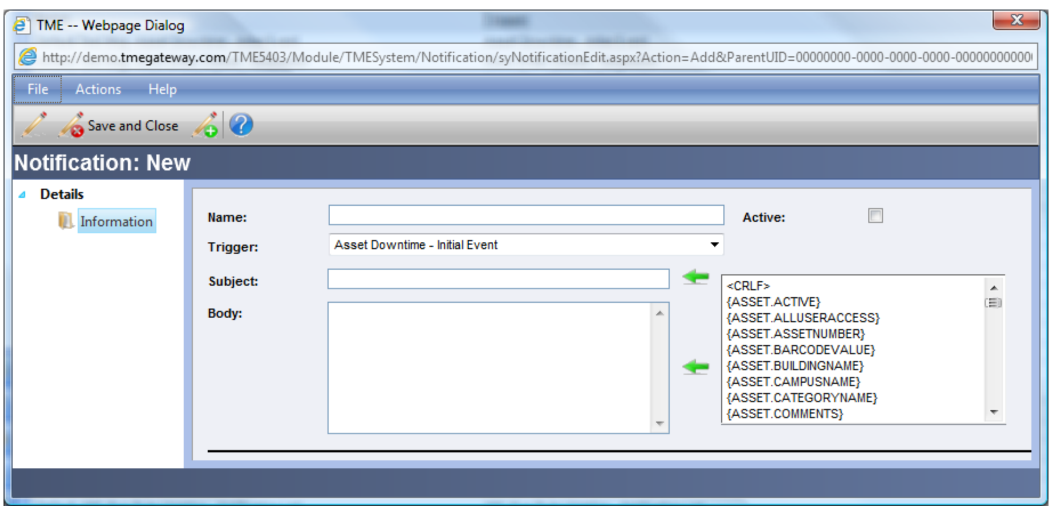

Figure 72 Notification Detail Screen

Type in the Name of the Notification which will appear in the drop-down list for selection; select the Trigger for which the Notification is to be sent out, select the Active checkbox and type the Subject into the Subject text field and the Message into the Body text field.

To insert variables into the Subject line, select the variable from the list provided and click the top  to move that value into the Subject line. The value will be placed at the end of the Subject line and can be cut (Ctrl C on the keyboard) and pasted (Ctrl V on the keyboard) into another position within the Subject.

To insert variables into the body of the message, select the variable from the list provided and click the bottom to move that value into the body. The value will be placed at the end of the message and can be cut (Ctrl C on the keyboard) and pasted (Ctrl V on the keyboard) into another position within the message.

To include a carriage return at the end of a line, insert the <CRLF> variable located at the top of the variable list and place it at the end of the line. This value can be copied and pasted throughout the message as necessary.

Save using the Detail Toolbar or Taskbar. To close the record without saving, click on File on the Detail Taskbar and then Close or click on the X at the top right corner of the Details Screen window.

To edit a Notification, select a record within the Notification Viewer and double click anywhere within the row or right click within the row and select "View." The Notification Details screen appears set to the Information Link. Make any edits as necessary on the General tab and save.

To delete, double click anywhere within the row of the specific Notification and delete the record via Actions on the Details Taskbar or right click on that row and select "Delete."

B) *Setting up the Notifications for Work Tracking*

Specific Users can receive email/text notifications for the following events as soon as they occur regardless of the Asset or Requestor: Non-Equipment Related Maintenance Request Created - Notification List, Repair Request Created-Notification List, Work Order Closed-Notification List, Work Order Edited-Notification List, Work Order Manually Created-Notification List, and Work Order Rejected-Notification List. Notifications for Work Tracking is accessed via Work Tracking > Processes. Open up the record for the Process, click on Revisions. Open up the record for the Revision in Question and click on Notification.

Notifications can be added to the list by clicking on New.

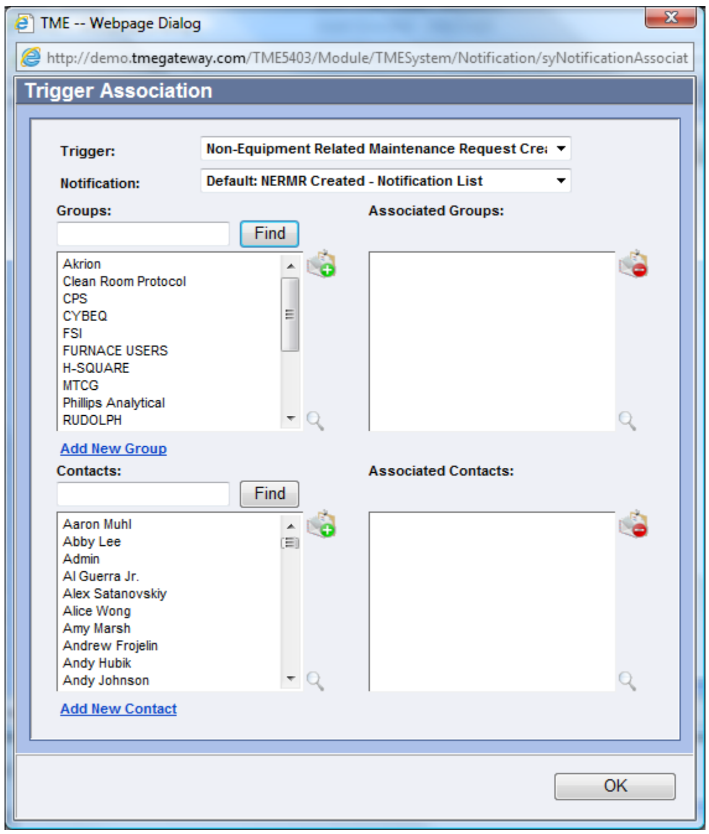

Figure 73 Notification Trigger Association Screen

Select the appropriate Trigger from the drop down list and the Notification. The Administrator can set up multiple Notifications (with different subject lines, messages, etc.) for each Trigger.

Select the Groups to receive the Notification (hold the Ctrl key if making multiple selections) from the Groups field and click on to the right of the field. The groups selected are now visible in the Associated Groups field. To remove a group from the Associated Group(s), select the Group (hold the Ctrl key if making multiple selections) from the Associated Groups field and click on to the right of the field.

The same process applies for selecting individual Contacts.

To search for a Group or Contact, type in the starting letters within the text field above the listed Groups/Contacts. Click Find and the list will filter accordingly. To return to the full list, remove the typed entry and click Find again.

Continue setting up each Trigger and Notification needed and then click OK to submit.

NOTE: a Group or Contact may be set up to receive multiple notifications for the same Trigger. For example, a Notification may be setup for Repair Request Created with a long message that's suitable for email while another Notification may be set up for the same trigger that is brief and suitable for texting. The designation of where to send each Notification (email or text address) is set up at the User's profile. See the Contacts portion of the Contacts section of Online Help for assistance on setting up the User profile.

To Add a New Group or Contact from within this screen, click on the corresponding links located under the Group and Contacts fields. See the Contacts and Groups portions of the Contacts section of Online Help for assistance on setting up the Group/Contact.

C) Setting up the Notifications for Individual Records for Assets, Inventory, Scheduled Work and SPC Rule Violations

I. **Assets**: Specific Users can receive email/text notifications for the following events for Assets as soon as they occur: Asset Downtime - Initial Event, Asset Downtime Event (all events, not just the initial), Repair Request Created, Service Request Created, Reservation Request, and Return to Uptime . To set up, click on the Notification link on the Asset's Detail Screen (Asset Management > Assets) and follow the same process as with setting up Notifications for Work Tracking as defined above.

II. **Inventory**: Specific Users can receive email/text notifications for the following events for Inventory Items as soon as they occur: Inventory Above Maximum - Overall and Inventory Below Minimum - Overall. These notifications will alert Users regarding the overall on-hand quantity of the Item within the entire system (minimum and maximum values defined on the Information screen). To set up, click on the Notification link on the Item's Detail Screen (Inventory > Items).

III. **Inventory Locales**: Specific Users can also receive email/text notifications for Below Minimum and Above Maximum for designated Locales for individual Inventory Items. To set up, click on the Notification link on the Item Location's Detail Screen (Inventory > Items > Location Mgt).

IV. **Scheduled Work**: Specific Users can receive email/text notifications for the following events as soon as they occur: Scheduled Work Triggered - Assigned To and Scheduled Work Triggered - Notification List. To set up, click on the Notification link on the Scheduled Work's Detail Screen (Work Tracking > Scheduled Work).

V. **WIP**: Specific Users can receive email/text notifications for the following events as soon as they occur: WIP Work Order Closed, WIP Work Order Closed-Assigned To, WIP Work Order Created, WIP Work Order Created-Assigned To, WIP Work Order Future Hold, WIP Work Order Hold, WIP Work Order Rejected, WIP Work Order Rejected-Assigned To, WIP Work Order Released, WIP Work Order Released-Assigned To, WIP Work Order Scrapped, WIP Work Order Step Complete, WIP Work Order Step Resume, WIP Work Order Step Started, WIP Work Order Step Suspended, and WIP Work Order To Inventory. To set up the WIP Work Order notifications, click on the Notification link on the Process Revision's Detail Screen (WIP > Processes > Revisions). To set up the WIP Work Order Step notifications, click on the Notification link on the Operation Step's Detail Screen (WIP > Operations > Revisions > Steps).

VI. **Attributes/Data Collection/SPC**: Specific Users can receive email/text notifications the violation of Attributes/Data Collection/SPC run rules. There are separate notifications for run rule violations for different objects: Asset Run Rule Violation, Inventory Item Run Rule Violation, Inventory Item Batch Run Rule Violation, Inventory Item Serial Number Run Rule Violation, Inventory Transaction Run Rule Violation Locale Run Rule Violation, Production Log Run Rule Violation, Purchase Order Run Rule Violation, Receipt Item Run Rule Violation, Receipt Run Rule Violation, Requisition Run Rule Violation, WIP Data Collect Run Rule Violation, Work Order Run Rule Violation and Work Order Step Run Rule Violation.

To set up, click on the Notification link on the Attribute or Collection Setup Detail Screen for the individual object such as an Asset, Inventory Item, Work Tracking Process (for example, Asset > Collection Setup).

To set up for WIP Work Order Collection, click on the Notification link via WIP > Operations > Revisions > Steps > Data Collection > Details link (becomes available upon selecting a Data Collection and saving the screen).

To set up for WIP Operations and Processes, click on the Notification link via Tools > Options > WIP > Operation or Process Attributes > Group Item.

To set up for All Assets, click on the Notification link via Tools > Options > Assets > Attributes/Collections (All Assets) > Group Item.

To set up for Purchase Orders and Requisitions, click on the Notification link via Tools > Options > Purchasing > PO or Req Attributes > Group Item.

To set up for Production, click on the Notification link via Tools > Options > Production > Attributes > Group Item.

To set up for Locales, click on the Notification link via Tools > Options > System > Locale Attributes > Group Item.

To set up for Contact Groups and Contact Group Members, click on the Notification link via Tools > Options > Contacts > Contact Groups or Contract Group Member Attributes > Group Item.

To set up for Inventory Transactions, All Item Batches, All Item Serial Numbers, Receipts and Receipt Items, click on the Notification link via Tools > Options > Inventory > [XXX] Attributes/Collections > Group Item.

To set up based on Category or Subcategory for Assets or Inventory Items, click on click on the Notification link via Tools > Options > Assets or Inventory > Categories/SubCategories> Drill to the Category or SubCategory > Group Item.

To set up for Work Tracking Work Orders, click on the Notification link via Tools > Options > Work Tracking > Attributes > Group Item.

D) Setting up Notifications to Be Sent to Alternate Email/Text Addresses

Select the User's record within the Contacts Viewer and double click anywhere within the row or right click within the row and select "View." The Contacts Details screen appears set to the Information Link. Click on the Notification Rule link. The Notification Rules help the system determine which email address to send any particular Notification to, for a User with multiple addresses. For example, a Downtime Event trigger can be set up with multiple notifications--one with lots of information to be sent to an email address and one with very limited information to be sent to a text address.

To add a new record, click on 

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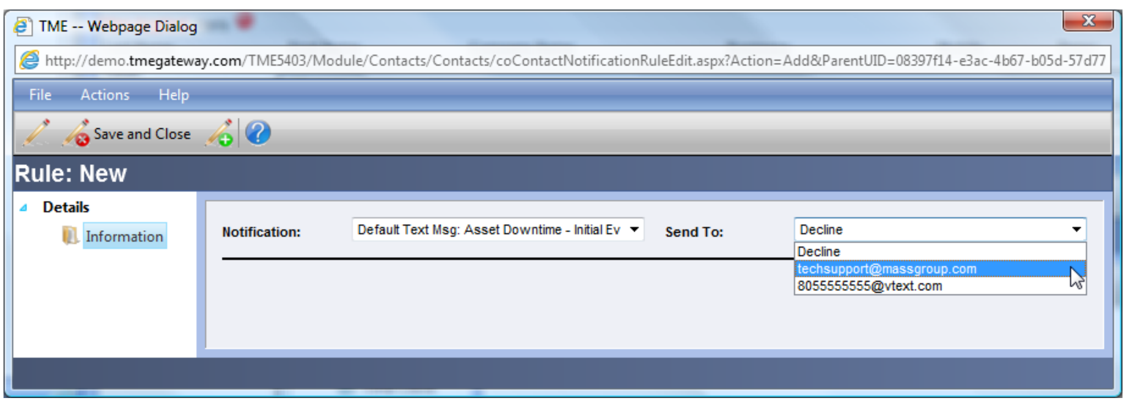

Figure 74 Notification Rule screen

Select the Notification from the drop down list and the email address from the Send To drop down list. In lieu of an email address, "Decline" can be selected and if that particular notification is to be sent out, the User will not receive it. Save.

To edit a record, select it within the Notification Rule Viewer and double click anywhere within the row or right click within the row and select "View." The Notification Rule Screen appears. Select an alternate Notification or an alternate Send To from the drop down lists accordingly.

Tools/Options

The Options section of TME is where the Administrator or a designated User can manage the drop-down lists and system setting selections. This function can be accessed via Tools from the Task Bar and selecting "Options". The screen that appears contains tabs for each of the Modules for which Tools exist. Click on the appropriate tab and make selections accordingly.

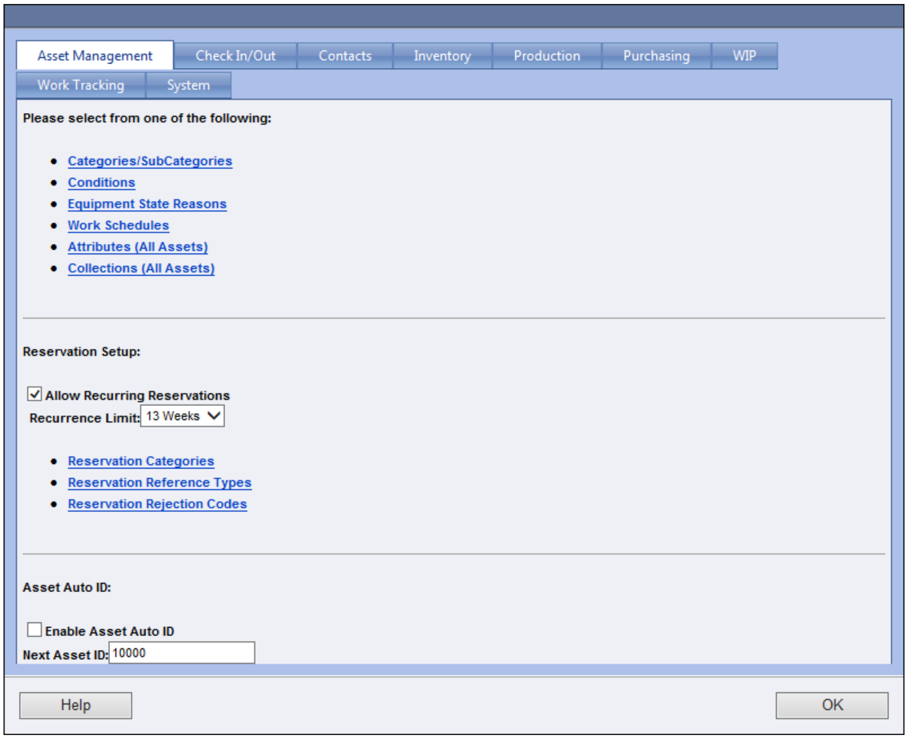

Figure 75 Tools Screen \ Asset Management

Asset Management Options

The Asset Management Options provides the setting up of Categories (including Attributes and Data Collectionsbased on those), Conditions, Equipment State Reasons, Work Schedules, Attributes (All Assets) and Collections (All Assets). Also included in the tab is the Reservation Setup where reservation categories, recurrence limits, types, and rejection codes are put into place. The selection of Asset Auto ID turns on the automatic assignment of Asset IDs in sequential order to New Assets.

Categories/SubCategories and Module/Failure/Corrective Action Tracking

In order to keep track of equipment repair, failures and corrective actions for the various modules of equipment, it is important that Categories and Subcategories have been entered into TME as they are the source of the drop-down lists for those modules, failures and corrective actions. As selections are made and data is collected, Pareto charts can be generated to track trends. Additionally, Attributes can be assigned to Assets based on Category or SubCategory.

The Categories viewer is accessed via Tools > Options > Asset Management and clicking on Categories/SubCategories. The data can be searched and sorted in order to easily access a specific record.

1. New Categories can be added by clicking on New at the left side of the Viewer Toolbar. A blank Details popup screen will appear and will as a default be set to the General tab of the Information link (the Additional links for SubCategories and Attributes are not available until the new Category record is saved). Type in the Name. Save using the Detail Toolbar or Taskbar. The Additional links for SubCategories and Attributes are now activated any time the Details screen for this record is open. To close the record without saving, click on File on the Detail Taskbar and then Close or click on the X at the top right corner of the Details Screen window.

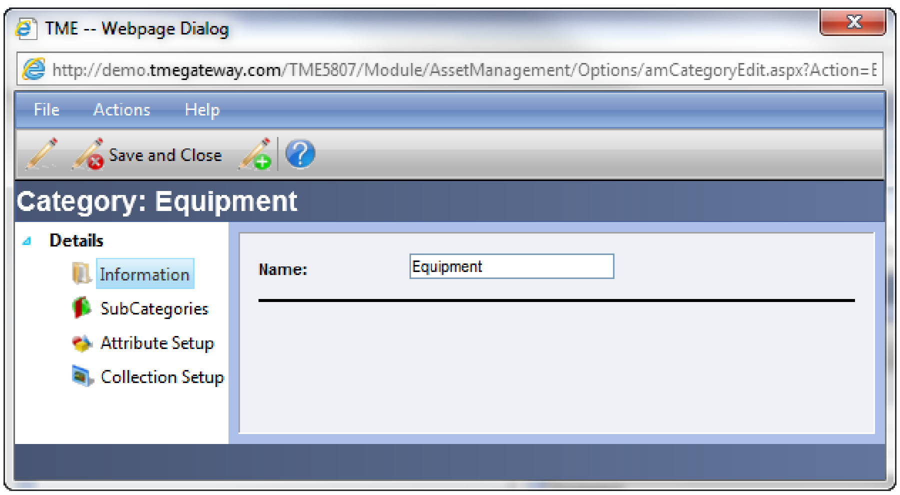

Figure 76 Asset Category Detail Screen

2. Click on the SubCategories link to access the SubCategory viewer. New SubCategories can be added by clicking on New. Type in the Name. Save using the Detail Toolbar or Taskbar. The Additional links for Modules and Attributes are now activated any time the Details screen for this record is open.

3. Click on the Modules link to access the Modules viewer. New Modules can be added by clicking on New at the left side of the Viewer Toolbar. Type in the Name. Save. The Additional link for Failures is now activated any time the Details screen for this record is open.

4. Click on the Failures link to access the Modules viewer. New Failures can be added by clicking on New. Type in the Name. Save. The Additional link for

Corrective Actions is now activated any time the Details screen for this record is open.

5. Click on the Corrective Actions link to access the Modules viewer. New Corrective Actions can be added by clicking New. Type in the Name. Save.

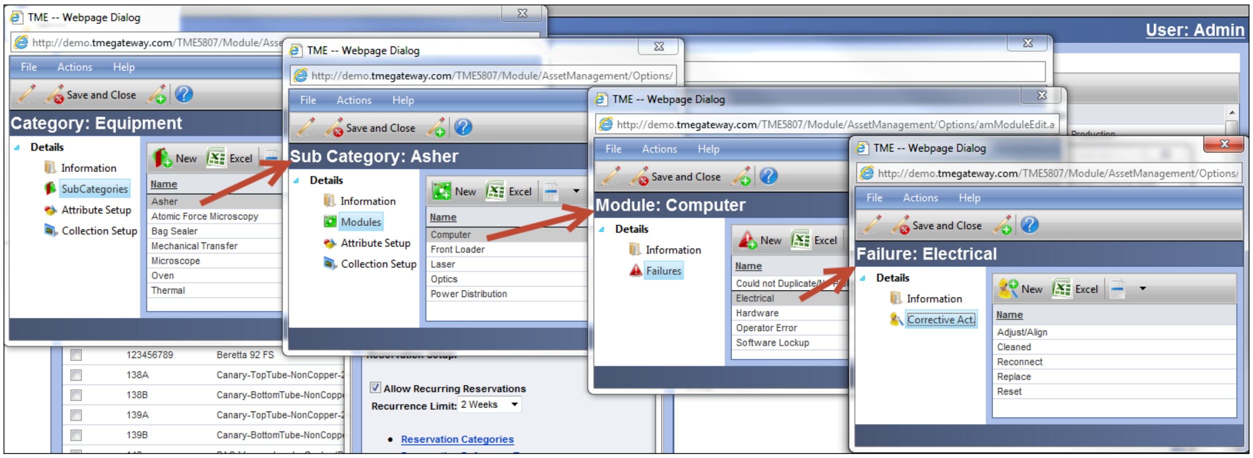

Figure 77 Example of Module/Failure/Corrective Action Setup

If applicable, select the attribute field that is to be associated to an Asset based on the Category or SubCategory. These attributes will only be available as fields for those Assets that are members of the Category or SubCategory. Go to the Detail Screen of the Category or SubCategory and click on the Attribute Setup additional link.

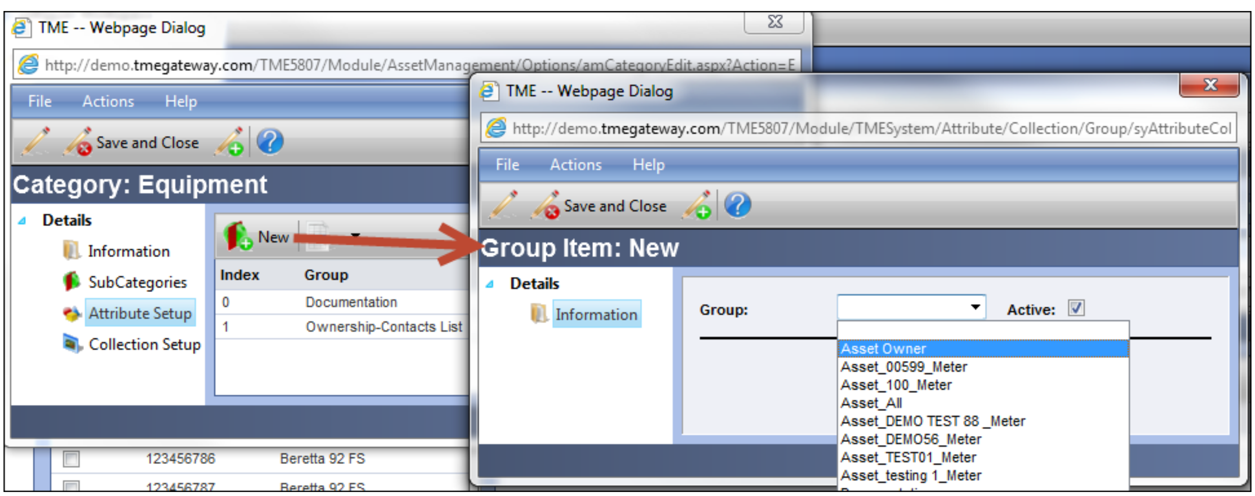

Figure 78 Attribute Setup Screen for Asset Category

Save using the Detail Toolbar or Taskbar. To close the record without saving, click on File on the Detail Taskbar and then Close or click on the X at the top right corner of the Details Screen window.

Conditions

The physical condition of an Asset can be assigned via selection from a drop-down list within the Asset's Detail screen. It can be changed by reselecting from the drop-down (changes would be tracked in the Audit Trail, but not for formal reporting purposes). The condition can also be changed at the time the Asset is checked out or back in via the Check In/Out module. This would provide a means for tracking changes in Condition as the transactions are logged and can be accessed via the Check In/Out additional link on the Asset Detail screen or via a Check In/Out report.

The Conditions viewer is accessed via Tools > Options > Asset Management and clicking on Conditions. The data can be searched and sorted in order to easily access a specific record.

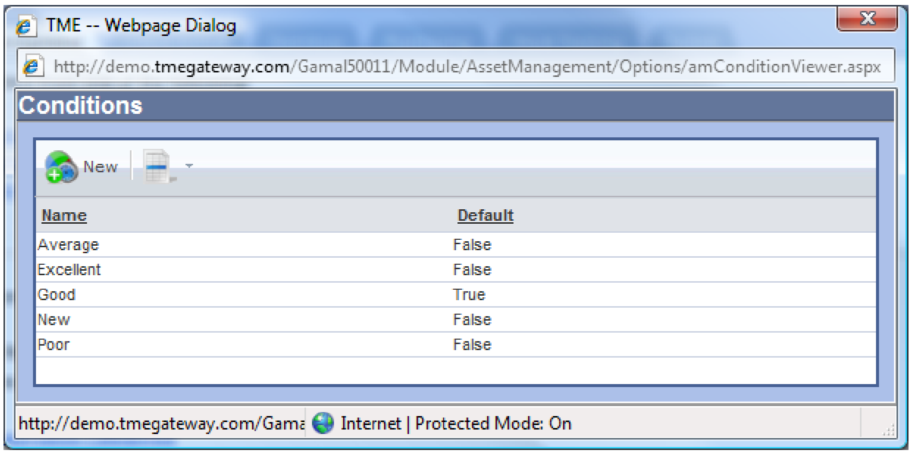

Figure 79 Asset Conditions Viewer

New Conditions can be added by clicking on 

at the left side of the Viewer Toolbar.

Type in the Name and if applicable, check the Default checkbox to make this Condition the default for all new Assets.

Equipment State Reasons

Equipment State Reasons can be set up in conjunction with the Major/Minor status to provide additional information regarding the status of an Asset. Reasons are defined in a drop down list for each Major/Minor status combination. Once a major and minor status for an Asset have been selected, the User then selects the Equipment State Reason from the drop down list that has been filtered for the selected status. The Runtime Engine sums up the hours of the Reasons as part of the daily Asset Metrics calculations.

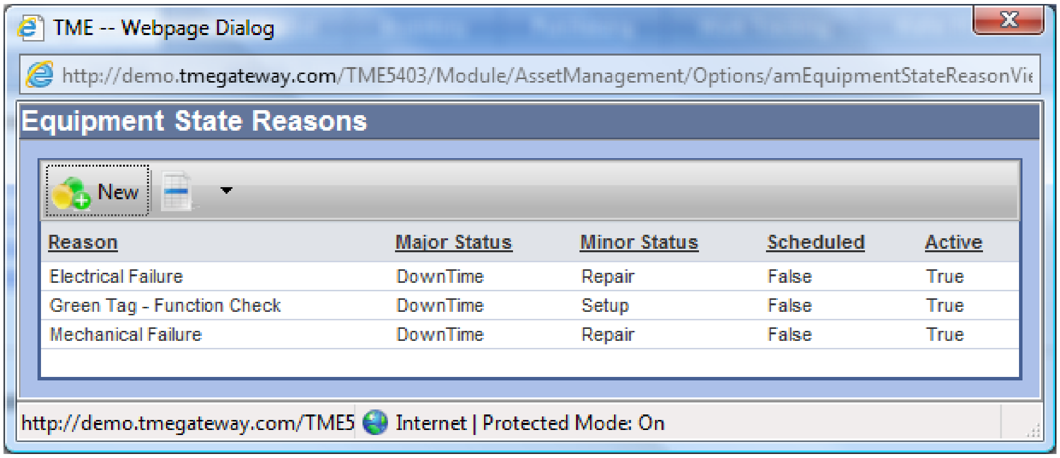

Figure 80 Equipment State Reasons Viewer

New Equipment State Reasons can be added by clicking on 

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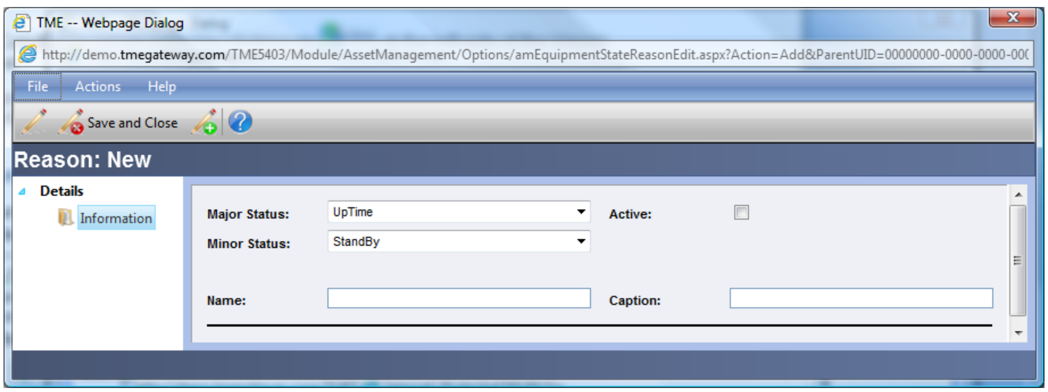

Figure 81 Equipment State Reason Detail Screen

Select the Major and corresponding Minor Status from the drop down lists for which the Reason is to apply. Select the Active checkbox in order for the Reason to be available for selection. Type in a Name (this is to become the column name in the database--no punctuation, spaces and must begin with a letter) and the Caption (what the User sees in the drop-down list). Save.

Work Schedules

Work schedules need to be in place so that when assets are entered into the system, the metrics calculations know when to include Non-Scheduled Time. Non-Scheduled Time is any time that is outside of the work schedule. For example, if the Work Schedule for the equipment is set for Monday through Friday, 8am -5 pm, the equipment is not expected to be operational in the middle of the night, so that time is calculated as Non-Scheduled time as part of efficiency metrics.

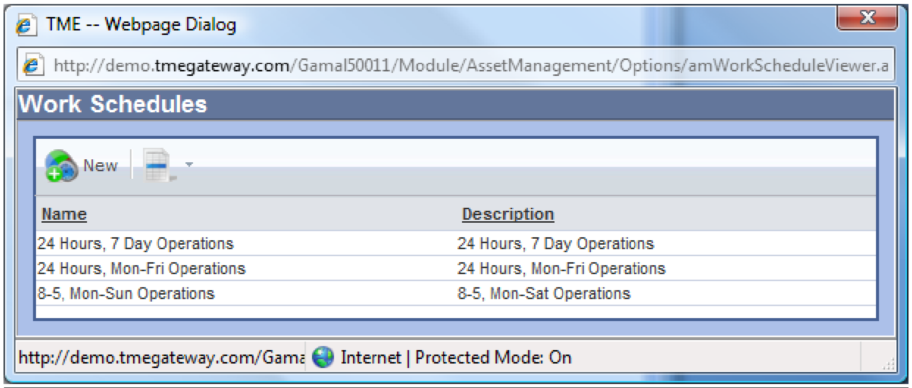

Figure 82 Work Schedule Viewer

1. Work Schedule Setup:

New Work Schedules can be added by clicking on . Type in the details--Name (required) and a Description. Check the box for Recalculate Metrics of Asset and select an as of date if the Runtime Engine needs to recalculate as of that date (i.e., for when a new work schedule has been put into practice and isn't set up in the system until later). Also, check the box if metrics are to be calculated for each rule (shift).

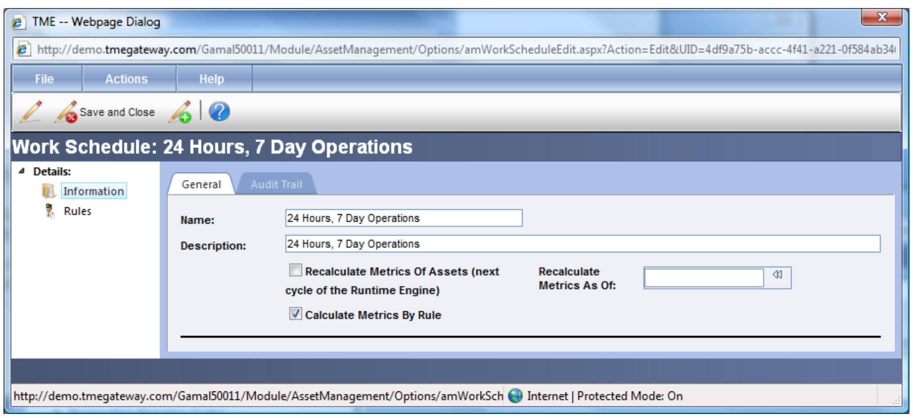

Figure 83 Work Schedule Detail Screen

Save. The Additional link for Rules is now activated.

For each Work Schedule, **at least one rule must be set up to provide the actual timeframe of the schedule**. Multiple rules can be set up for the purpose of putting in shifts. If tracking of metrics is not to be based on shifts, but on the total time of a Work Schedule, then the setting up of multiple rules is not necessary regardless of the number of shifts the company has in practice.

2. Rules Setup:

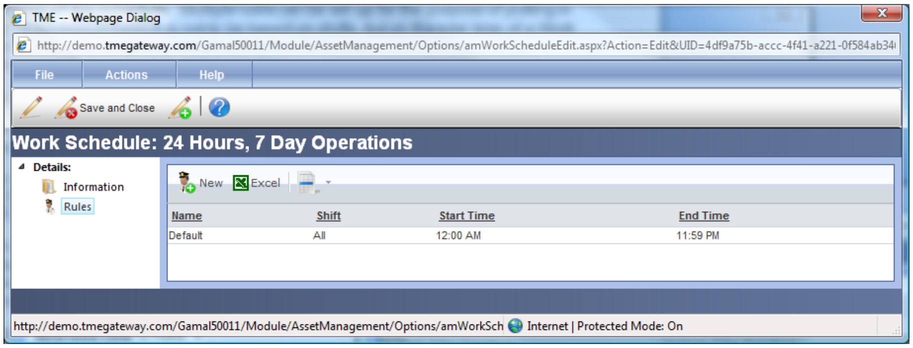

Figure 84 Work Schedule - Rules Detail Screen

To set up a rule for a Work Schedule, click on the Rules additional link on the Work Schedule's Detail screen. Click on New.

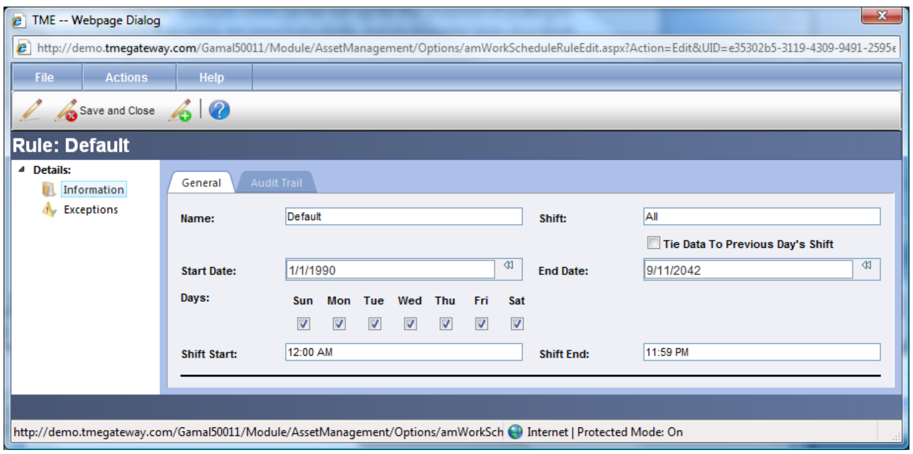

Figure 85 Work Schedule Rule Detail Screen

Type in the details--Name of the rule (required) and which Shift it is. Select the Start and End dates of the Rule. Check the Days for which this Rule applies and type in the Shift Start and Shift End Times using the format 12:00 AM. Do not use military time.

Save. The Additional link for Exceptions is now activated.

3. Exceptions Setup:

There are occasions when periods of time need to be excluded from metrics calculations. Such times might include holidays, company shutdowns, etc. Each Rule will need its own Exception set up for each occasion. For example, if there are two Work Schedules with three shifts (Rules) each, then six Exceptions will need to be set up for the same 24 hour holiday shutdown. If only the first shift is to be shutdown, then only two Exceptions (one for each Work Schedule) will need to be set up.

To set up an Exception for a Rule, click on the Exceptions additional link on the Rule's Detail screen.

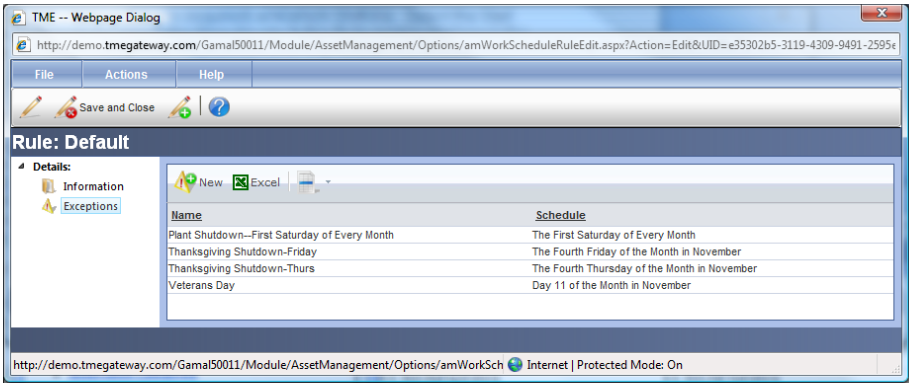

Figure 86 Work Schedule Rule - Exceptions Viewer Detail Screen

Click New.

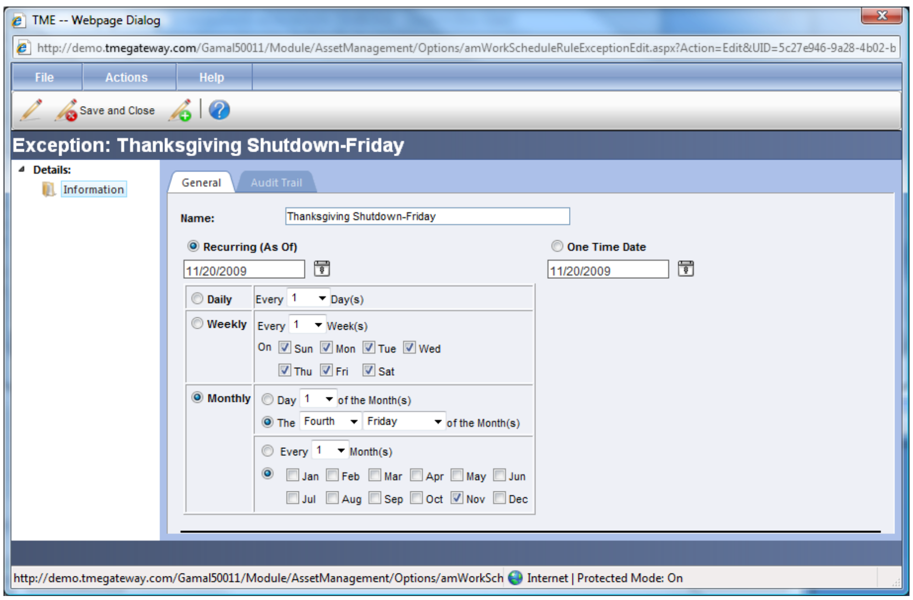

Figure 87 Work Schedule Rule Exceptions Detail Screen

Type in the name of the Exception (i.e., Labor Day). If the Exception is a recurring event, check the Recurring checkbox and make the selections for the schedule--Daily, Weekly or Monthly. If the Exception is a one-time event, click One Time Date and click on the calendar icon to select the date.

Attributes (All Assets)

Single instance data collection in the form of attributes can be set up globally for all Assets in the same manner as for Asset Categories or SubCategories. Click on the Attributes (All Assets) link to get to the Attribute Association screen.

Click on New. Select the Variable Group to associate with all Assets. Save/Close. Change the order of the Variable Groups as they are to appear on screen by clicking on the or accordingly.

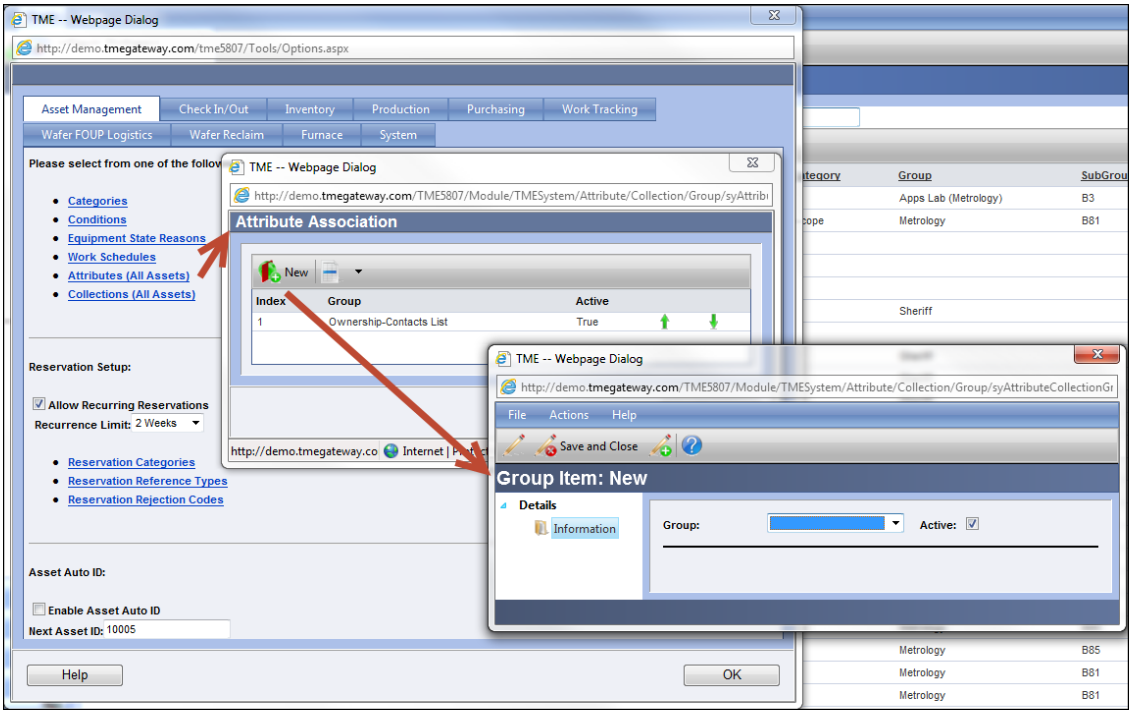

Figure 88 Attributes (All Assets) Setup Screens

Collections (All Assets)

Multi instance data collection in the form of Data Collections can be set up globally for all Assets in the same manner as for Asset Categories or SubCategories. Click on the Collections (All Assets) link to get to the Collection Association screen.

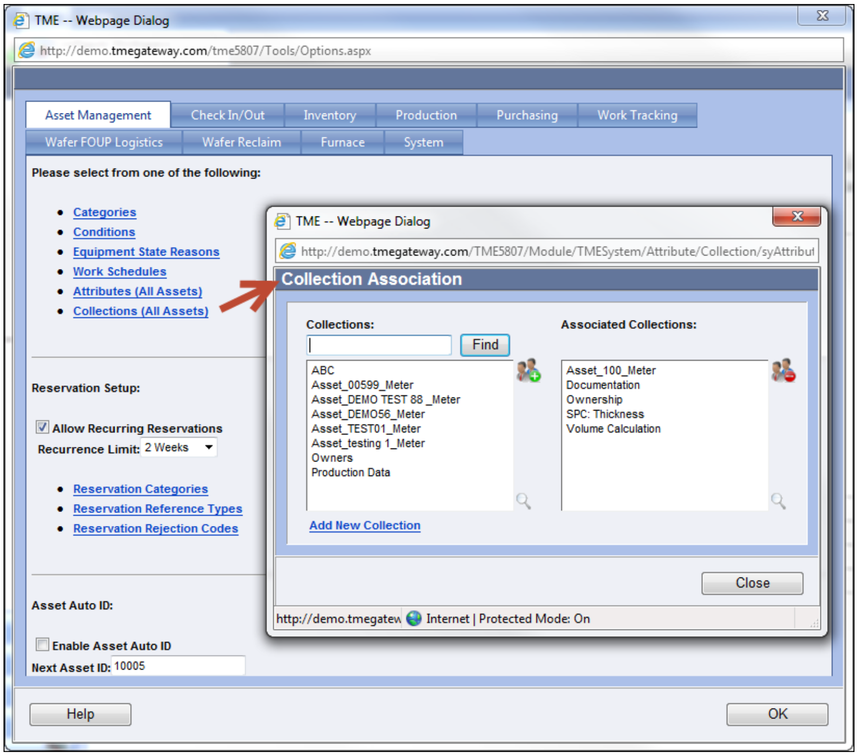

Figure 89 Collections (All Assets) Setup Screens

Reservation Setup

Asset Reservations allows assets such as production equipment to be scheduled for maintenance, repair or overhaul. The Asset Reservation Calendar is a graphical scheduling tool that displays asset reservations. Reservation Setup allows the TME Administrator to set up recurrence limits, categories and type of reservations for selection by the Users as well as rejection codes that approvers of Reservations can select for including a preset comment when rejecting a request.

The Reservation Setup is accessed via Tools > Options > Asset Management. To access Categories, Types or Rejection Codes, click on their links.

<u>1. Recurrence Limits</u>

The Recurrence Limits are available directly on the Asset Management Options screen. If allowing users to make recurring reservations, select the checkbox Allow Recurring Reservations and select the Recurrence Limit (range is 2 - 52 weeks). Users will not be able to set reservations to recur past the limit set.

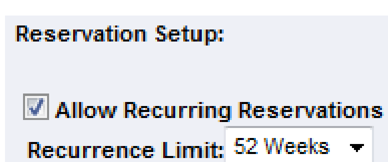

Figure 90 Asset Reservation Settings

2. Reservation Categories

New Reservation Categories can be added by clicking on  from the Reservation Categories Viewer.

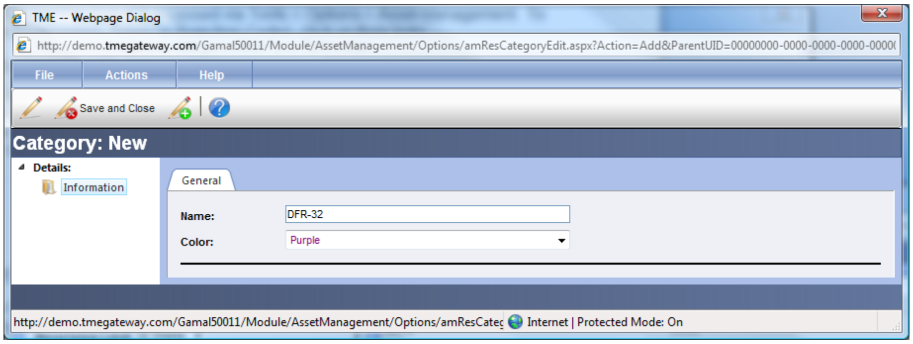

Figure 91 Asset Reservation Categories Detail Screen

Type in the Name and select a color. The Asset ID's font color as displayed on the Reservation Calendar is determined by the category of the reservation.

3. Reservation Types

New Reservation Types can be added by clicking on  on the Reservation Type Viewer.

Type in the Name. It will become part of the drop-list of Types that Users can select when making or editing a Reservation.

4. Reservation Rejection Codes

When the Approver selects the Name from a list of codes, the Message for that code will populate and be included in the email notifying the User of the rejection of the request. The Approver still has the option of typing in his/her own message or editing the message that populates when a Rejection Code is selected, but the codes do provide for quick comments of general rejections.

New Reservation Rejection Codes can be added by clicking on  on the Reservation Reject Codes Viewer.

Type in the Name and the Message.

Enable Auto ID

Asset IDs can be set up to be automatically generated via a sequential numbering system.

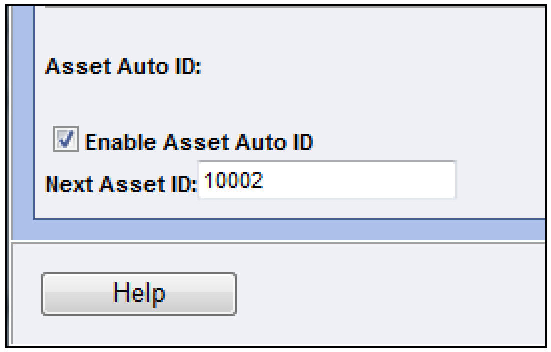

Figure 92 Enabling Asset Auto ID

Select the checkbox for Enable Asset Auto ID to activate. Type in the numeric value for the next Asset to be created. The Asset ID will automatically generate by adding 1 to the previously generated ID. The Next Asset ID can be changed at any time, however, duplicate Asset IDs cannot be created by the system--all Next Asset IDs must start at a number that will not create duplicates.

Check In/Out Options

The Check In/Out Options provides the selection of the labels that are printed as a receipt every time an Asset is checked in or out by a User. The label selections are available directly on the Check In/Out Options screen. Select the label name from the drop-down list for Check In Receipt and for Check Out Receipt. These labels are set up in the Print SubModule of the Settings Module.

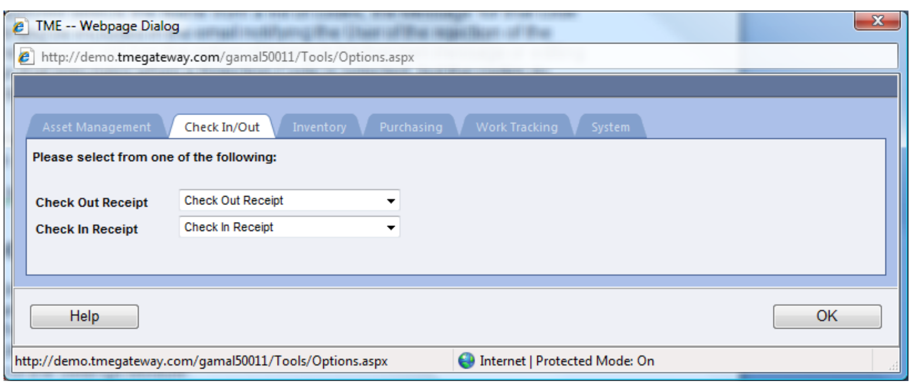

Figure 93 Check In/Out Options Screen

Inventory Options

Categories and SubCategories

Inventory Items can be categorized and subcategorized for organizational purposes. Additionally, Attributes and Data Collections can be assigned to Items based on Category, SubCategory, or globally).

The Categories/SubCategories viewer is accessed via Tools > Options > Inventory and clicking on Item Categories/SubCategories. Managing the Inventory Categories and SubCategories works exactly the same way as for Assets—including the use of Attributes and Data Collections.

Attributes and Data Collections can also be associated globally to Inventory Items, Batch Numbers, Serial Numbers, all Inventory Transactions, by Inventory Transaction, Receipts (for the overall receipt of inventory items) and Receipt Items (individual inventory items being received) by clicking on the appropriate link.

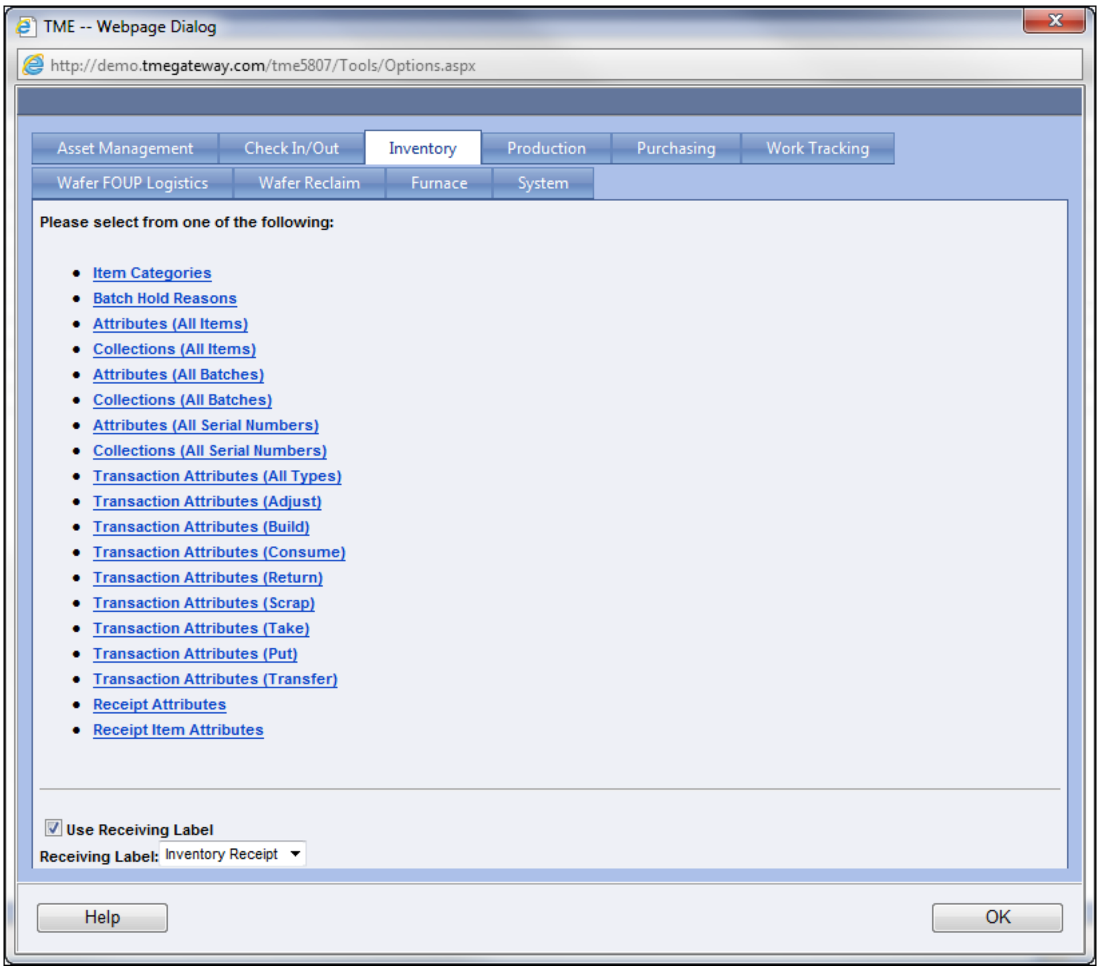

Figure 94 Tools Screen \ Inventory

Batch Hold Reasons

Users can place Batches on hold and select the reason for it from a drop-down list managed by the TME Administrator.

The Batch Hold Reasons viewer is accessed via Tools > Options > Inventory and clicking on Batch Hold Reasons. Managing the Batch Hold Reasons works exactly the same way as any item with just the entry of a Name.

Use Receiving Label

When submitting the receiving of inventory items via the Receiving Submodule, the receipt label automatically pops up as a pdf file. This feature can be turned off by deselecting the Use Receiving Label checkbox.

If there are multiple formats of the receipt uploaded into TME, the format to be used is selected from the Receiving Label drop-down list.

Production Options

The Production Options provides the ability to set up Attributes when collection Production data. It works the same way as the global setup for Assets and Inventory Items.

Purchasing Options

The Purchasing Options provides the setting up of Types, Purchasing Locations, Bill To List, Ship To List, Carrier List and Shipping Method List. Also included is the selection for the Requisition Form and Purchase Order Form templates.

Types

Users can select the Type of Requisition to be submitted from a drop-down list managed by the TME Administrator.

The Types viewer is accessed via Tools > Options > Purchasing and clicking on Types. Managing the Types works exactly the same way as any item with just the entry of a Name.

Purchasing Locations

Users can select the Purchasing Location (i.e., Central Warehouse, New York, etc.) of the Requisition or Purchase Order to be submitted from a drop-down list managed by the TME Administrator.

The Purchasing Locations viewer is accessed via Tools > Options > Purchasing and clicking on Purchasing Locations. Managing the Purchasing Locations works exactly the same way as any item with just the entry of a Name with the addition of entries for Req Prefix, PO Prefix and Comments. The Prefixes will appear in front of the Requisition or PO number, i.e., LA107 for Requisition 107 for the LA office.

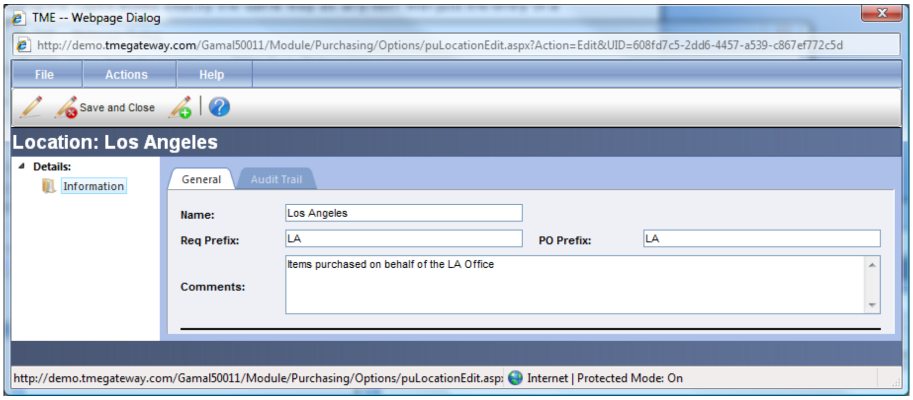

Figure 95 Purchasing Location Detail Screen

Bill To List

Users can select the billing information to be submitted from a drop-down list managed by the TME Administrator.

The Bill To List viewer is accessed via Tools > Options > Purchasing and clicking on Bill To List.

New Bill To Lists can be added by clicking on 

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Type in the Name. It will become part of the drop-down list for the Bill To field that Users can select when making or editing a Requisition or Purchase Order. Type in the Address, City, State and Zip. These will automatically populate the appropriate fields on a Requisition or Purchase Order once the Name is selected.

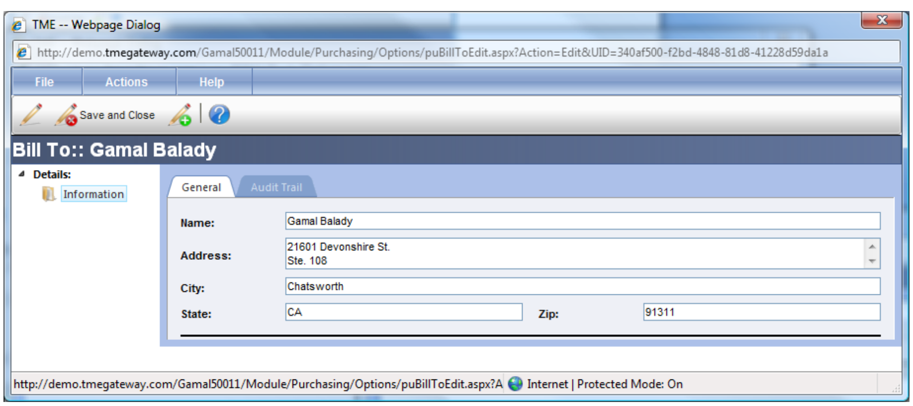

Figure 96 Purchasing Bill To Detail Screen

Ship To List

Users can select the shipping information to be submitted from the drop-down list populated via this Ship To List. Managing the Ship To List works exactly the same way as any item with just the entry of a Name.

Carrier List

Users can select the Carrier to be used for shipping of Items from the drop-down list populated via this Carrier List. Managing the Carrier List works exactly the same way as any item with just the entry of a Name.

Shipping Method List

Users can select the shipping method (i.e., Overnight, Ground, 3-Day, etc.) to be used for shipping of Items from the drop-down list populated via this Shipping Method List. Managing the Shipping Method List works exactly the same way as any item with just the entry of a Name.

Account Numbers

Users can select an Account Number to be associated with ordered Items from the drop-down list populated via this Account Numbers List. Managing the Account Numbers List works exactly the same way as any item with just the entry of a Name.

Attributes

Setting up Attributes globally for Requisitions and Purchase Orders works the same way as the global setup for Assets and Inventory Items. Click on the PO Attributes or Req Attributes link to access the Attribute Association screen.

Requisition and Purchase Order Form Templates

The Purchasing Options provides the selection of the labels/forms that are printed as forms for Requisitions and Purchase Orders. The label selections are available directly on the Purchasing Options screen. Select the label name from the drop-down list for Requisition Print Template and for Purchase Order Print Template. These labels are set up in the Print SubModule of the Settings Module.

Auto PO Number

PO Numbers can be set up to automatically generate via sequential numbering.

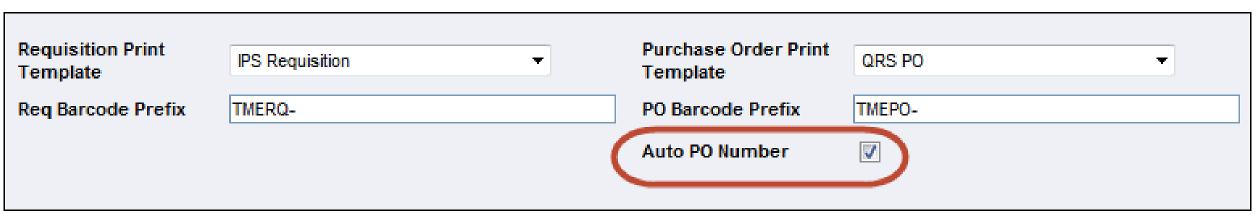

Figure 97 Enabling Auto PO Number

Select the checkbox for Auto PO Number to activate. Newly created Purchase Orders will have the PO Number generated in sequential order. Users can edit the PO number and this will not affect the sequential ordering of the Purchase Orders generated.

WIP Options

The WIP Options provide the tools for setting up various drop-down lists, attributes, collections, look-up screens, etc. for the WIP Operations and Processes.

The details for this screen are in the WIP Options portion of the WIP chapter of this manual.

Work Tracking Options

The Work Tracking Options provides the setting up of rules for requested Work Orders, the selection of hiding old closed work orders in the viewer and the Work Order form template, as well as setting up the Project List for non-Work Order related tasks and events.

Work Order Options

Options for Work Tracking is accessed via Tools > Options > Work Tracking. Selections made on this screen need to be saved by clicking on the OK button at the bottom right corner of the screen.

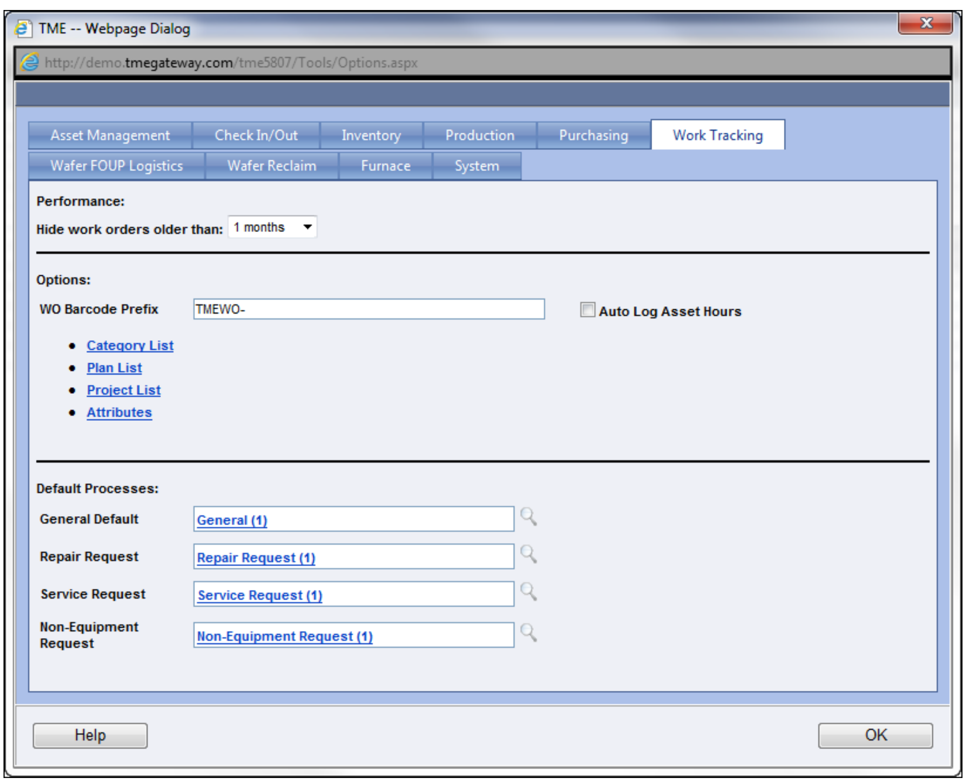

Figure 98 Work Order Options Screen

Performance

Set the length of time that closed Work Orders are available on the Work Order Viewer. The information of any Work Order that has been closed and is older than the timeframe selected is still in the database and accessible via Reports. The reason for including this selection as an option is to improve the speed and performance of the Viewer by reducing the number of records that are cycled through.

Options

The WO Barcode Prefix is preset.

Check the Auto Log Asset Hours checkbox to turn on the feature whereby TME automatically calculates the time spent between an Asset going into an active Downtime state (Repair, Preventive Maintenance) and then set for an inactive Downtime state (all other minor statuses) or an Uptime state. This time is then logged as Hours on behalf of the User who set the initial active Downtime state for the Asset. For this function to work, the states must be logged within the Work Order itself (not via a Work Order Step or directly onto the Asset Status Log).

If the feature is not selected, all Hours will need to be logged manually.

Category List

Work Orders can be categorized and subcategorized for organizational purposes. They are selected as part of the creation of a Process which then translates to the Work Orders generated from the Processes.

The Categories viewer is accessed via Tools > Options > Work Tracking and clicking on Category List.

Plan List

Work Orders also have a drop down list for selecting a Plan, another method for organizing types of work.

The Plans viewer is accessed via Tools > Options > Work Tracking and clicking on Plan List.

Project List

Users can timestamp the start and end times as well as log comments for work done outside of Work Orders via the Projects SubModule. The list of Projects from which the Users selects is managed by drop-down list.

The Project List viewer is accessed via Tools > Options > Work Tracking and clicking on Project List.

Attributes

Setting up Attributes globally for Work Orders works the same way as the global setup for Assets and Inventory Items. Click on the Attributes link to access the Attribute Association screen.

Default Processes

TME contains four Work Order Templates inherent to the system. These are entirely sufficient for general use within Work Orders and Scheduled Work.

- **General (Revision 1)**: Primary purpose is to serve as a simple default template for Manual Work orders created from within the Work Order viewer, usually by a Technician. It is also a good example of a simple template to use with Scheduled Work. It does not have Steps and has almost all options (i.e., Logging Hours, Updating Equipment Status, Consuming Inventory, etc.) of a Work Order selected.
- **Repair Request (Revision 1)**: Set up as a simple template with no Steps to be used as the default for all Repair Requests submitted by Users from the Dashboard. Most options of a Work Order have been selected.
- **Service Request (Revision 1)**: Identical template as the Repair Request but for use with all Service Requests submitted by Users from the Dashboard. The reason for a separate template is that an Administrator may choose to require entry of Module/Failure/Corrective Action data on Repair Requests but not have it available on Service Requests. Other differences may be set up as well.
- **Non-Equipment Request (Revision 1)**: This template has been set up without steps and is designed for those requests not associated with an Asset submitted by Users from the Dashboard. It does not contain the option to change equipment status, i.e., Uptime to Downtime.

However, the Administrator may choose to create alternate Processes to take the place of the Defaults already set up. To do so, the Process needs to be created first and then selected as a Default Process. See the Processes and Operations sections of the Work Tracking Module in Online Help for assistance on creating a Process.

To select a Process for a particular Default, select the corresponding icon.

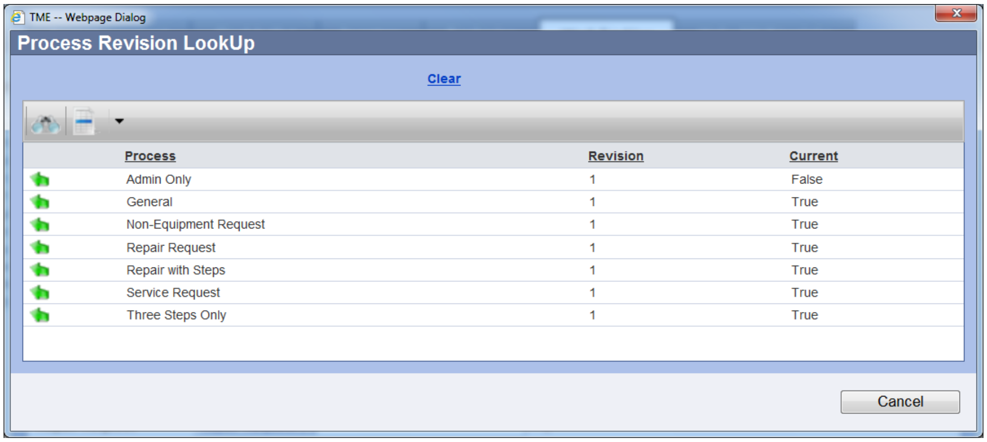

Figure 99 Process Revision LookUp Screen

The Process Revision LookUp screen will appear. Only those Processes that are active will be available. To drill into the detail screen of a Process, double-click on the row. To select the Process, click on its icon. Once selected, it populates the Process field as a link. Clicking on the link will open the Process Detail Screen.

System Options

The System Options provides the setting up of system-wide selections.

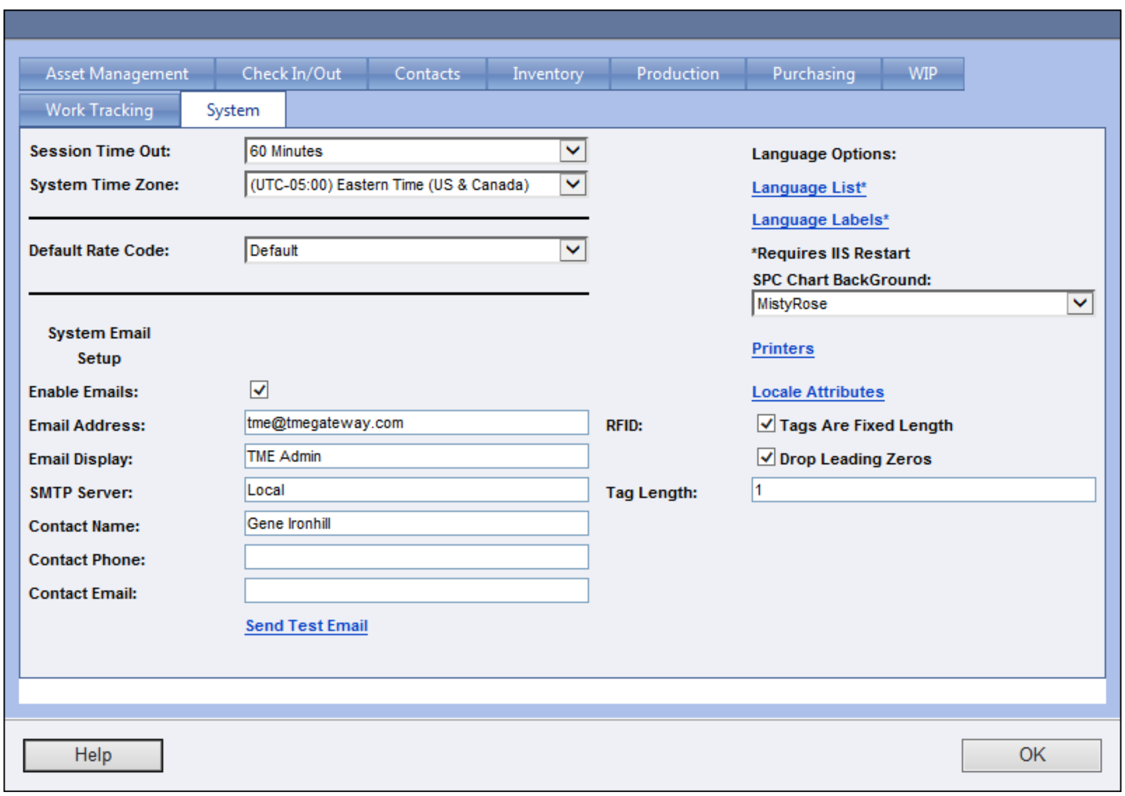

Figure 100 System Options Screen

The first selection is the length of time of inactivity before the system logs a User out. The User will be provided with a two-minute warning screen allowing for the cancelation of the time out.

Next is the selection of the System Time Zone. All activities throughout the system will be logged against this time zone as opposed to the time zone of the server on which the TME application resides.

The next section on the screen is where the TME Administrator selects the Default Rate Code and the User label format.

- The Default Rate Code is the rate code that is applied to any User where an alternate rate code was not selected as part of his/her profile.
- The User label selected will be the format of all User labels printed from the User detail screen. Labels are set up in the Print SubModule of the Settings Module.

The final section is the System Email Setup. Select the checkbox for Enable Emails if notification emails from throughout the system are to be allowed. Type in the email address and email display from which the system emails will be listed as having been sent, SMTP Server name (check with company IT Department), as well as the TME Administrator Contact Name, Phone and Email (for FYI purposes).

To test that the email system is working, click on Send Test Email. A popup screen will appear stating that an email message had been sent (will go to the email address of the User logged in). If no email address has been included in your profile, a message will appear stating that an email address is not associated with the profile. If the email system (SMTP Server) is not functioning, a message will appear stating that the email could not be sent. If that is the case, check with the IT Department or call MASS Group, Inc. at 818-709-1255.

Multi-Language Set Up

A) The first step to setting up the multi-language feature is to add the new language to the Language List. Managing the Language List works exactly the same way as any item with just the entry of a Name.

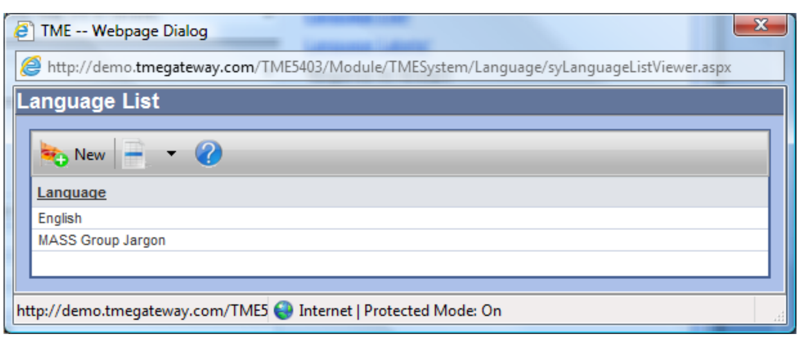

Figure 101 Language List Viewer

The language is now available as part of the next step which is assigning new labels for the values in TME.

B) The next step is to put in the labels for the TME values for the new language.

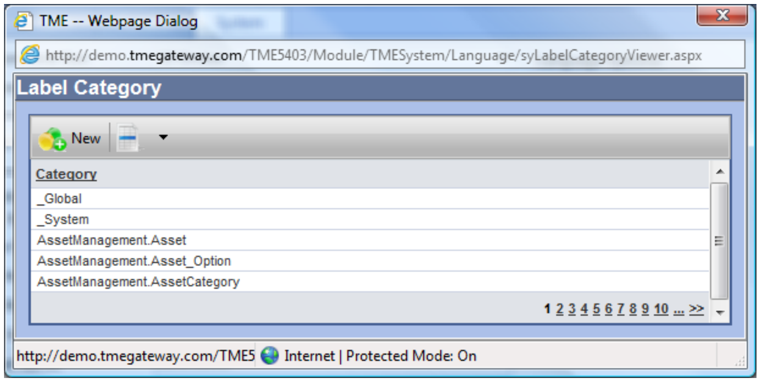

Figure 102 Label Category Viewer

Double click (or right click and select View) on the category for which new labels are to be made in order to open the record. Click on the Additional link titled Values (the Labels link is for MASS Group to utilize).

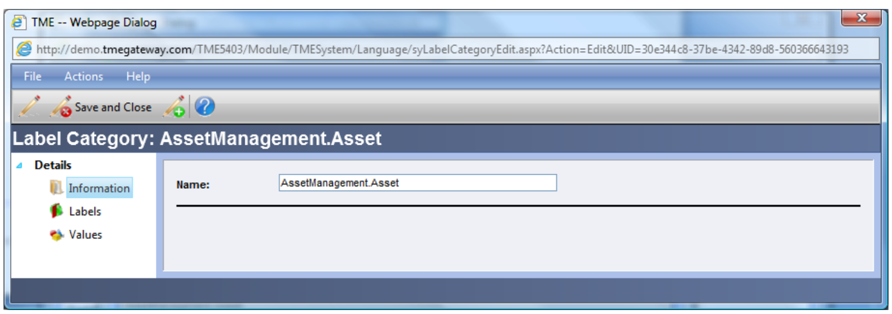

Figure 103 Label Category Detail Screen

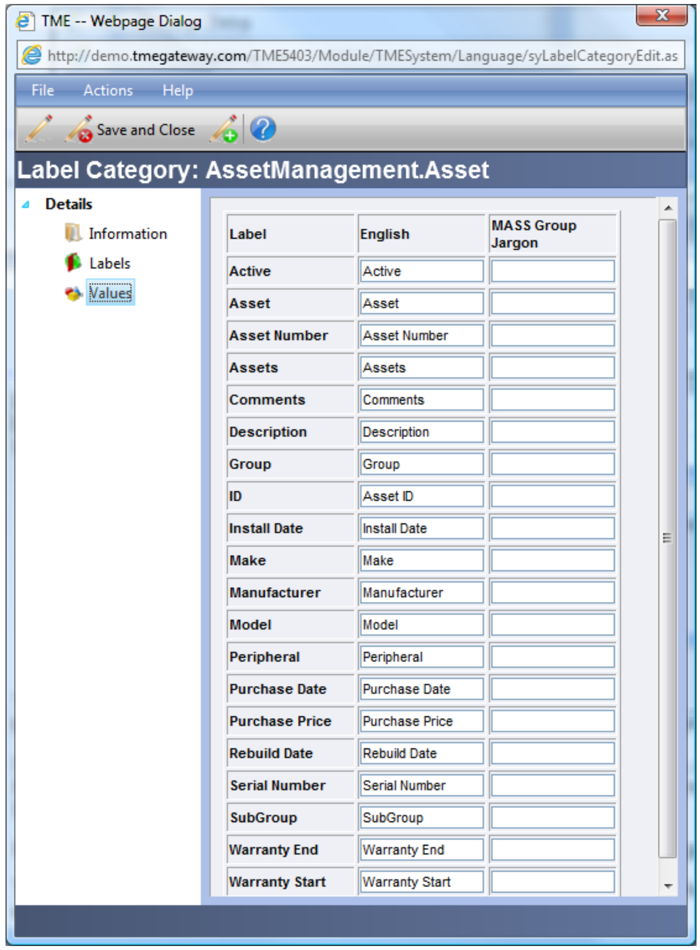

Figure 104 Label Category - Values Detail Screen

The English labels are the default labels for TME. Type in the values accordingly into the column corresponding to the new language (listed as the column header).

Save using the Detail Toolbar or Taskbar. To close the record without saving, click on File on the Detail Taskbar and then Close or click on the X at the top right corner of the Details Screen window.

Repeat for all categories for which the labels are to be added for the new language.

To edit a value, open the record for the Language Category and type over value entered. To delete a value, delete the entry.

C) Set up the Users who are to have the new language as their default. See the Contacts Chapter.

D) For the new labels to be immediately activated, IIS needs to be restarted. Contact the IT Representative responsible for maintaining the server. Let Users know that TME will have a momentary disruption. If TME is hosted by MASS Group, call them at 818-709-1255 for the restart.

SPC Chart Background

The SPC Chart Background drop-down list is how the background color of the SPC charts is selected. This color will be applied to all SPC charts across TME.

Reports Printer Set Up for Report Subscriptions

Reports can be automatically printed by setting up subscriptions to print to a designated printer. The printers must first be set up to be recognized by TME.

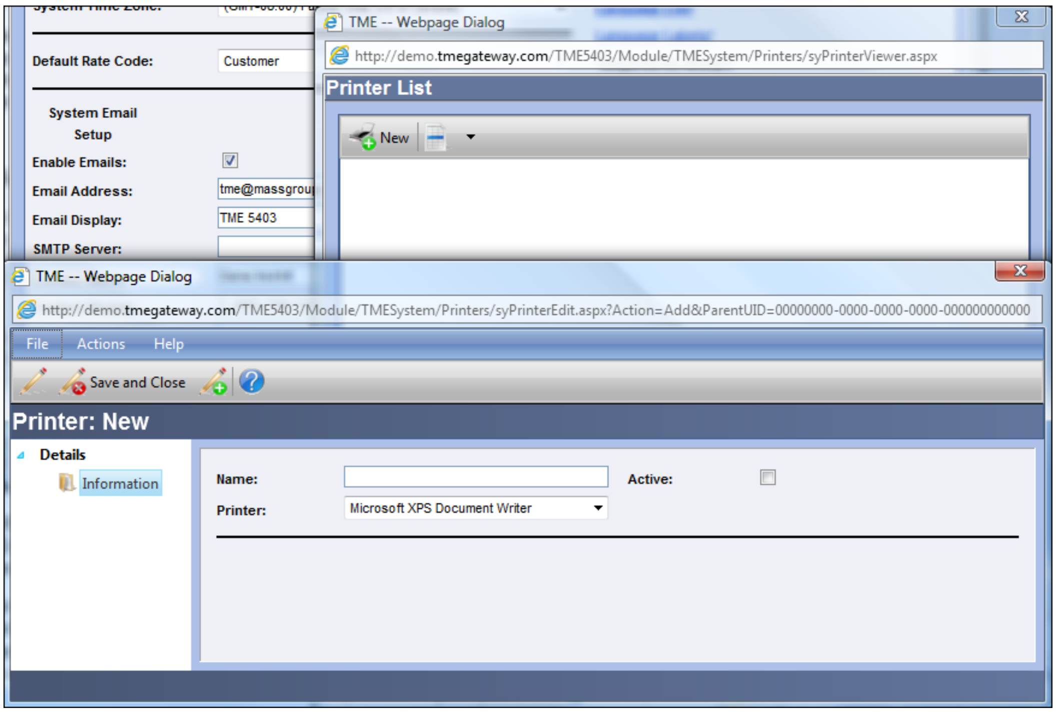

Figure 105 Printer Viewer and Printer Detail Screens

Type in the Name that will populate the drop-down list of printers for the setting up of Subscriptions. Select the Active checkbox and select the printer from the Printer drop-down list. If the printer is not available, check with the Server Administrator to have it set up on the server that hosts the TME application.

Locale Attributes

Setting up Attributes globally for Locales works the same way as the global setup for Assets and Inventory Items. Click on the Attributes link to access the Attribute Association screen.