

Exercise Guide

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Using Microsoft Dynamics AX 2012

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This document, which is free of charge, is a support for readers of the related book. The author of the book is the author of this exercise guide, which has been compiled with utmost care. Nevertheless, it is not possible to guarantee that it is free of every possible mistake. Therefore, the author cannot accept any liability. Suggestions of additions and indications of errors as well as other comments are most welcome, however.

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1 Information on the Exercise Guide

The sample solutions shown in this exercise guide refer to the book "Using Microsoft Dynamics AX 2012" (ISBN 978-3-8348-1742-6). This guide is a free support for readers, showing the steps necessary to solve the exercises in the book. It does not contain further explanations, which are available in the book itself.

Sample Company

The instructions shown in this exercise guide are based on the simplified sample company "Anso Technologies Ltd. As an alternative, you may as well choose a different training company like the "Contoso Entertainment Systems USA (CEU)" in the Microsoft Dynamics AX standard demo database.

When completing the exercises in a different training company, you should apply the company currency ("USD" in the company "CEU") where the exercise descriptions say "GBP". In other areas, replace the data mentioned in the exercise guide by similar data available in your training company.

Microsoft Dynamics AX 2012 Feature Pack

The book and this exercise guide are based on the original core Dynamics AX 2012 installation, which has been released in August 2011.

In February 2012, the Microsoft Dynamics AX 2012 Feature Pack has been released. The feature pack adds industry functionality for retail and process manufacturing to the core installation. Clicking the button *Help* / *About Microsoft Dynamics AX* in the command bar of the Dynamics AX client, you may view the installed version – if applying the feature pack it is displayed in the version name.

There are a few areas, where the functionality described in the book and in the exercise guide is different, depending on whether you are working in the feature pack release or in the original release:

- **Bill of materials:** Whereas there is no specific setting required for products linked to a bill of material in the original release, you have to select the *Production type* "BOM" on the tab *Engineer* of the released product before assigning a bill of materials in the feature pack.
- **Additional product data:** If you do not need additional industry features like catch weight or retail categories, you may leave the checkbox *CW product* or the lookup *Retail category* empty when creating a product.

- **Additional product dimension:** In addition to the product dimensions *Configuration*, *Size* and *Color*, the dimension *Style* is available in the product dimension groups.
- **Additional inventory model:** In addition to the inventory models *FIFO*, *LIFO*, *Weighted avg.* and *Standard cost*, the model *Moving average* is available in the item model groups.

In the exercise guide, you may find a note in procedures showing a difference between the original release and the feature pack.

Application Functionality

When looking at the exercise guide, you should take into account that your options in a training company may be different to the options shown in this guide because of applicable license and permission settings.

Descriptions and illustrations in this guide refer to the language “EN-US”. If you select a different language like British English (“EN-GB”), you will notice some labels are different compared to the instructions – “Sales tax” for example will display “VAT”.

Sample User

The instructions show exercise solutions for a user with the user ID “99”. You may replace “99” by your ID to apply to your situation.

2 Getting Started: Navigation and General Options

Exercise 2.1 – Logon

Your first task is to log on to a Dynamics AX training system, where you should access a company different to your default company. Then open a second workspace, where you choose the *Accounts payable* menu in the navigation pane in order to access the list page *All vendors*. Finally, log out and close the Dynamics AX session.

Instructions

In order to log on to Dynamics AX, you need to select the Dynamics AX icon on the PC desktop or in the start menu. If necessary, you may change client settings choosing the option *Microsoft Dynamics AX 2012 Configuration* in the Windows administration menu (available in the PC desktop start menu).

If no other start company account is specified in the *Microsoft Dynamics AX 2012 Configuration* or in your Dynamics AX user options, Dynamics AX will show the DAT company. In order to switch to a different company in Dynamics AX, you want to access the *Select company* dialog choosing one of the following options:

- Command *File/Tools>Select company accounts* in the jewel menu
- Clicking the company field in the status bar (available if selected in your user options)

After selecting the appropriate company in the dialog box, you may switch to that company clicking the button *OK*.

An alternative way for switching the company is available by selecting the first node in the menu path of the address bar.

In order to open a second workspace, you want to choose the shortcut key *Ctrl+W* or the option *Windows* */Open new workspace* in the command bar. Another possibility to open a new workspace is to click the button *New Workspace* in the dialog box when switching company accounts.

The navigation pane displays on the left of the Dynamics AX workspace. If the navigation pane does not display, you may show it choosing the option *View* */Navigation Pane* in the command bar. Clicking the module button *Accounts payable* in the lower part of the navigation pane, you may access the *Accounts payable* menu. The menu items of the accounts payable module are available in the navigation pane and in the area page (shown in the content pane of the workspace).

An alternative way to access the *Accounts payable* menu is available choosing the appropriate path in the address bar.

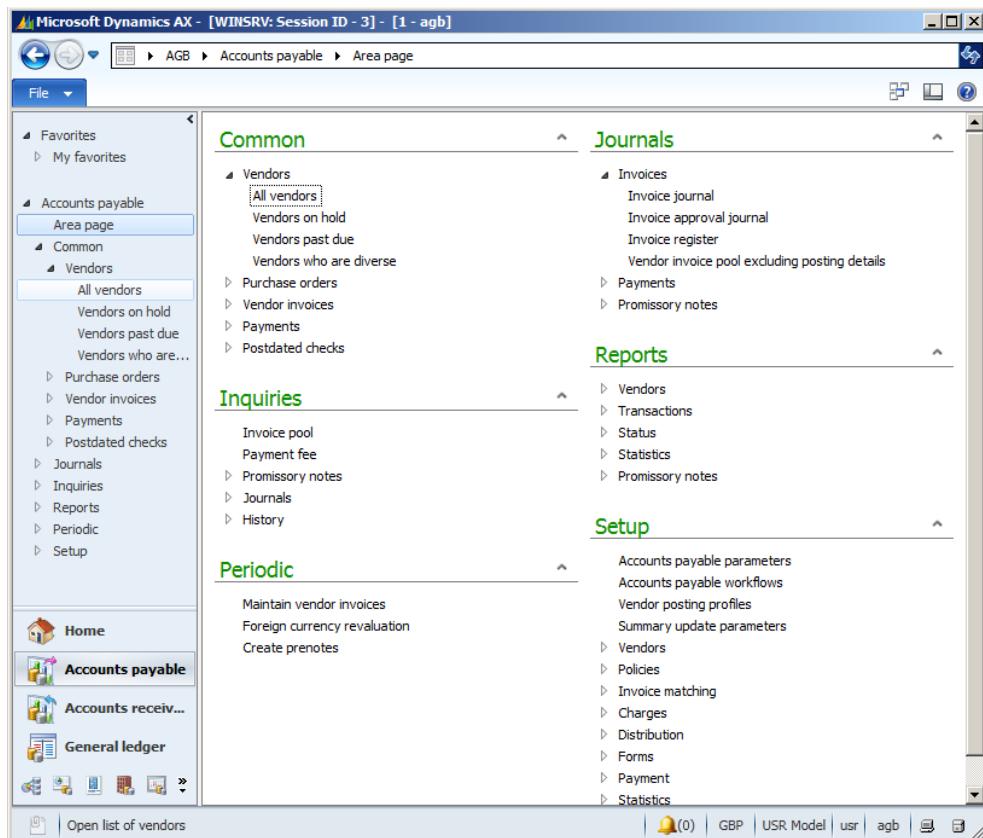


Figure 2-1: Accounts payable menu shown in the navigation pane and the area page

In order to access the list page for vendors, you want to click the menu item *Common> Vendors> All vendors* in the navigation pane or in the area page of the accounts payable menu. You may access detail data of the particular vendors by double-clicking a vendor line or by clicking the button *Edit* in the action pane of the vendor list page.

You may close a Dynamics AX workspace by choosing the shortcut key *Alt+F4*, the button or the menu option *File/Exit*. Closing the last workspace automatically ends the session and logs you off.

Exercise 2.2 – Favorites

Start a client session in Dynamics AX, select the training company and open the favorites pane. Add the list page *Released products*, which you may find in the menu *Product information management*, to your favorites.

Afterwards, you want to create a new favorites folder “Invoicing”. This folder should contain the list pages *All sales orders* and *All free text invoices* of the menu *Accounts receivable* as well as the form *Payment journal* of the menu *Accounts receivable> Journals*.

Instructions

You may start the Dynamics AX client as described in exercise 2.1. If the Dynamics AX workspace does not display the favorites pane, you may show it choosing the option *View /Show Favorites in Navigation Pane* in the command bar.

In order to include the released products list page in your favorites, you want to access the *Product information management* menu by clicking the appropriate module button. In the pop-up menu that opens when clicking the right mouse-button on the menu item *Released products* in the folder *Common* of the area page, you may select the option *Add to favorites*.

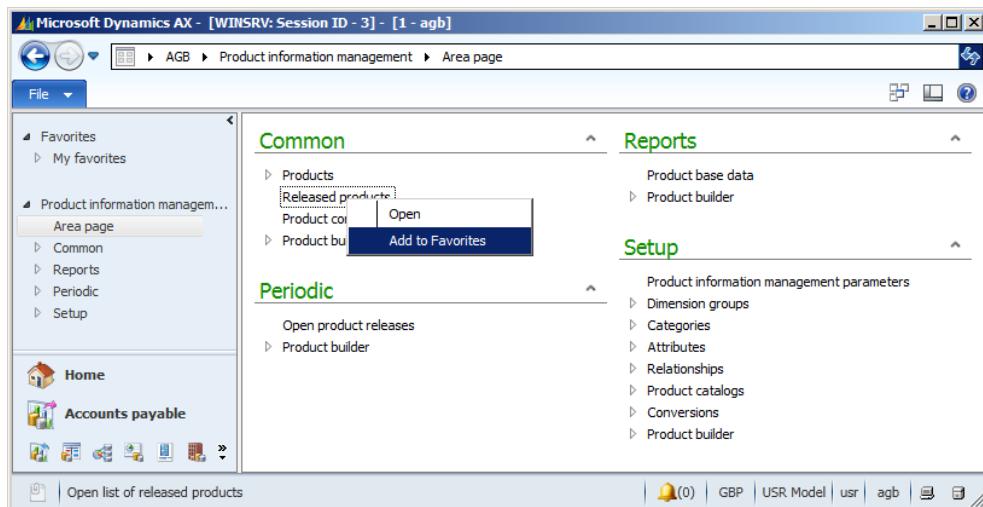


Figure 2-2: Adding the list page *Released products* to the favorites

The same way you may add the menu item *Accounts receivable> Common> Sales orders > All sales orders*, the menu item *Accounts receivable> Common> Free text invoices orders > All free text invoices* and the menu item *Accounts receivable> Journals> Payments> Payment journal* to the favorites.

If you want to add a folder to the favorites, you may choose the command *File/Favorites/Organize favorites* in the jewel menu accessing the favorites dialog. Clicking the button *Create folder* there, you may add the new folder “Invoicing”.

In order to move the appropriate favorite items to the new folder, you may either drag and drop them to the folder or click the button “Move to folder”. Finally you may close the favorites dialog box clicking the button *Close*.

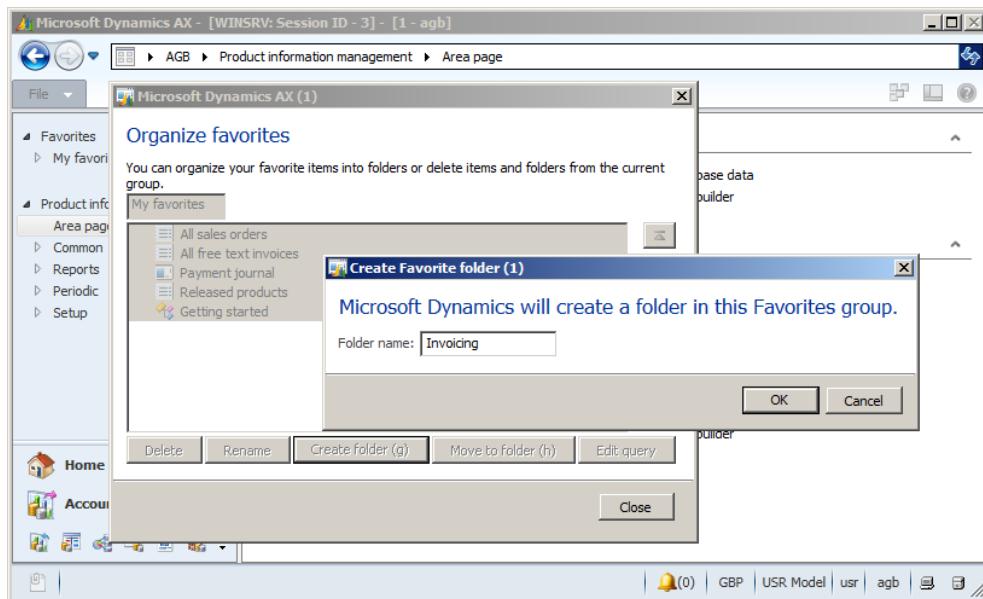


Figure 2-3: Creating the favorites folder “Invoicing”

Note: In addition to folders, groups are another option to structure your favorites. You may create groups by choosing the command *File/Favorites/Create group* in the jewel menu or by right-clicking on the header *Favorites* in the navigation pane.

Exercise 2.3 – Detail Forms

As an example of detail forms in Dynamics AX, you may access the vendor detail form through the vendor list page (*Accounts payable> Common> Vendors> All vendors*). When accessing the detail form, you want to view the vendor in the third line in the list page. Show an example of a field group and a lookup with and without main table.

Then show an example of a checkbox field. What can you tell about fast tabs and fact boxes? How do you proceed if you want to edit the vendor? Is there an option to edit several vendors in the form?

Instructions

After accessing the module *Accounts payable*, you may choose the menu item *Common> Vendors> All vendors*. In the vendor list page, you may switch to the detail form for a certain vendor by double-clicking the appropriate line. Alternatively, you may access the detail form clicking the button *Edit* in the action pane of the list page or by choosing the option *Open* in the pop-up menu (which opens by right-clicking a line).

If the detail form opens in view mode, you may click the button *Edit* in the action pane to switch to the edit mode. In edit mode, lookup fields show a lookup button in the right part of the field. Lookup fields with a main table show the option *View details* in the pop-up menu after right-clicking, which enables a direct access to the corresponding main table. For example, the option *View details* on the field *Group* (tab *General* in the vendor detail form) directly opens the *Vendor groups* form.

An example for a lookup field without a main table is the field *ABC code* on the tab *General* in the vendor detail form. Several examples of checkbox fields are available on the tab *Vendor profile*.

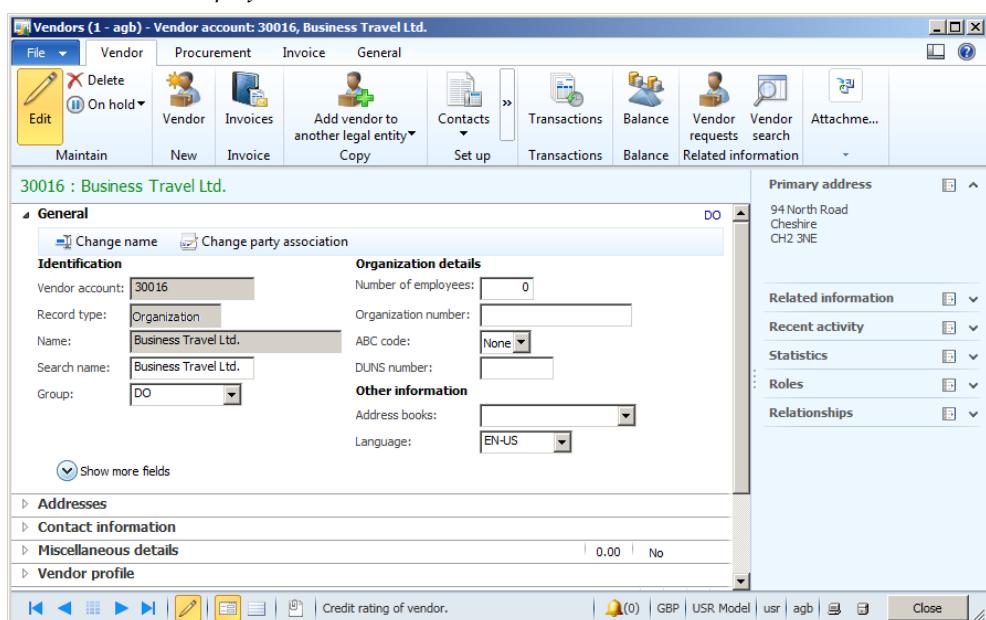


Figure 2-4: Fields on the tab *General* of the vendor detail form (in edit mode)

Fast tabs provide a structure according to the functional area of fields and field group in a detail form. In comparison to regular tabs, fast tabs additionally show summary fields displaying core data directly on the tab.

Fact boxes on the right of a detail form or list page display additional information referring to the selected record.

Whereas the view mode only displays data, the edit mode enables modifying data. You may switch between the edit and the view mode clicking the button *Edit* in the action pane or the status bar, or choosing the shortcut key *Ctrl+Shift+E*.

You may jointly edit several vendors in the grid view of a detail form. The grid view is available clicking the button *Grid View*  in the status bar of the detail form or the button *Edit in grid* in the action pane of the list page.

Exercise 2.4 – Inserting Records

Insert a new vendor without applying record templates. For the beginning, you only have to register the vendor with the name “##-Exercise 2.4” (## = your user ID) and a vendor group.

Notes: If the number sequence for vendor accounts is set to “Manual”, you have to enter the vendor number manually. If the *Accounts payable parameters* require a tax-exempt number (VAT registration number) to be entered, you need to access the fast tab *Invoice and delivery*, where you enter a *Tax exempt number (VAT number)*, which you create through the *View details* feature before.

Instructions

If Dynamics AX does not display the vendor list page or detail form yet, you may access the list page selecting the menu item *Accounts payable> Common> Vendors> All vendors*. In order to register a new vendor in the list page or detail form, you may choose the shortcut key *Ctrl+N* or the button *New/Vendor* in the action pane.

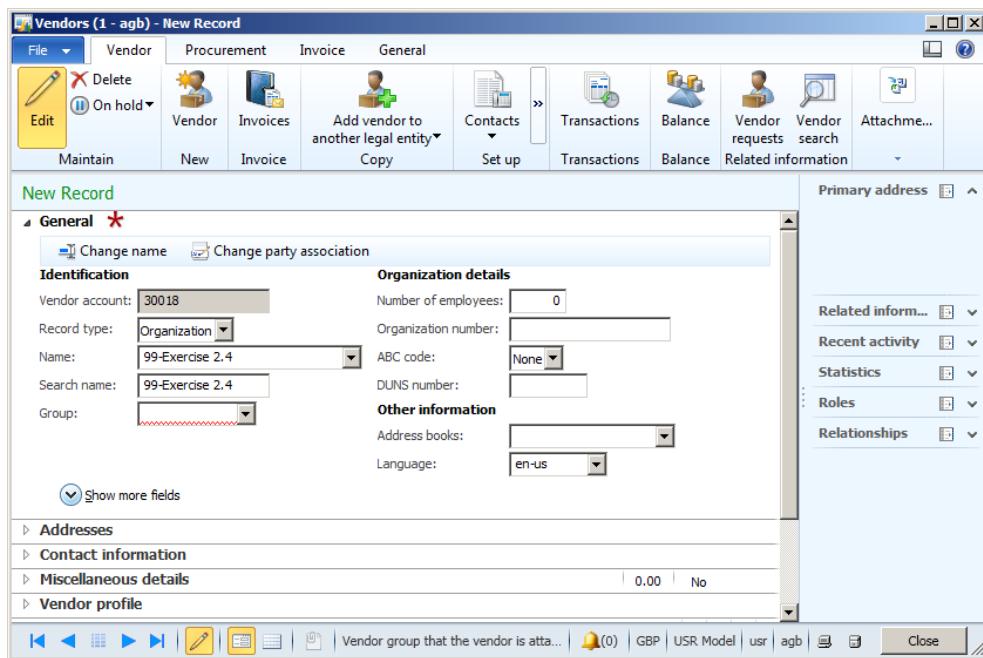


Figure 2-5: Inserting the new vendor record

If record templates are available for vendors, a dialog box will show applicable templates. In this case, you want to select the blank template to avoid data defaulting from a template.

When creating a new vendor without a template, Dynamics AX shows an empty vendor detail form. For entering a company and not a person, the lookup *Record*

type on the tab *General* of the detail form should show the option “Organization”. In the lookup field *Name* you may enter the name of the new vendor company then. The example of Figure 2-5 shows a user with the user ID “99” entering the vendor name “99-Exercise 2.4”. Since the vendor group is a mandatory field, you have to select a group – in the current exercise it may be any group – in the lookup field *Group* before you can save the vendor record.

Note: If the new vendor is already a party in the global address book (e.g. already being a customer in parallel), you may select the appropriate party applying the lookup in the field *Name*.

Exercise 2.5 – Lookup Fields

Searching a *Buyer group* on the tab *Miscellaneous details* of the vendor form when entering the vendor in exercise 2.4, you notice that the group you need is not available. Create a new buyer group ##-P (## = your user ID) applying the *View details* feature. Then you should select that group for your new vendor.

Instructions

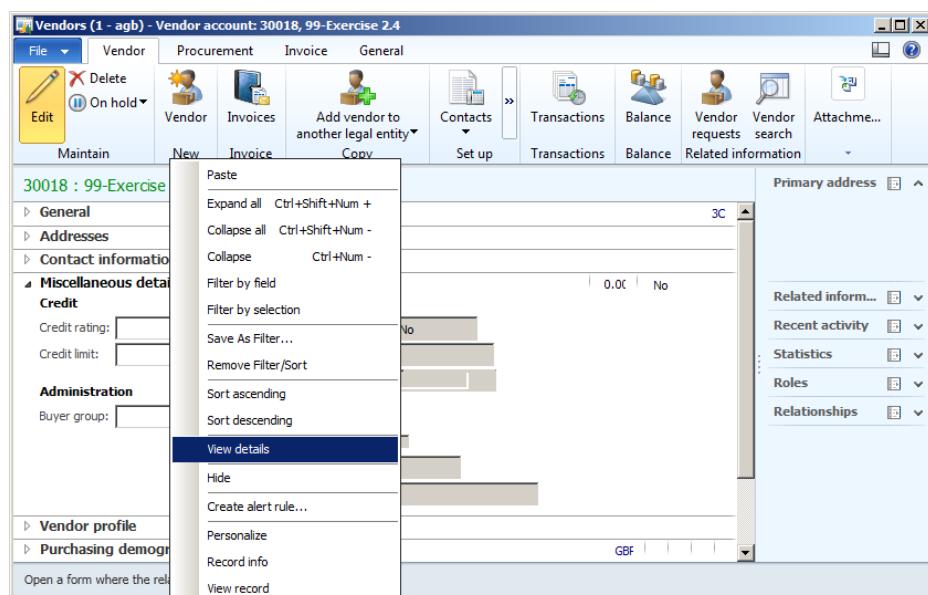


Figure 2-6: Choosing the option *View details* in the buyer group field

In order to insert a new buyer group for the vendor of exercise 2.4, you may access the buyer groups form directly from the buyer group field in the vendor form choosing the option *View Details* in the pop-up menu which opens by right-clicking (see Figure 2-6).

In the buyer groups form, you may insert a new group clicking the button *New* in the action pane strip (see Figure 2-7). After entering the group code and name, you may close the buyer groups form.

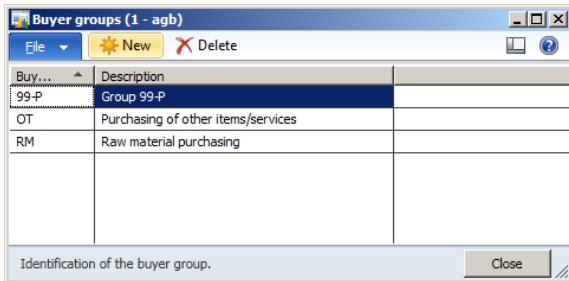


Figure 2-7: Inserting a new buyer group

Back in the vendor detail form, you may either type the new group code in the buyer group field or select it in the value lookup that opens when choosing the button or the shortcut key *Alt+Down Arrow*.

Exercise 2.6 – Filtering

In order to get exercise with filtering, apply some filters in the vendor list page as requested below. For the first filter you should apply the filter field in the filter pane, for the second filter choose a *Filter by selection*. For the other filter exercises, apply the *Filter By Grid* as well as the *Advanced Filter/Sort*.

For filtering, choose following criteria one after the other and clear the filter after each task:

- All vendors containing “inc” in the name
- All vendors assigned to the vendor group you have selected in exercise 2.4
- All vendors assigned to the vendor group you have selected in exercise 2.4 and in addition showing a name starting with “T”
- Vendors with a number from 3003 to 3005 or higher than 3008
- Vendors with a number ending with “5” and an “i” in the name
- Vendors with an “e” on the second character of the name
- Vendors with a name not starting with “C”

Once you have finished the filtering tasks above, open the advanced filter window and select vendors, who do not have *Terms of payment* “Net 30 days”. Export the result of that filter to an Excel sheet.

Note: If working in the sample company “Anso Technologies”, add a digit when filtering on the vendor number (filter on vendor 30003 to 30005 or higher than 30008).

Instructions

In order to make use of the filter field in the filter pane for showing all vendors containing "inc" in the name, you want to open the list page *Accounts payable> Common> Vendors> All vendors*. In the filter pane above the grid you have to make sure that the field lookup shows the column *Name* (see Figure 2-8). Then you want to enter the characters "inc" and choose the *Enter* key or the button right next to the filter field for applying the filter.

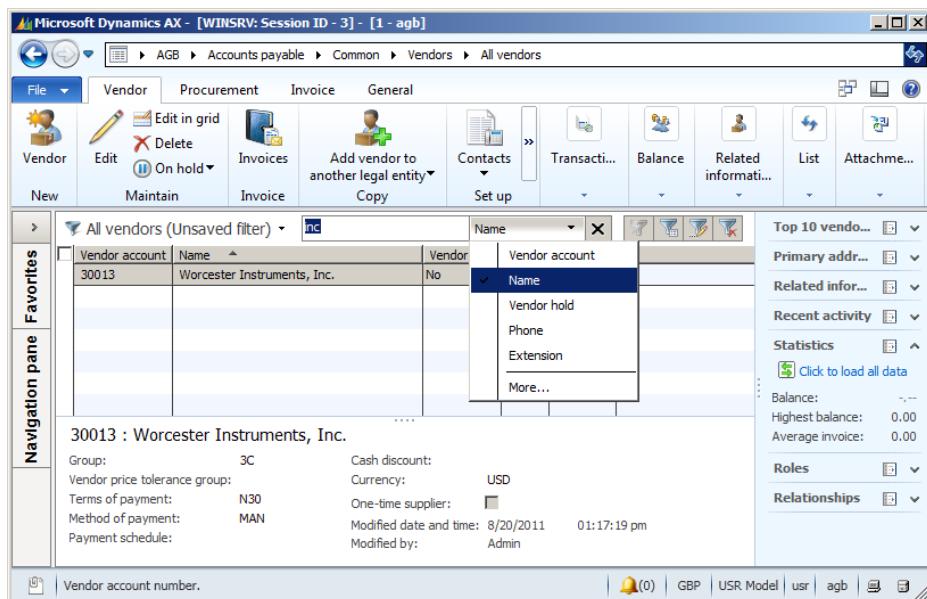


Figure 2-8: Selecting the field *Name* in the filter pane of the vendor list page

Choose the shortcut key *Ctrl+Shift+F3* or the icon to clear the filter then.

If you want to filter by selection on the vendor group in the vendor list page, you have to show the vendor group column. One option to show this column is to add the field *Group* in the fields available for the lookup of the filter pane. For this purpose you have to access the *Select field* dialog choosing the option *More...* at the bottom of the field lookup in the filter pane. Clicking the "+"-sign left to the node *Vendors* in the dialog shows all vendor fields. Scrolling down to the field *Group* you may select it and click the button *Add* one time before closing the dialog by clicking the button *Cancel* (see Figure 2-9).

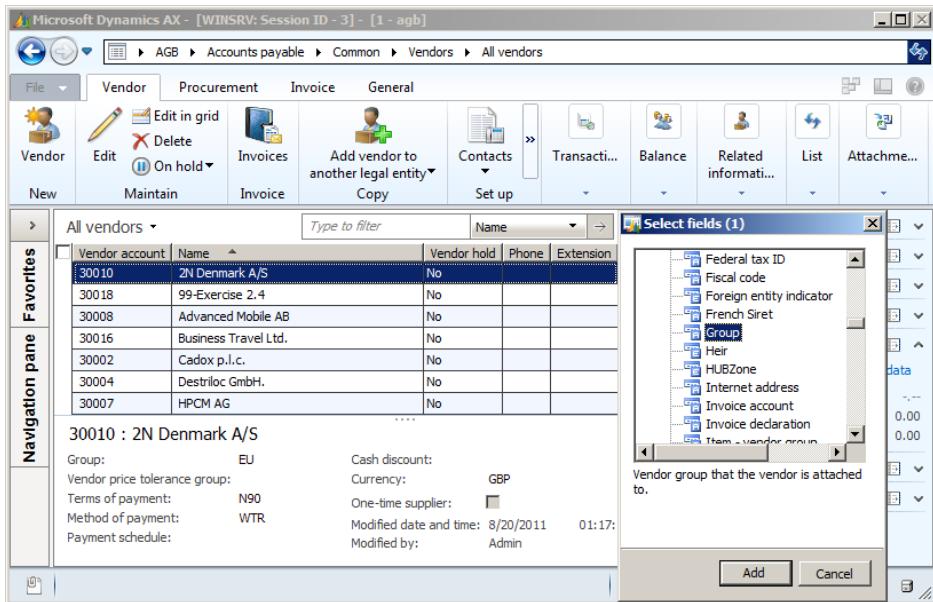


Figure 2-9: Selecting the vendor group in the *Select fields* dialog

After selecting the *Group* field, it shows as a column in the list page.

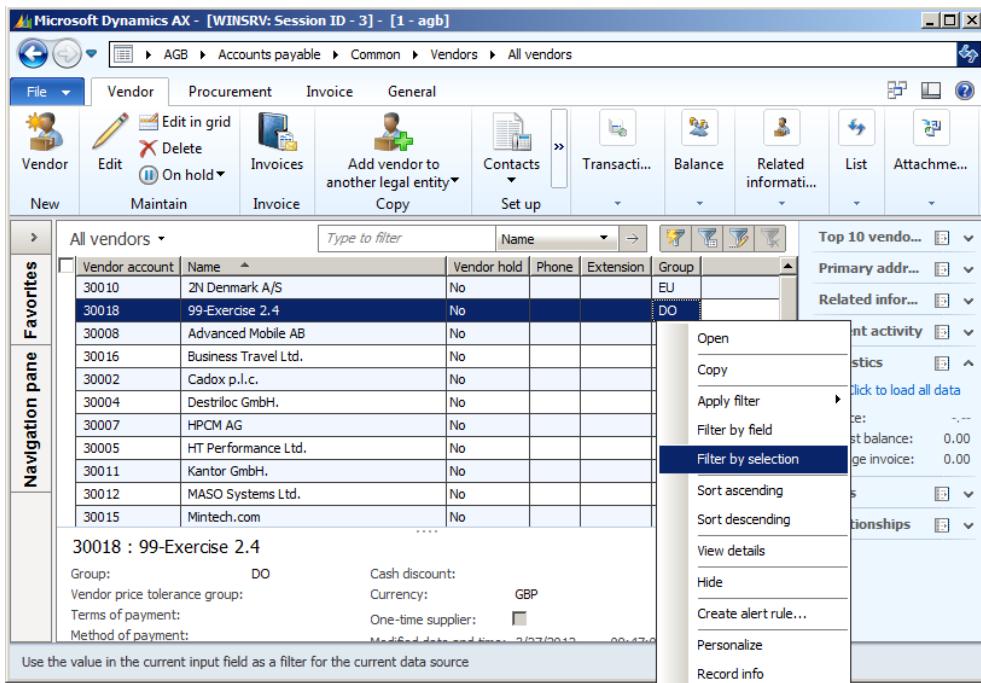


Figure 2-10: Applying the filter by selection

In the list page, you want to select the vendor group field in the line showing the vendor of exercise 2.4 and to choose the option *Filter by selection* in the pop-up menu (see Figure 2-10) to apply the filter then. Alternatively, you may choose the shortcut key *Alt+F3* after selecting the vendor group field.

When applying the filter, the list page shows all vendors linked to the same group as your vendor.

If you want to apply the *Filter By Grid*, you need to show the filter line choosing the shortcut key *Ctrl+G* or the icon . Supposing you did not remove the *Filter by selection* entered before, that filter still applies and shows in the filter line. In order to additionally filter on vendors with a name starting with "T", you may enter "T*" in the filter field *Name* as shown in Figure 2-11. The filter applies after pushing the *Enter* key.

If you want to hide the filter line then, you may choose the shortcut key *Ctrl+G* or the icon again. Hiding the filter line will not remove the filter, however. In order to clear the filter, you may choose the button *Ctrl+F3* or the icon .

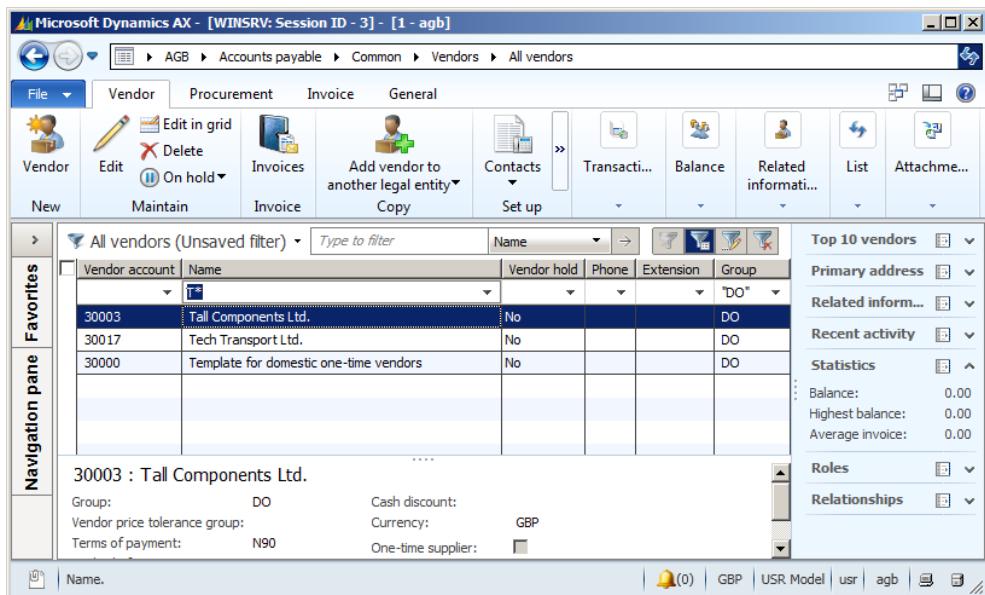


Figure 2-11: Entering the filter by grid

After clearing the previous filter, filtering on vendors with a number from 30003 to 30005 or higher than 30008 is possible applying the filter by grid again or choosing the advanced filter form.

In order to access the advanced filter, you want to choose the shortcut key *Ctrl+F3* or the icon . Alternatively you may select the option *Filter> Advanced Filter/Sort* in the filter button **All vendors (Unsaved filter)** on the left side of the filter pane.

In the advanced filter form, you may enter appropriate criteria in a filter line for the field *Vendor account* as shown in Figure 2-12. You may know the required field name from the title of the appropriate column in the vendor form. Clicking the button *OK* in the advanced filter form applies the filter.

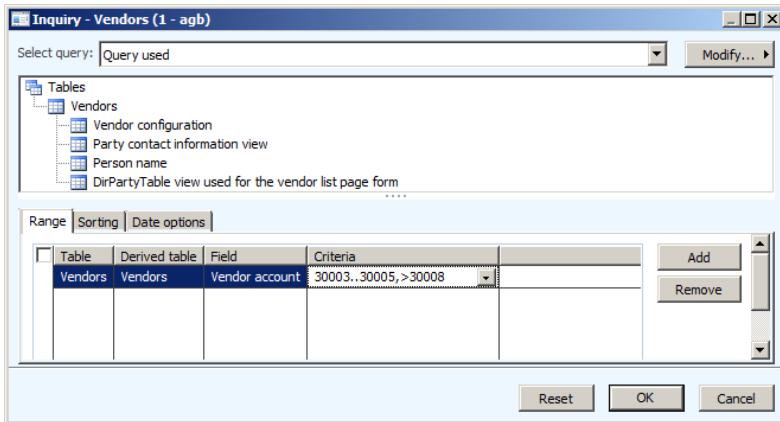


Figure 2-12: Advanced filter on the vendor account number

If you want to easily check the result of filtering, you may sort the records in the vendor list page by the field *Vendor account*. In order to specify the sorting sequence, you may either enter a suitable criterion on the tab *Sorting* of the advanced filter form, or click on the appropriate column header in the list page.

After clearing the filter, you may enter the filter for vendors with an "i" in the name and a number ending with "5" in the filter by grid or in the advanced filter like in the previous filtering tasks.

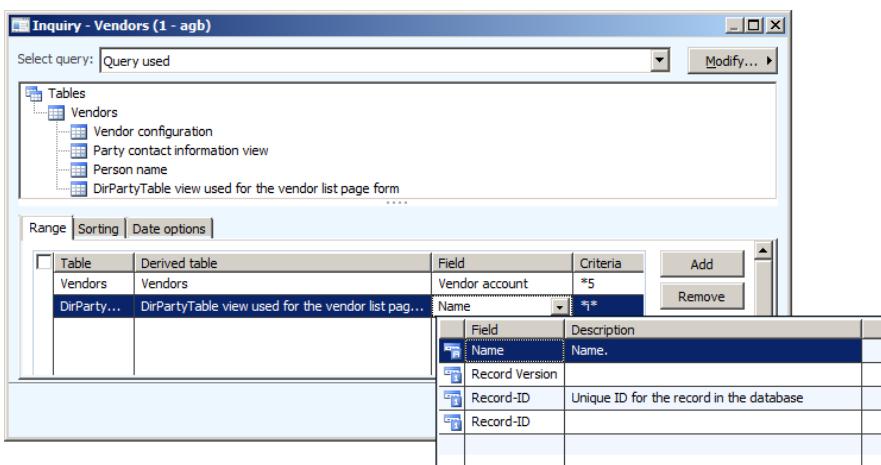


Figure 2-13: Advanced filter on the vendor account number and name

If applying the advanced filter, you have to enter a second filter line inserting a new record in the lower pane of the advanced filter form. Since the field *Name* of

vendors is included in the global address book, you have to select the appropriate table option in this filter line (see Figure 2-13).

If you do not use the advanced filter, but the filter by grid, you may enter the filter criterion in the grid filter line without paying attention to the derived table.

Note: In the advanced filter, you may immediately close the value lookup which shows automatically when entering the “*” in a criterion by pushing the *Esc* key.

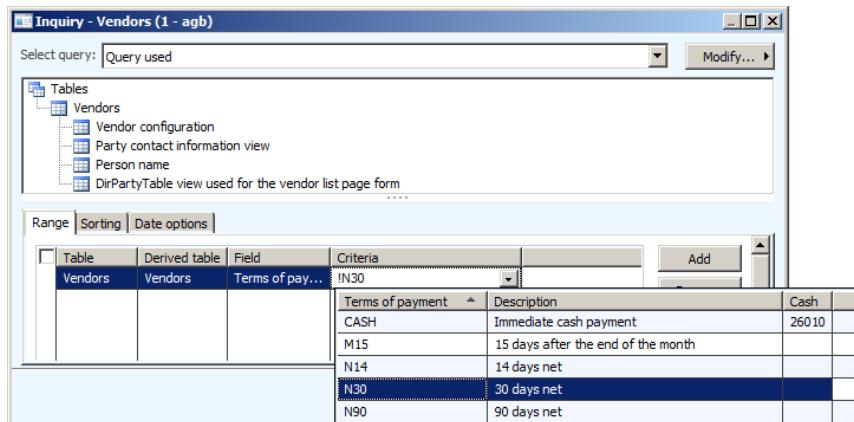


Figure 2-14: Filtering on terms of payment different from “Net 30 days”

After clearing the previous filter, you may enter the filter for vendors with an “e” on the second character of the name applying the criterion “?e*” on the field *Name*.

A filter for vendors with a name not starting with “C” shows the criterion “!C*” on the field *Name*.

Finally, you may enter a filter on the field *Terms of payment* with the criterion “!N30” (or similar, see Figure 2-14) in the advanced filter form for selecting vendors, who do not have payment terms “Net 30 days”.

After applying the filter clicking the button *OK*, you may export the appropriate vendor records to an Excel sheet choosing the option *File/Export To Microsoft Excel* in the jewel menu or the button *List/Export to Microsoft Excel* on the action pane tab *Vendor* of the vendor list page.

Exercise 2.7 – Printing

Print a vendor list (*Accounts payable> Reports> Vendors> Vendors*), selecting a print preview for the print destination. Afterwards, print the vendor list again, filtering on any vendor group of your choice and setting a PDF-file as print destination.

Instructions

When selecting the menu item *Accounts payable> Reports> Vendors> Vendors*, Dynamics AX shows the report form for the vendor list. In this form, you may

select the destination for the printout by clicking the button *Destinations*. If you want to create a print preview, you need to select the destination “Screen” as shown in Figure 2-15.

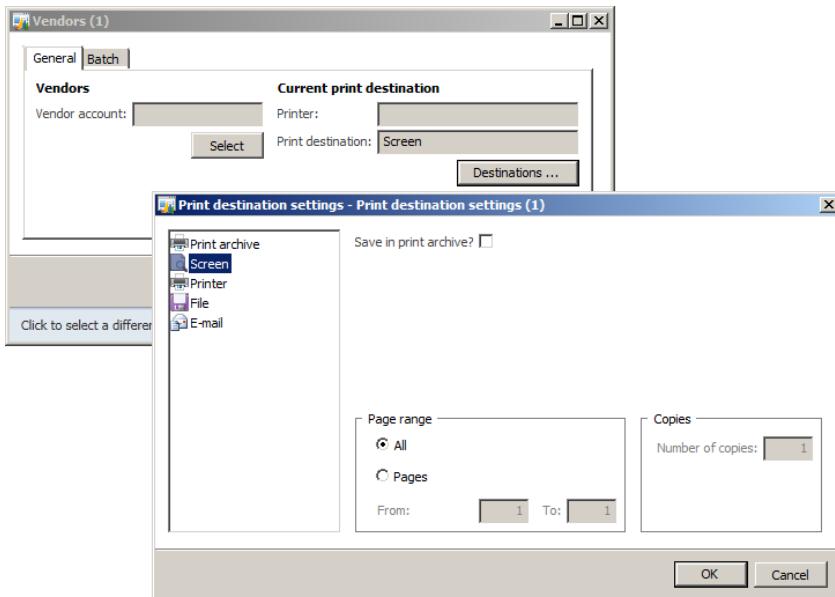


Figure 2-15: Print destination settings for creating a print preview

Clicking the button *OK* in the print destination settings dialog confirms the destination. After closing the destination settings dialog you may click the button *OK* in the report form to finally show the print preview of the report.

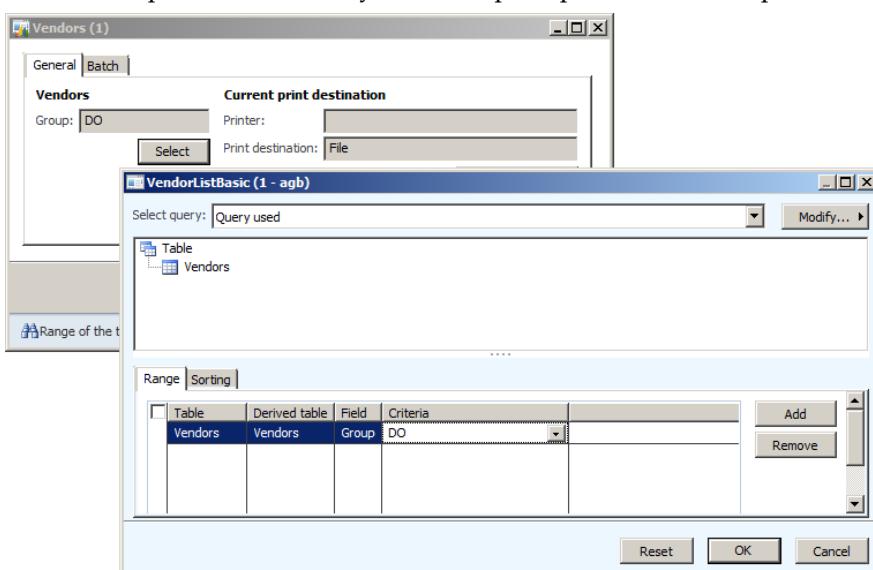


Figure 2-16: Entering the report filter

If you want to include only certain vendors on the report as requested in the second part of the exercise, you need to click the button *Select* in the report form to access the advanced filter form. In order to filter on a vendor group, you may insert a filter line as shown in Figure 2-16.

The option to print the report to a PDF file is available in the print destination settings dialog, where you may select the destination “File” (instead of the destination “Screen”). Choosing the *File format* “PDF”, you may specify the file name and path as applicable. Alternatively, you may create a PDF file printing to the screen and clicking the button  *Export/PDF* in the print preview.

Exercise 2.8 – User Options and Worker Record

You want to access your user options in order to make sure your name and e-mail address is correct. In addition, select the training company to be the *Start company accounts* to avoid opening a different company when you log on the next time. Your settings for the status bar should include showing the user ID.

Since you need a worker assignment in some of the later exercises, create a new worker W-## (## = your user ID) with your name in the worker form. Your employment in the training company starts at the current date. In the user relations, assign that employee to your Dynamics AX user ID.

Instructions

You may access your user options choosing the command *File/Tools/Options* in the jewel menu. On the tab *General* of the user options form, you want to enter your *Name* and *E-Mail* in the appropriate fields. By selecting the correct training company in the lookup field *Start company accounts* of the user options you are making sure to directly access this company when logging on to Dynamics AX the next time. In order to show the user ID in the status bar, you need to select the checkbox *Show user ID* on the tab *Status bar* of the user options.

After closing the user options you may access the worker records in the list page *Human resources> Common> Workers> Workers*. Clicking the button *Hire new worker* you want to enter your name in the new worker record in the quick create dialog (see Figure 2-17). Make sure to select the training company in the field *Legal entity* and the current date in the *Employment start date*. The *Employment end date* should remain empty. You may enter the *Personnel number* manually if no automatic number from a number sequence applies.

Clicking the button *Hire new worker* in the dialog creates the worker record. Dynamics AX then shows the related worker detail form, which you may close immediately since you don't have to enter additional details for your worker in the current exercise.

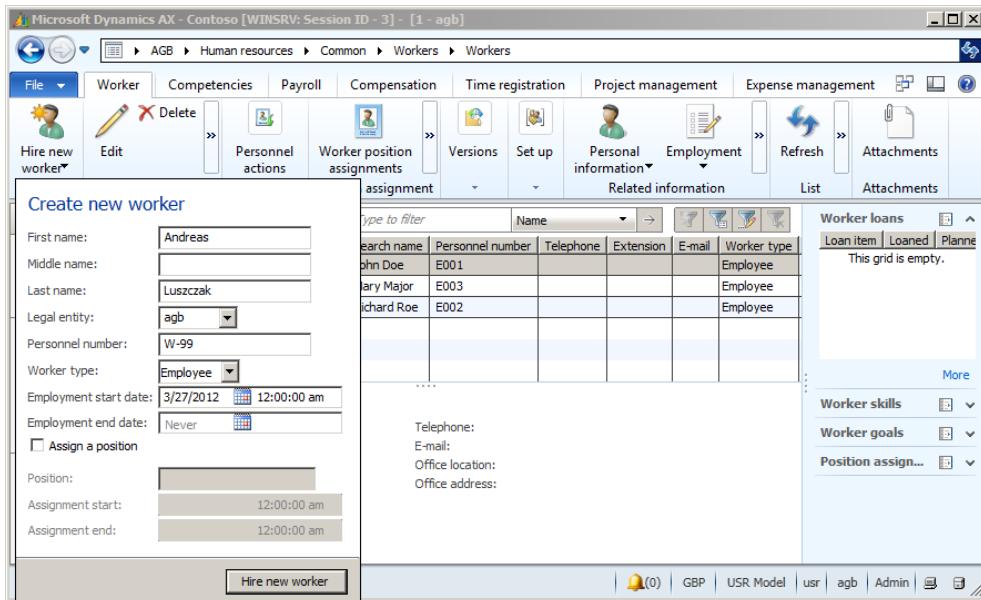


Figure 2-17: Creating a new worker

In order to link the new worker record to your user, you want to access the form *System administration> Common> Users> User relations*. After clicking the button *New* in the user relations form, you want to choose your new worker in the lookup *Person* (click *OK* in the lookup after selecting your worker record). In the field *User ID*, you want to choose your user which displays in the status bar after the first task of this exercise.

Note: If another worker record is already assigned to your user, you have to delete that user relation or change the assignment before you can attach the user to your worker.

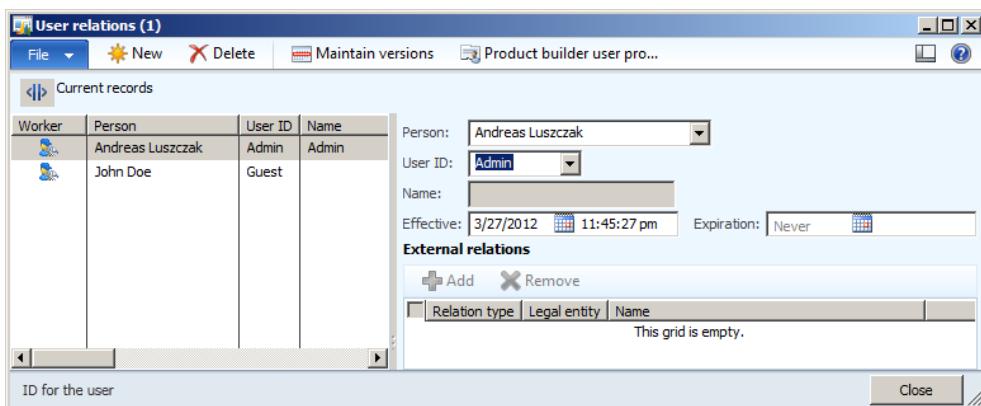


Figure 2-18: Linking the new worker to you user

Exercise 2.9 – Record Templates

Create a new user template based on the vendor that you have entered in exercise 2.4. Then you may insert a new vendor applying this template to get to know how to use templates.

Instructions

In order to create a user template based on your vendor, you need to show that vendor in the vendor detail form. For this purpose you may access the list page *Accounts payable> Common> Vendors> All vendors* and double-click on the vendor of exercise 2.4 to access the detail form. You may apply the search and filtering options shown in previous exercises to find your vendor easily.

In the vendor detail form, you want to access the record information dialog choosing the option *Record info* in the pop-up menu that opens when clicking the right mouse-button. Clicking the button *User template* in the record information will create a user template as shown in Figure 2-19. Before saving the template, you need to enter a name for the template in a separate dialog box.

Note: When creating the template, choose the pop-up menu referring to the field *Vendor account* or *Group* for example, but not to the field *Name* – the name refers to the record information of the global address book.

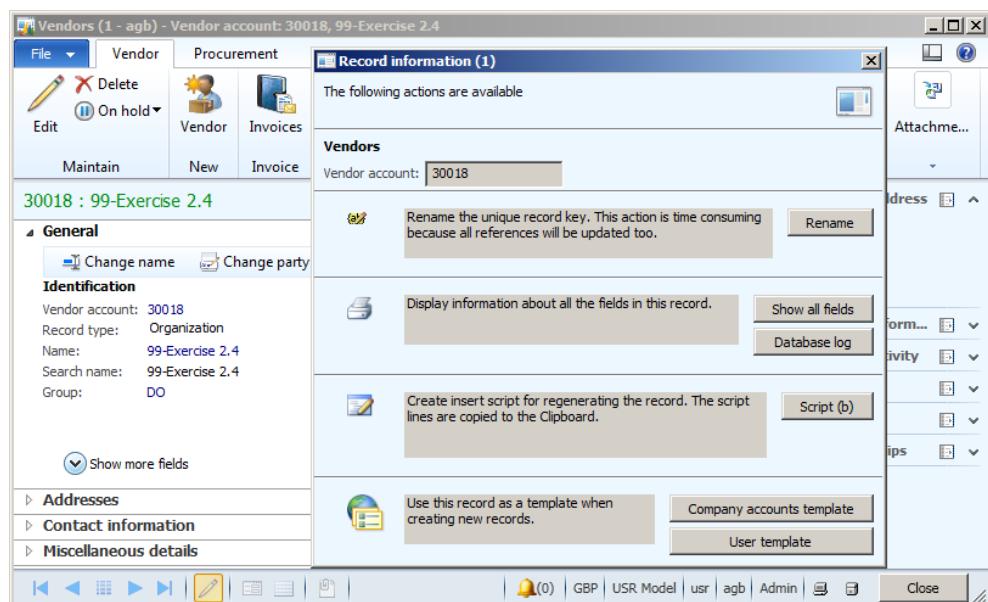


Figure 2-19: Creating a user template in the vendor form

After creating the user template, you may close the record information dialog box choosing the shortcut key *Alt+F4* or the icon .

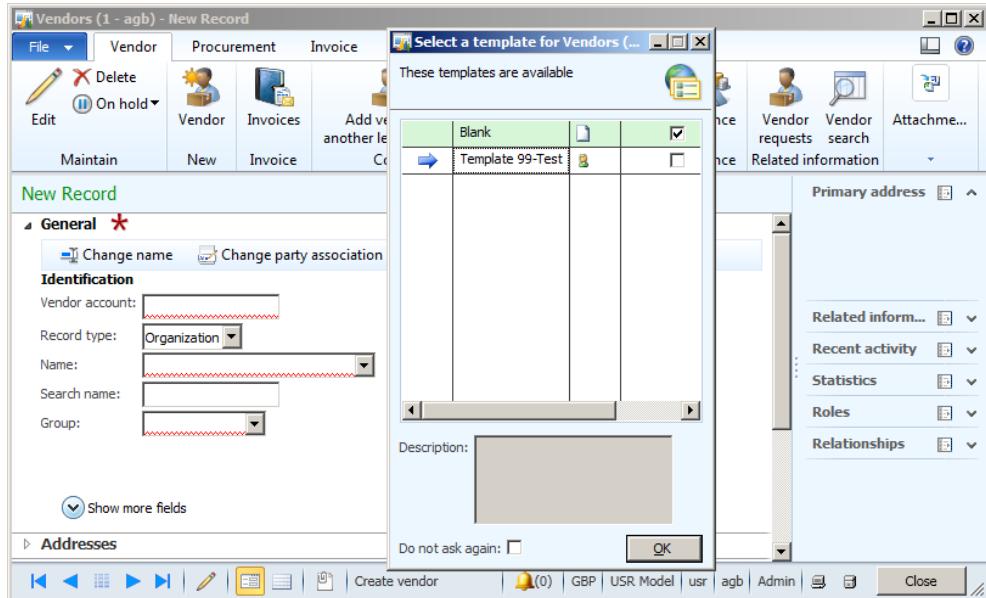


Figure 2-20: Selecting a user template when inserting a new vendor

When inserting a new vendor afterwards, a dialog box containing record templates will show (see Figure 2-20). If you want to create the new vendor based on your user template, you have to select the line concerned and click the button **OK** in the dialog box. You may know your user templates by the type and by the name and description.

Exercise 2.10 – Global Address Book

In order to check the functionality of the global address book, check if you can find a party record for your vendor from exercise 2.4.

Then you want to insert a new party in the global address book. Fields you should enter include the name “##-Exercise 2.10” (## = your user ID) and a postal address in London. This new party becomes a vendor in your company. What do you do in Dynamics AX?

Instructions

You may access the global address book in the *Home* menu selecting the menu item *Home> Common> Global address book*. Entering the name of the vendor of exercise 2.4 in the filter field or applying other search and filtering options you may find the party record of your vendor (see Figure 2-21). After selecting it, the fact box *Roles* shows the related vendor number in the training company.

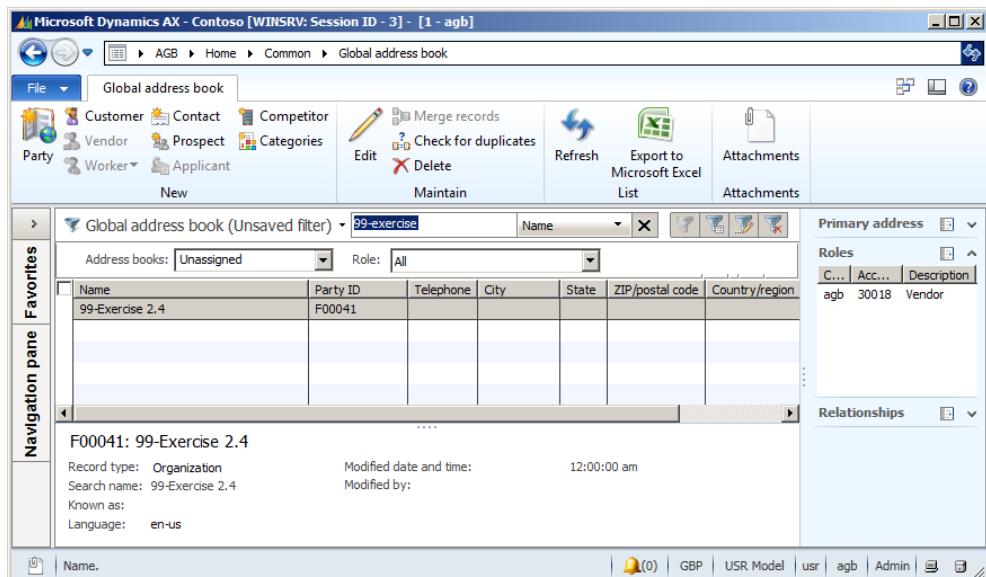


Figure 2-21: Searching a party in the global address book

In order to create a new party in the global address book you want to click the button *New/Party* in the action pane. Dynamics AX shows an empty party detail form then, where you may enter the new party name in the field *Name*. The *Record type* should show the option “Organization” for entering a company name.

On the tab *Addresses* you want to click the button and enter the postal address details in the *New address* dialog (see Figure 2-22). For the primary address of a party, make sure the checkbox *Primary* is and the checkbox *Private* is not selected. Depending on the setting for *ZIP/postal code* validation in the address setup form (*Organization administration> Setup> Addresses> Address setup*), you have to insert new postal codes in the *ZIP/postal code* table applying the table reference (*View details*) before you can enter it in an address.

Once you have finished entering the address and other party details, you may create a related vendor by clicking the button *New/Vendor* in the action pane of the party detail form.

If templates apply, the template selection form displays. In the template selection, you may delete existing user templates by selecting the applicable line and pushing the shortcut key *Alt+F9*. Choosing the template “Blank” avoids applying defaults from a template. If no template applies, you have to select at least an appropriate vendor group in the field *Group* of the vendor detail form, which opens then. In the vendor detail form, you may also check the postal address and other applicable data from the party.

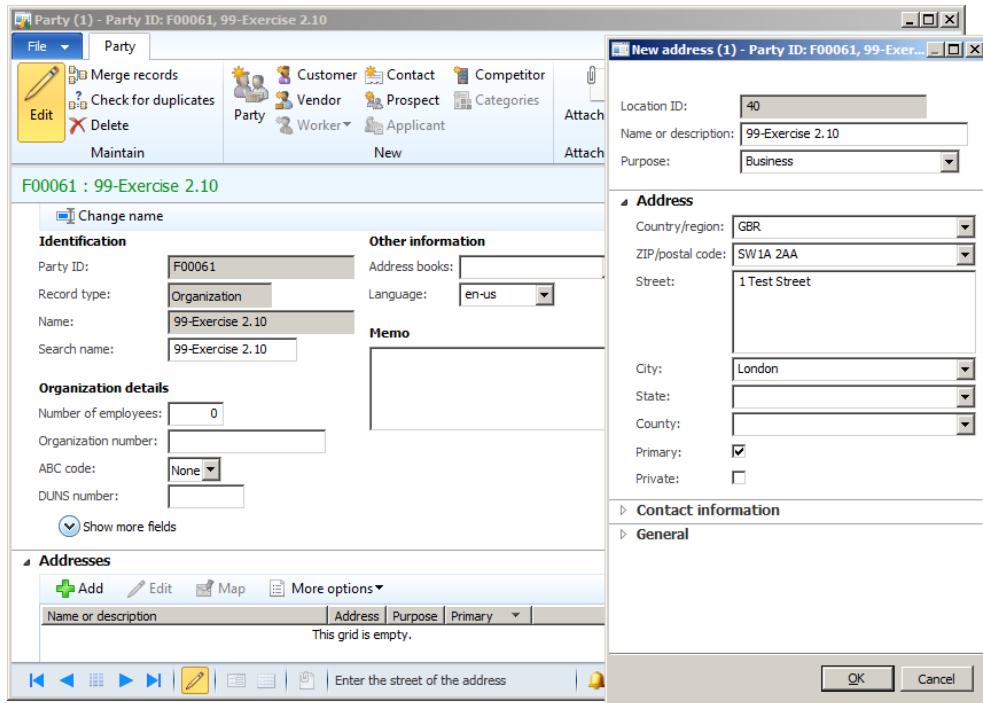


Figure 2-22: Entering address details of a new party

An alternative option for creating a vendor referring to an existing party is to insert the vendor record in the vendor form (*Accounts payable> Common> Vendors> All vendors*). In this case you have to select the existing party in the lookup field *Name* of the vendor detail form.

Note: Whereas parties in the global address book are shared across companies, vendor records are company-specific which is why you have to make sure you are in the training company before creating the vendor.

3 Purchasing

Exercise 3.1 – Terms of Payment

Your company wants to establish new terms of payment “60 days net”, which you have to enter in Dynamics AX choosing a code P-## (## = your user ID). In addition, a new cash discount D-## for “14 days with 3 percent discount” is required.

Be sure to enter the values for due date and cash discount date calculation correctly. When registering the cash discount in Dynamics AX, choose ledger main accounts similar to the accounts in existing cash discounts.

Instructions

In order to register the new payment terms, you want to insert a new record with an appropriate code and description in the form *Accounts payable> Setup> Payment> Terms of payment*. If you want to enter a description in foreign languages, you have to click the button *Translations* in the action pane strip. Due date calculation settings are available on the tab *Setup* as shown in Figure 3-1.

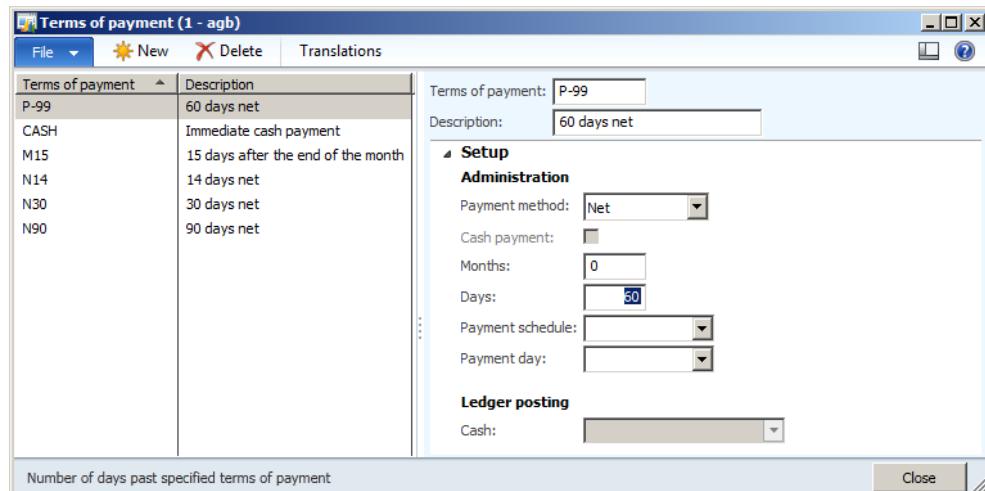


Figure 3-1: Setting up the terms of payment

Cash discount management is available in the form *Accounts payable> Setup> Payment> Cash discounts*. After entering the code and description in a new record, you want to register settings for discount calculation on the tab *Setup* as shown in Figure 3-2.

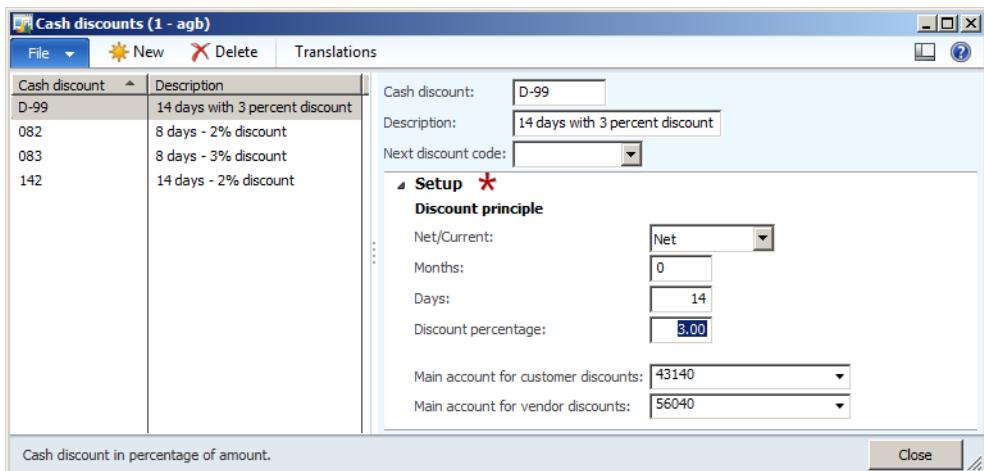


Figure 3-2: Setting up the cash discount

Exercise 3.2 – Create Vendor

The responsible department accepts a new domestic vendor, who wants to ship items to your company. Enter a new record for this vendor in Dynamics AX without applying a template. Register a name (starting with your user ID) and a primary address, select an appropriate vendor group and sales tax group. For this vendor, the terms of payment and the cash discount entered in exercise 3.1 apply.

Instructions

In order to register a new vendor, you have to access the vendor list page in the procurement module (*Procurement and sourcing*> *Common*> *Vendors*> *All vendors*) or in the accounts payable module (*Accounts payable*> *Common*> *Vendors*> *All vendors*). In the vendor list page or in the related detail form, insert a record choosing the button *New/Vendor* (on the action pane tab *Vendor*) or the shortcut key *Ctrl+N*. If templates apply, choose the template “Blank” to avoid defaults from a template.

The vendor number (field *Vendor account*) automatically derives from the appropriate number sequence, if the number sequence does not specify manual numbering. Make sure to apply the *Record type* “Organization” if you do not register a person as vendor. After entering the vendor name in the field *Name* you have to select the appropriate group for domestic vendors in the field *Group* (“DO” in the sample company “Anso Technologies Ltd.”).

On the tab *Addresses*, you want to click the button and enter the postal address details in the *New address* dialog similar to entering a postal address in the global address book (see exercise 2.10).

If it does not default from the vendor group, you need to make sure to select the appropriate sales tax group for domestic vendors on the tab *Invoice and delivery*. Payment terms and cash discount are available on the tab *Payment*.

The screenshot shows the 'Vendors (1 - agb) - Vendor account: 30021, 99-Vendor of exercise 3.2' window. The 'Edit' button is highlighted in yellow. The 'Identification' section contains fields for Vendor account (30021), Record type (Organization), Name (99-Vendor of exercise 3.2), Search name (99-Vendor 3.2), and Group (DO). The 'Organization details' section includes fields for Number of employees (0), Organization number, ABC code (None), DUNS number, Address books, and Language (en-us). The 'Payment' section shows Terms of payment (P-99) and Cash discount (D-99). The right side of the screen displays a sidebar with links for Primary address, Related information, Recent activity, Statistics, Roles, and Relationships.

Figure 3-3: Inserting the vendor record

Exercise 3.3 – Ledger Integration

You want to find out about ledger integration. To which summary account in the general ledger will an invoice from your new vendor post?

Instructions

The summary account for vendor invoices depends on the posting profile. On the tab *Ledger and sales tax* in the accounts payable parameters (*Accounts payable> Setup> Accounts payable parameters*), you may find the field *Posting profile* specifying the standard profile for vendor transactions.

You may access details of this posting profile in the form *Accounts payable> Setup> Vendor posting profiles*, where you may check the summary accounts on the tab *Setup*. As shown in Figure 3-4, invoices of vendors linked to the group "DO" will post to the ledger account "33010" in the sample company.

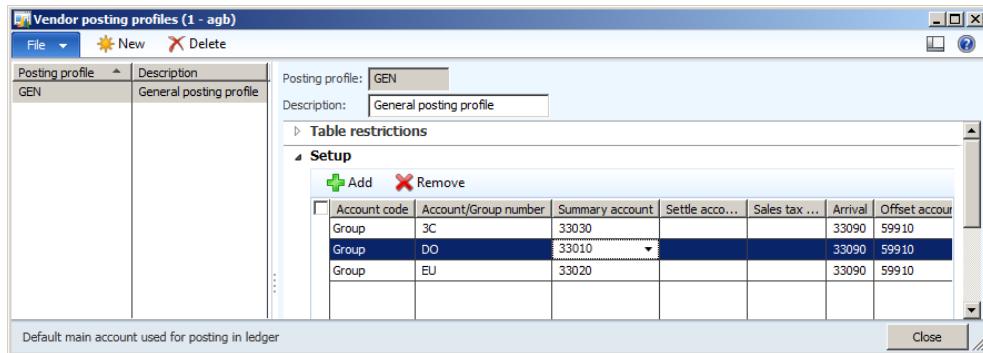


Figure 3-4: Specifying the vendor summary account in the posting profile

Exercise 3.4 – Procurement Categories

Your company purchases a new kind of services, for which you want to set up appropriate product categories in the procurement hierarchy. Enter a new category node “##-services” containing the categories “##-assembling” and “##-fees” (## = your user ID). In addition, make sure the procurement categories receive the item sales tax group referring to the standard tax rate.

Instructions

In order to register new procurement categories you want to access the list page *Product information management> Setup> Categories> Category hierarchies* and select the category hierarchy linked to the hierarchy type “Procurement category hierarchy”. In order to check which hierarchy types are associated to a hierarchy you may view the appropriate fact box in the right pane of the list page.

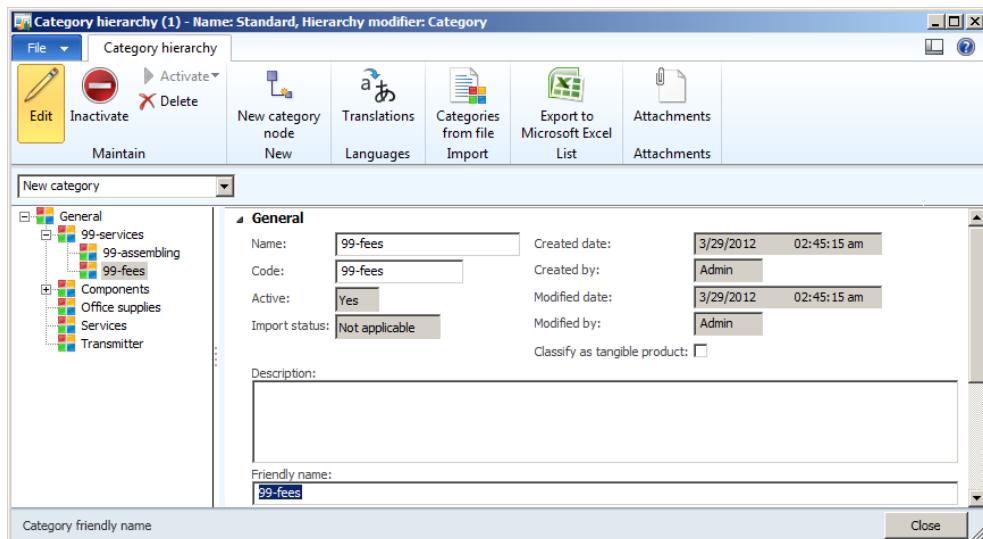


Figure 3-5: Inserting a new sub-category in the category hierarchy

Clicking the button *Edit* in the action pane, you may access the hierarchy structure of the selected hierarchy. In order to add the category node on top level, you want to select the first node in the tree structure and click the button *New category node* in the action pane. In the new category, you want to enter the *Name*, *Code* and *Friendly name*. Then select the new node and click the button *New category node* again for entering the new sub-categories (see Figure 3-5).

When you have finished entering the new categories, you may close the category hierarchy and access the form *Procurement and sourcing > Setup > Categories > Procurement categories*. Selecting your new categories one after another you may enter the item sales tax group on the tab *Item sales tax groups* in this form.

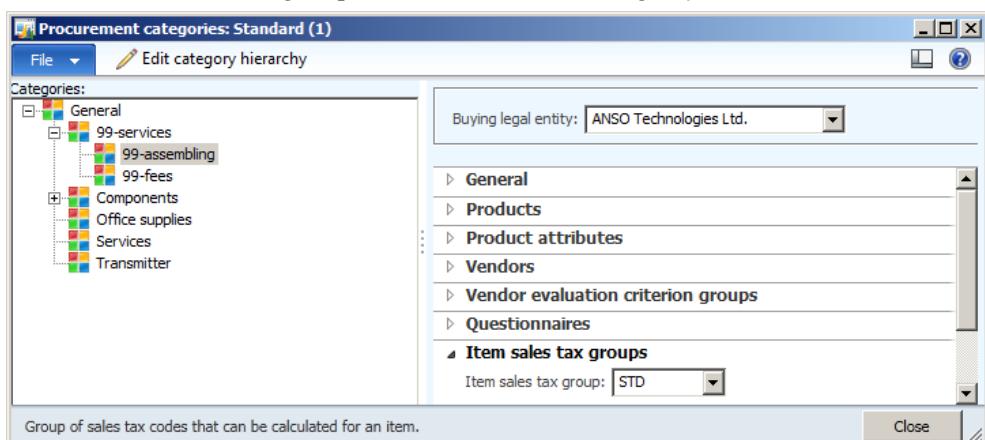


Figure 3-6: Entering the item sales tax group of a procurement category

Note: Clicking the button *Edit category hierarchy* in the procurement categories form provides an alternative access for editing the product category hierarchy assigned to purchasing.

Exercise 3.5 – Product Record

In order to accomplish purchase order processing in the following exercises, you need to set up a new product. This first product is a trade item, later on we will continue with the more complex structures of BOM items.

Enter a new shared product with the product number I-## and the name “##-merchandise” (## = your user ID). It should be a regular stocked product without variants, serial or batch numbers. You want to track inventory per site and warehouse. Choose appropriate dimension groups in the shared product.

Then you want to release the product to your test company. In the released product, select an appropriate item group for merchandise and an item model group with FIFO-valuation.

The item sales tax group for sales and for purchasing should refer to the standard tax rate. The unit of measure for the item is “Pieces” in all areas, and the main vendor is the vendor of exercise 3.2. The base purchase price and the base cost price are 50 pounds, the base sales price is 100 pounds.

In the *Default order settings* for purchasing and sales, you should enter the main site as well as default quantities (*Multiple 20, Min. order quantity 40, Standard order quantity 100*). In the *Site specific order settings*, you should enter the main warehouse of the main site for purchasing and sales.

Note: If the number sequence for product numbers is set up for automatic numbering, you do not need to enter a product number.

Instructions

You may register the new product in the list page *Product information management> Common> Products> All products and product masters*. After clicking the button *New/Product* in the action pane there, the *New product* dialog displays where you want to enter the *Product number* (if no automatic number sequence applies), the *Product name* and the *Search name* (see Figure 3-7).

Note: If you want to apply manual product numbers, you have to make sure the number sequence for product numbers is set to “Manual”. An easy way to check this is to access the number sequence setting in the product information management parameters (*Product information management> Setup> Product information management parameters, tab Number sequences*) and to choose the option *View details* after right-clicking on the product number sequence code. In the number sequence form, make sure the checkbox *Manuel* on the tab *General* is selected (for changing the setting, switch to edit mode).



Figure 3-7: Registering the new product in the quick create dialog

Note: If the Dynamics AX 2012 Feature Pack applies to your installation, additional fields referring to retail and process industries display. Leave them empty.

Close the dialog clicking the button *OK* and make sure the new product is selected in the all products list page. Clicking the button *Set up/Dimension groups* in the

action pane of the list page then provides the option to select the appropriate *Storage dimension group* and *Tracking dimension group* (see Figure 3-8).

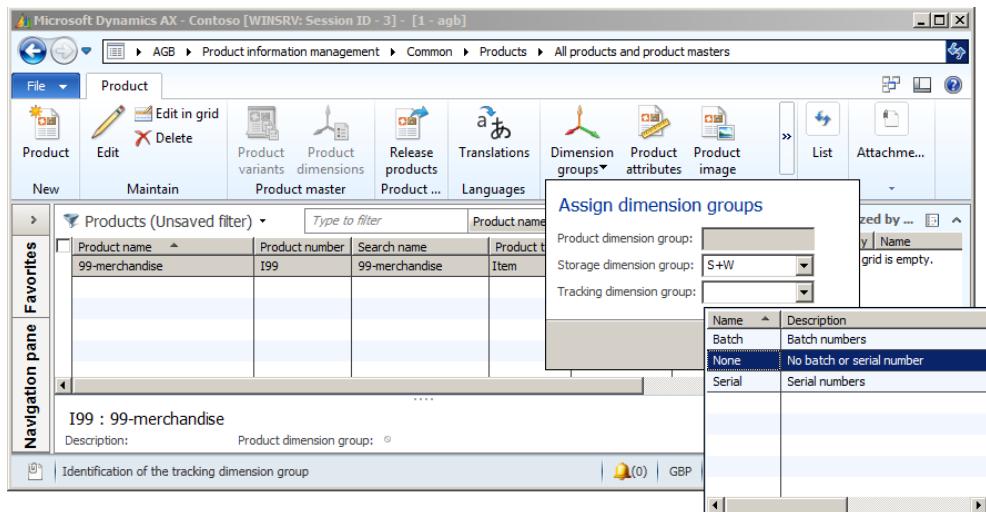


Figure 3-8: Selecting dimension groups for the shared product

In order to release the product, make sure the new product is selected and click the button *Release products* in the action pane. The *Release products* dialog then displays, showing your new product on the tab *Select products*. After switching to the tab *Select companies*, put a checkmark in front of your training company and click the button *OK*. After clicking *OK* in a confirmation dialog, the new product is available in your training company.

You may find the product in the released products list page now (*Product information management> Common> Released products*). After selecting your product there, you may click the button *Edit* on the action pane tab *Product* to access the released product detail form where you have to add missing item data.

On the tab *General* in the released product detail form, you want to select the *Item model group* "FIFO" in the sample company. Data referring to purchasing are available on the tab *Purchase*, where you want to enter the *Item sales tax group*, the base price in the field *Price* and the main vendor in the field *Vendor*.

If the default for the unit of measurement as specified in the inventory parameters ("Pcs." in the sample company) is not applicable to your product, you have to change the inventory unit of your product in the field *Unit* on the tab *Manage inventory* before changing the purchase unit on the tab *Purchase*.

On the tab *Sell*, check the *Unit* and enter the *Item sales tax group* and the base sales price (field *Price*) applicable when selling the product.

On the tab *Manage costs*, select the *Item group* for merchandise ("ME" in the sample company) and the base cost price (field *Price*).

The screenshot shows the 'Released product details' form for item number I99, 99-merchandise. The 'Purchase' tab is active. In the 'Purchase' section, under 'Purchase unit', 'Pcs.' is selected. Under 'Purchase site', 'HQ' is selected. The 'Purchase quantity' section contains the following values: Multiple: 20.00, Min. order quantity: 40.00, Max. order quantity: 0.00, and Standard order quantity: 100.00. In the 'Other' section, 'Purchase lead time' is set to 0, 'Working days' is checked, and 'Stopped' is checked.

Figure 3-9: Specifying purchasing related data on the tab *Purchase* of the item form

In order to specify further defaults for purchasing and sales, you have to click the button *Order settings/Default order settings* on the action pane tab *Manage inventory*. In the default order settings, you may leave the *Default order type* “Purchase order” on the tab *General* and enter the required settings on the tabs *Purchase order*, *Inventory* and *Sales order* as shown in Figure 3-10.

The screenshot shows the 'Default order settings' form for item number I99, 99-merchandise. The 'Purchase order' tab is active. Under 'Purchase unit', 'Pcs.' is selected. Under 'Purchase site', 'HQ' is selected. The 'Purchase quantity' section contains the following values: Multiple: 20.00, Min. order quantity: 40.00, Max. order quantity: 0.00, and Standard order quantity: 100.00. In the 'Other' section, 'Purchase lead time' is set to 0, 'Working days' is checked, and 'Stopped' is checked.

Figure 3-10: Entering order quantities in the default order settings

After closing the default order settings, you may access the site-specific order settings clicking the button *Order settings/Site specific order settings* on the action pane tab *Manage inventory* of the released product form. In the site-specific order

settings, you want to insert a line referring to the main site with the default warehouse for purchase, inventory and sales.

Note: After releasing a shared product, you may directly access it from the shared products page as an alternative to the menu item *Product information management> Common> Released products*. Click the link *More* in the factbox *Authorized by company* of the shared product form and then apply the table reference (*View details*) on the column *Item number* in the dialog. It might be necessary to refresh the screen (F5) after releasing a product to view it in the factbox.

Exercise 3.6 – Trade Agreement

You agree upon a lower price for the new item with your main vendor. Set up a trade agreement for the vendor of exercise 3.2, which specifies a purchase price of 45 pounds for the item of exercise 3.5. There is no minimum quantity and no end date for this price.

Instructions

In order to set up new purchase prices, you want to access the form *Procurement and sourcing> Journals> Price/discount agreement journals*. Click the button *New* in the action pane strip of the journal form to register a new journal. In the journal header line you have to select a journal name in the first column, in addition you may enter a description (remark) in the 3rd column (*Name*).

After clicking the button *Lines* then, you may insert a journal line for the purchase price. Make sure “Price (purch.)” is selected in the column *Relation* before selecting “Table” in the *Account code* and your vendor number in the column *Account selection*. For prices, the column *Item code* has to show “Table” along with the product number in the *Item relation* before entering the price in the column *Amount in currency* (see Figure 3-11).

C.	Relation	Account code	Account selection	Item code	Item relation	Size	Site	From	To	Unit	Amount in currency	Currency
	Price (purch.)	Table	30021	Table	I99			0.00	Pcs.		45.00	GBP

Figure 3-11: Registering the purchase price in the trade agreements journal lines

When you have finished entering the journal line, click the button *Post* in the action pane strip to activate the price.

Exercise 3.7 – Planned Order

In order to avoid processing purchase order approval, make sure change management does not apply to your vendor entered in exercise 3.2.

A minimum inventory quantity of 200 units on the main warehouse is required for the item entered in exercise 3.5. After registering this minimum quantity, you want to open the net requirements form for the item updating the master schedule. What is result of that master scheduling?

Open the planned purchase order form in the procurement and sourcing menu. If required, switch to the dynamic master plan that has been applied when updating the net requirements. Select the planned order referring to your item and transfer it to a purchase order.

Instructions

If the checkbox *Activate change management* is selected in the procurement parameters (*Procurement and sourcing> Setup> Procurement and sourcing parameters*, tab *General*), you have to deactivate change management specifically for your vendor. In this case you want to access the vendor detail form, making sure the checkbox *Allow override of settings per vendor* in the procurement parameters is selected before. On the tab *Purchase order defaults* of the vendor detail form you may select the checkbox *Override settings* and deselect the checkbox *Activate change management* for your vendor then.

The minimum inventory quantity setting of an item is available in the item coverage form. You may access the item coverage settings for your released product by clicking the button *Coverage/Item coverage* on the action pane tab *Plan* of the released product form (*Product information management> Common> Released products*) after selecting your item. In the item coverage, you may insert a new record registering the minimum quantity as shown in Figure 3-12.

Site	Warehouse	Minimum	Maximum	Coverage group
HQ	10	200.00	0.00	PER

Figure 3-12: Registering the minimum quantity in the item coverage form

In order to access the net requirements form after closing the item coverage, you may click the button *Requirement/Net requirements* on the action pane tab *Plan* of the released product form.

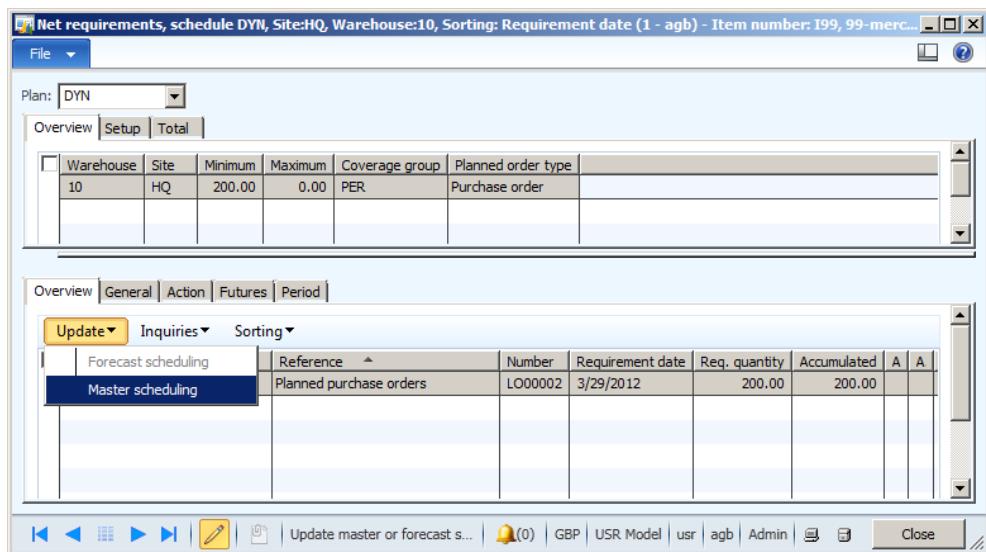


Figure 3-13: Updating the master schedule in the net requirements

The net requirements form shows data for the *Plan* selected in the header pane of the form. The default for this plan is the current dynamic master plan specified in the master planning parameters (“DYN” in the sample company).

In order to update the net requirements in the selected plan, you may start local master scheduling for your item clicking the button *Update/Master scheduling*. In this exercise, master scheduling generates a planned purchase order of 200 units based on the minimum quantity entered before (see Figure 3-13).

You may access this planned purchase order in the list page *Procurement and sourcing> Common> Purchase orders> Planned purchase orders*. In planned purchase order list page, the default in the lookup field *Plan* specifying the master plan applied for showing planned orders is the current static master plan (“STD” in the sample company). If you want to view the planned order you have created before, you have to switch to the plan selected when updating local master scheduling (“DYN” as a default in the sample company).

Applying a filter on your item number, you may easily find your planned order. The vendor in the planned order derives from the main vendor which you have entered in the released product record. After selecting your planned order, you may transfer it to a purchase order by clicking the button *Process/Firm*.

If refreshing the planned order list page choosing the keyboard shortcut *F5* or the button *List/Refresh* in the action pane, the planned order does not show any more.

You may find the new purchase order in the purchase order list page (*Procurement and sourcing> Common> Purchase orders> All purchase orders*).

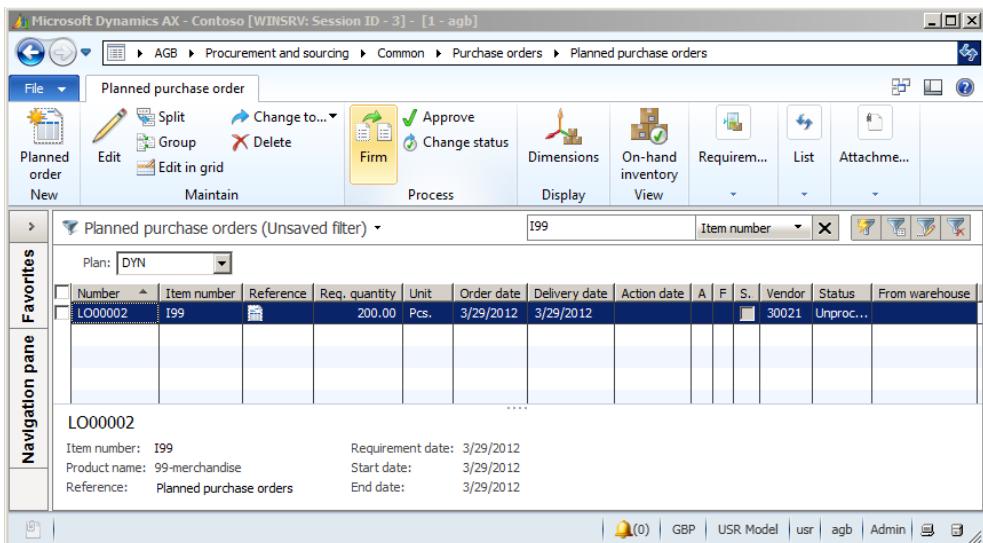


Figure 3-14: Firming the planned order after selecting the master plan (lookup Plan)

Exercise 3.8 – Request for Quotation

You want to receive vendor quotes for your item. In the request for quotations form, you want to insert a new request therefore. This request should contain a line with your item from exercise 3.5. The RFQ reply configuration for the request should include the header field *Reply valid to* and the line fields *Quantity* and *Unit price*.

You want to send the request to your vendor from exercise 3.2 and another vendor of your choice. Once you have finished entering the request, choose the option *Send* to post and print the RFQ for these vendors.

After a while, you may receive quotes from both vendors containing quantities and prices of your choice. In order to track the quotes, you want to enter them as request for quotation replies assigned to the original request. Your vendor has submitted the better quote, which you may accept transferring the RFQ reply to a purchase order. Then send a quote rejection to the other vendor.

Instructions

In order to register a request for quotation (RFQ), click the button *New/Request for quotation* in the form *Procurement and sourcing> Common> Requests for quotations> All requests for quotations*. In the create dialog, you may check default data like the *Purchase type* ("Purchase order" for RFQs to be transferred to a purchase order) and

adjust the *Delivery date* and the *Expiration date* before creating the RFQ by clicking the button OK.

On the lines tab of the RFQ detail form, you want to insert a new record containing your item and defaults for warehouse and quantity as shown in Figure 3-15.

The screenshot shows the 'Request for quotation details' window for Case ID: PQ00002, Andreas Luszczak. The window has a toolbar with various icons for actions like Edit Record, Copy from, Delete, Request for quotation New, Send Proc..., Enter reply, Configure request for qu..., Compare replies, Totals, Manage charges, Request for quotation journals, and Attachments. The main area is divided into two tabs: 'Request for quotation header' and 'Request for quotation lines'. The 'Request for quotation header' tab contains fields for Administration (Buyer group: dropdown), Sales tax (Prices include sales tax: checkbox), Requester (Andreas Luszczak), Language (EN-US), and Dates (Expiration date: 11/30/2012). The 'Request for quotation lines' tab shows a grid with columns: Line type, Procurement..., Item number, Product name, Site, Warehouse, Delivery..., Expiration..., Lowest status, Highest status, Quantity, and Unit. A single row is present with Item number I99, Product name 99-merchandise, Site HQ, Warehouse 10, Delivery date 12/24/2012, Expiration date 11/30/2012, Lowest status Created, Highest status Created, Quantity 100.00, and Unit Pcs. Below the grid, there are sections for Vendor and Address, and a toolbar with buttons for Add, Remove, Details, Set up, Functions, and Inventory.

Figure 3-15: Inserting the item line in the request for quotation detail form

Clicking the button *Replies/Configure request for quotation reply* on the action pane tab *Quotation* of the RFQ form, you may specify the required reply fields making sure the checkboxes *Reply valid to*, *Quantity* and *Unit price* are selected.

In order to specify the vendors referring to the request for quotation, you may switch to the tab *Vendor* in the RFQ detail form and click the button there to insert a line for every vendor concerned. Then you may post and print the RFQ by clicking the button *Process/Send* on the action pane tab *Quotation*.

When receiving a quote from your vendor, you may register it in the in the form *Procurement and sourcing> Common> Requests for quotations> Request for quotation replies*. Selecting the reply header for your RFQ (column *Case ID*) and the appropriate vendor, you want to access the reply detail form clicking the button *Edit*. In the reply detail form, you may click the button *Process/Copy data to reply* in order to avoid entering all required fields. Then you want to enter or modify the *Quantity* and the *Unit price* on the lines tab as shown in Figure 3-16.

The screenshot shows a Microsoft Dynamics AX 2012 application window titled 'Request for quotation reply (1 - agb) - Request for quotation: PF00004, 99-Vendor of exercise 3.2'. The top menu bar includes 'File', 'Reply', and 'General'. Below the menu is a toolbar with icons for 'Edit Record' (highlighted in yellow), 'Return', 'Accept', 'Reject', 'Copy data to reply', 'Totals', 'Manage charges', 'Financials', 'Request for quotation journals', 'Journals', 'Refresh', 'Export to Microsoft Excel List', and 'Attachments'. The main area displays a table titled 'Purchase quotation lines' with columns: Mark, Line type, P..., Item number, Site, Warehouse, Product name, Delivery date, Expiration date, Status, Quantity, Unit, and Unit price. One row is selected, showing Item number I99, Site HQ, Warehouse 10, Product name 99-merchandise, Delivery date 12/24/2012, Expiration date 11/30/2012, Status Received, Quantity 100.00, Unit Pcs., and Unit price 44.00. Below the table are sections for 'Quotation' and 'Address'. The bottom of the screen shows a navigation bar with icons for back, forward, search, and file operations, along with currency (GBP), user (usr), and system (agb, Admin) information.

Figure 3-16: Registering vendor quotes in the request for RFQ reply detail form

After registering the first RFQ reply, you may close the reply detail form and select the line for the quotation of the second vendor in the reply list page. Accessing the reply detail form for the second quotation you may enter it the same way as the first reply, but with a higher unit price.

Finally you may close the reply detail form and the reply list page and return to the form *Procurement and sourcing> Common> Requests for quotations> All requests for quotations*. After selecting your RFQ there, you may click the button *Replies/Compare replies* in the action pane to access the compare RFQ reply form.

After checking quantity and amount in the compare form, you may select the better quote (which is from your vendor of exercise 3.2) there and convert it to a purchase order clicking the button *Accept* as shown in Figure 3-17. When posting an accepted quote, Dynamics AX also displays the reject posting form to reject the other quote easily.

The screenshot shows a Microsoft Dynamics AX 2012 application window titled 'Compare request for quotation replies (1 - agb) - Case ID: PQ00002, Andreas Luszczak'. The top menu bar includes 'File', 'Reply', and 'General'. Below the menu is a toolbar with icons for 'Return', 'Accept' (highlighted in yellow), 'Reject', 'Copy data to reply', 'Totals', 'Manage charges', 'Financials', 'Request for quotation journals', and 'Journals'. The main area displays a table titled 'Dimensions display' with columns: Mark, P..., Item..., Product name, R..., Vendor..., Quantity, and Balance. Two rows are shown: one for vendor account 30001 and one for vendor account 30021. To the right of the table is a panel titled 'Request for quotat...' containing summary data: Total discount: 0.00, Discount amount: 0.00, Charges on purchases: 0.00, Balance: 4,400.00, and Net amount: 5,170.00. Below the table is a section for 'Vendor account number.' and a 'Close' button.

Figure 3-17: Accepting a vendor quote in the RFQ reply compare form

Exercise 3.9 – Purchase Order

You want to order your item (entered in exercise 3.5) from your vendor (entered in exercise 3.2). You may start registering the purchase order in the vendor form. Which quantity and which price display as default, where do they come from? In a second order line, you want to receive two hours of the procurement category “##-assembling” (entered in exercise 3.4) for a price of GBP 100.

After closing the order form, you want to display all orders referring to your vendor. How do you proceed and how many orders are available?

Instructions

In order to register a purchase order, you may access the vendor list page (*Procurement and sourcing > Common > Vendors > All vendors*) and search for your vendor there. After selecting your vendor, click the button *New/Purchase order* on the action pane tab *Procurement*.

Dynamics AX creates a purchase order applying default data from your vendor and immediately shows the line view of the purchase order detail form, where you may enter the first order line selecting the item number as shown in Figure 3-18. The default for the order quantity derives from the *Standard order quantity* in the default order settings of the item. The *Unit price* in the order line derives from the trade agreement for the purchase price entered in exercise 3.6. The default for *Line number* shows when leaving or saving a purchase order line.

In the second line, you want to select the appropriate *Procurement category* instead of an item. Then you have to enter further line data as shown in Figure 3-18.

The screenshot shows the Microsoft Dynamics AX Purchase Order form in Line View. The header displays the purchase order number PO00011 and the vendor name 30021 - 99-Vendor of exercise 3.2. The toolbar includes buttons for New, Edit, Delete, Header view, Line view, Totals, Copy, View, Generate from template, and Attachments. The main area shows the Purchase Order Lines grid with one existing row and one new row being edited. The new row has columns filled with data: Item... (I99), Procurement cat... (99-merchandise), Site (HQ), Warehouse (10), Quantity (100.00), Unit (Pcs.), Unit price (45.00), and Net amount (4,500.00). The second row, which is currently selected, has columns filled with data: Item... (I99), Procurement cat... (99-assembling), Site (HQ), Warehouse (10), Quantity (2.00), Unit (hour), Unit price (100.00), and Net amount (200.00). The bottom of the screen shows the status bar with various icons and the current user information.

Figure 3-18: Inserting an order line in the purchase order form (line view)

After closing the purchase order form, you may choose to view existing purchase orders referring to the selected vendor by clicking the button *Related information/Purchase orders/All purchase orders* on the action pane tab *Procurement* of the vendor list page. In the purchase order list page, you may see three orders for your vendor:

- The order of the current exercise
- The order of exercise 3.8, transferred from a RFQ reply
- The order of exercise 3.7, transferred from a planned order

Note: As an alternative for creating a purchase order, you may also start in the purchase order list page (*Procurement and sourcing> Common> Purchase orders> All purchase orders*) and click the button *New/Purchase order* on the action pane tab *Purchase order*. In the *Create purchase order* dialog, you have to choose a vendor then in the vendor lookup (e.g. applying a *Filter by field* with a right-hand click in the column *Name* of the lookup).

Exercise 3.10 – Order Confirmation

Post and print both purchase orders that you have created in the last two exercises. One time you should print to a PDF file, the other time you should display a print preview.

Then change the quantity in the first order line of exercise 3.9 to 120 units. How do you proceed?

Instructions

Since you do not apply change management (including approval workflows) to your vendor according to the setup selected in exercise 3.2, you can immediately print the purchase order of exercise 3.9.

You may start printing the purchase order directly in the purchase order form clicking the button *Generate/Purchase order* on the action pane tab *Purchase*. In the posting form, you want to select the checkboxes *Posting* and *Print purchase order*. Clicking the button *Printer setup/Purchase order*, you may select a *File* in the *File format* “PDF” as printing destination. Next, you may start the printout by clicking the button *OK* in the posting form.

When printing the purchase order 3.8 to a print preview, you want to select the printing destination “Screen” instead of “File”. In the print preview you can also find the option to generate a PDF file (see exercise 2.7).

In order to change the quantity in the purchase order 3.9 after printing it, you have to access the line view of the purchase order detail form in edit mode by clicking the button *Edit* on the action pane tab *Purchase order* of the purchase order list page. After modifying the order quantity in the column *Quantity* to 120 units in the first

purchase order line, you have to print the purchase order again before you can receive products. If you do not actually want to print the order, you may deselect the checkbox *Print purchase order* in the posting form.

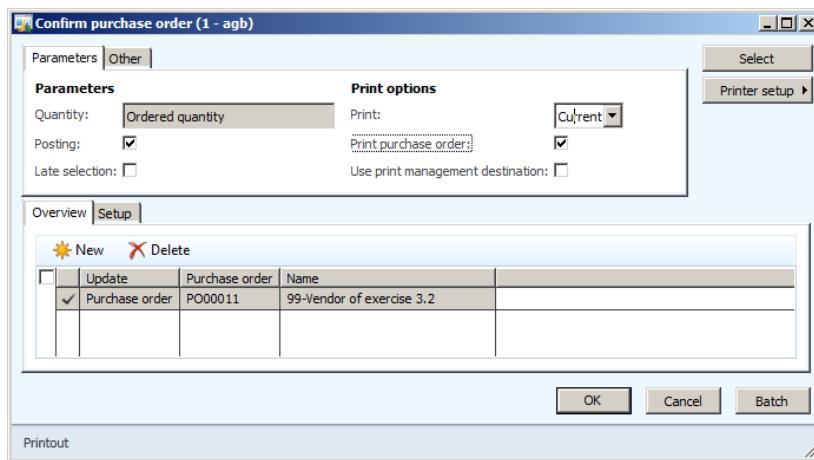


Figure 3-19: Posting form to print the purchase order

If you want to see the original printed order later, you may show it unchanged clicking the button *Journals/Purchase order confirmation* on the action pane tab *Purchase* of the purchase order form. Clicking the button *Preview/Print* in the purchase order inquiry, you may reprint the original order.

Notes: If you do not switch to the second order line after changing the quantity you might need to refresh the form (*F5*) before you can print the order a second time.

For posting the purchase order confirmation, you may alternatively choose the button *Generate/Confirm* on the action pane tab *Purchase* of the purchase order form – not showing the posting form – instead of the button *Generate/Purchase order*.

Exercise 3.11 – Product Receipt

Your vendor ships the goods and services ordered in exercise 3.9 with packing slip PS311. Before posting the receipt, check following items in the purchase order:

- Order status and document status
- Inventory quantity of the ordered item (button *Inventory/On-hand*)
- Inventory transaction related to the order line of the product

Post a product receipt for the complete quantity ordered (120 units for the first line according to exercise 3.10) referring to the vendor packing slip number mentioned above. You may do the posting directly out of the purchase order form.

Now review the status of the items on the list given above in this exercise again. What is different after product receipt posting?

Instructions

The order status is available in the column *Status* of the purchase order list page (*Procurement and sourcing> Common> Purchase orders> All purchase orders*). After double-clicking on your order to access the purchase order detail form, you may click the button *Show/Header view* on the action pane tab *Purchase order* of the detail form to view the *Document status* on the tab *General* in the header view.

Since the purchase order of exercise 3.9 has been confirmed (printed) in exercise 3.10, the *Status* shows “Open order” and the *Document status* “Purchase order”. After switching to the line view, you may access the inquiries of inventory quantity and inventory transactions by clicking the button *Inventory/On-hand* or *Inventory/Transactions* in the action pane strip of the *Purchase order lines* tab. When selecting the first order line, these inquiries show following results:

- Since you did not post any transaction up to now, the inventory on hand of your item is zero.
- The inventory transactions show a line with the ordered quantity in the receipt status “Ordered”. The date fields *Physical date* and *Financial date* in the transaction are empty.

You may post the product receipt in the purchase order form clicking the button *Generate/Product receipt* on the action pane tab *Receive*. Selecting “Ordered quantity” in the lookup field *Quantity* on the upper pane of the posting form you are going to post the receipt of the total quantity – 120 units for the first line (modified in exercise 3.10) and 2 hours for the second line. You may check and modify quantities before posting on the tab *Lines* of the posting form.

Update	Purchase order	Name	Product receipt	
<input checked="" type="checkbox"/>	PO00011	99-Vendor of exercise 3.2	PS311	

Figure 3-20: Posting form when posting the product receipt

Before finally posting the transaction by clicking the button *OK* in the posting form, you have to enter the packing slip number of the printed vendor document in the column *Product receipt* of the posting form.

After posting the product receipt, the inquiries show following results:

- Order status “Received”; Document status “Product receipt”
- Inventory on-hand: Received quantity
- Inventory transaction receipt status “Received”;
Physical date according to product receipt posting; *Financial date* empty

Exercise 3.12 – Partial Delivery

You want to order your item (entered in exercise 3.5) from your vendor another time. Enter a purchase order for 80 units. You may post the product receipt of packing slip PS312 for a partial delivery of 50 units. Then post the product receipt of a second partial delivery containing 10 units.

Do you know how to show the remaining quantity? Check the order status, inventory quantity and inventory transactions like in exercise 3.11. What is different in comparison to exercise 3.11?

Instructions

You may record the purchase order similar to exercise 3.9 and confirm it like in exercise 3.10. The inquiries of order status and inventory transactions show the same results as the inquiries for the other order at the beginning of exercise 3.11. The on-hand quantity shows the quantity received later in exercise 3.11.

In order to prepare posting a partial quantity, you may enter the quantity of the transaction in the column *Receive now* on the *Purchase order lines* tab (right-most column) of the purchase order detail form. The column *Receive now* is also available in the *Line quantity* form, which shows after clicking the button *Related Information/ Line quantity* on the action pane tab *General* of the purchase order form.

After accessing the posting form for the product receipt by clicking the button *Generate/Product receipt* on the action pane tab *Receive* of the purchase order form, you may select “Receive now quantity” in the lookup field *Quantity* then.

Alternatively, you may post a partial receipt without prior registration of a *Receive now* quantity in the purchase order line. In this case, you want to select “Ordered quantity” in the lookup field *Quantity* of the posting form and to change the quantity in the column *Quantity* of the tab *Lines* in the posting form.

After posting the first and the second partial product receipt, the remaining quantity shows in the column *Deliver remainder* in the *Line quantity* form (access by clicking the button *Line quantity* on the action pane tab *General* of the purchase order form).

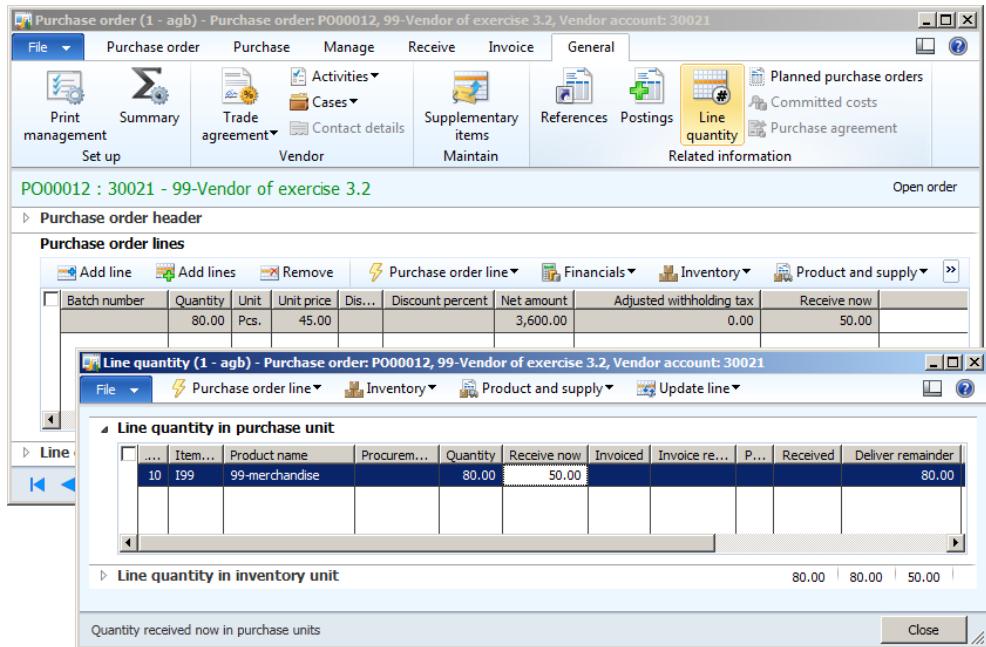


Figure 3-21: The “Receive now” quantity in the order lines and in the line quantity form

Unlike the order in exercise 3.11, the purchase order in the current exercise still shows “Open order” in the field *Status* after posting the product receipt. But like in exercise 3.11, the field *Document status* shows “Product receipt” after posting the product receipt. The inventory quantity adds the received quantity.

Because of the partial receipt transactions, the inventory transaction inquiry displays three lines linked to the purchase order line: One line with 50 units for the first receipt and one line with 10 units for the second receipt (both showing the receipt status “Received”) as well as one line with the remaining 20 units showing the receipt status “Ordered”.

Exercise 3.13 – Product Receipt Inquiry

You want to see the product receipt of exercise 3.11. Therefore, open the product receipt inquiry out of the purchase order concerned. In a second step, open the product receipt inquiry choosing the appropriate form in the procurement and sourcing menu. Check product receipt header and lines and try to find out, if there are related ledger transactions.

Instructions

In order to display the posted product receipt directly from the purchase order form, you may click the button *Journals/Product receipt* on the action pane tab *Receive* of the purchase order form after selecting the appropriate order. By

switching to the tab *Lines* in the product receipt inquiry, you may show the lines of the product receipt selected on the tab *Overview* of the inquiry.

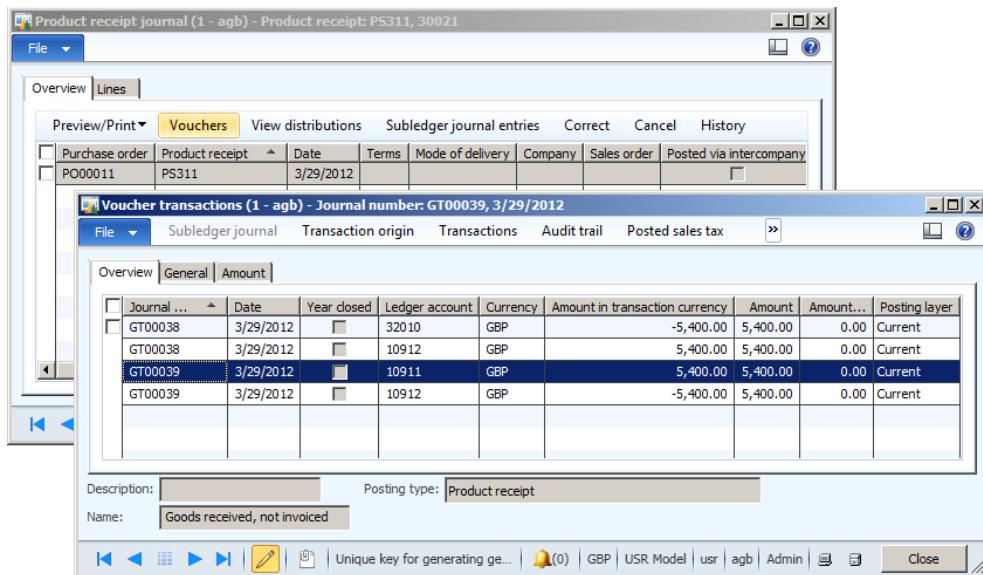


Figure 3-22: Product receipt inquiry and referring ledger transactions

Clicking the button *Vouchers* on the tab *Overview* of the product receipt inquiry, you may access related ledger transactions as shown in Figure 3-22.

If you want to access posted product receipts in the procurement and sourcing menu, you have to choose the form *Procurement and sourcing> Inquiries> Journals> Product receipt*. In the product receipt inquiry, you may select the required product receipt by applying a filter – for example a filter by grid (command *File/Edit/ Filter/ Filter By Grid*) on the purchase order number or on the vendor number (column *Invoice account*).

Exercise 3.14 – Purchase Order Invoice

Your vendor sends the invoice VI314, which concerns the goods and services received in exercise 3.11. Before posting the invoice, check following items:

- Order status and document status of the purchase order
- Inventory transaction related to the order line of the product (button *Inventory/Transactions*)

Register and post the vendor invoice for the quantity received. You want to register the invoice in the pending vendor invoices page, checking the invoice total before posting.

Now review the status of the items on the checklist above again. What is different after invoice posting?

Instructions

Since you did not do any changes to the purchase order after finishing exercise 3.11, the order status still is “Received” and the document status “Product receipt”. The inventory transaction still shows the receipt status “Received”, the *Physical date* complies with the product receipt and the *Financial date* is empty.

You may register the vendor invoice in the pending vendor invoice list page (*Accounts payable> Common> Vendor invoices> Pending vendor invoices*) clicking the button *New/Invoice* on the action pane tab *Vendor invoice* there.

In the lookup *Default quantity for lines* of the detail form, you may leave “Product receipt quantity” to post the invoice for the quantity received. After selecting the vendor number in the field *Invoice account*, you may choose the order concerned in the lookup *Purchase order* or click the button *Actions/Retrieve purchase orders* on the action pane tab *Vendor invoice*.

In the invoice header field *Number* you have to enter the invoice number printed on the vendor invoice. Before posting the transaction, you may finally check the invoice total in the factbox *Invoice totals* of the vendor invoice form as shown in Figure 3-23.

	B	Item number	Item name	Procurement category	Quantity	Unit	Unit price	Line net amount	Purchase order
	I99	99-merc...	99-assembling	120.00	Pcs.	45.00	5,400.00		P000011
				2.00	hour	100.00	200.00		

Figure 3-23: Registering a vendor invoice and checking the invoice totals

If the invoice totals match the received invoice, you may post the invoice clicking the button *Actions/Post/Post* on the action pane tab *Vendor invoice* of the invoice form.

After you have finished posting the invoice receipt, the inquiries in the purchase order form show following results:

- Order status “Invoiced”; Document status “Invoice”
- Inventory transaction receipt status “Purchased”;
- Physical date* according to product receipt posting;
- Financial date* according to invoice posting

Exercise 3.15 – Partial Invoice for a Purchase Order

You receive the invoice VI315, which applies to the goods received with packing slip PS312 in exercise 3.12. Post the vendor invoice starting from the purchase order form, making sure that the vendor invoice only contains the items received with packing slip PS312.

Instructions

After selecting the purchase order of exercise 3.12 in the purchase order form, you may check the quantity of packing slip PS312 in the product receipt inquiry (tab *Lines*) as shown in exercise 3.13.

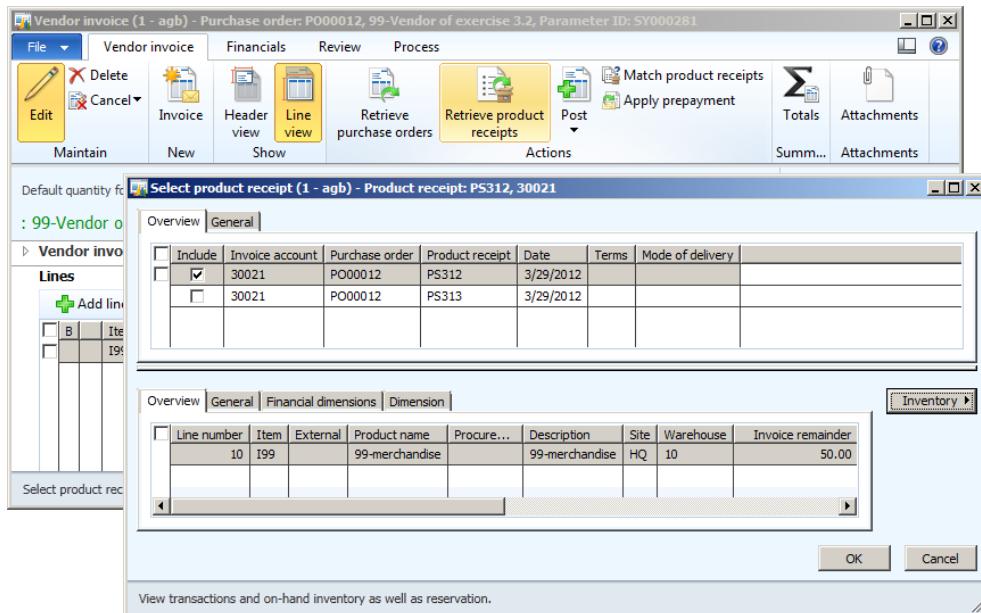


Figure 3-24: Selecting the product receipt for invoice posting

In order to post the invoice starting in the purchase order, you may click the button *Generate/Invoice* on the action pane tab *Invoice* of the purchase order form. If the

lookup field *Default quantity for lines* in the vendor invoice detail form shows the option “Product receipt quantity”, the default for the line quantities is the total quantity received.

In order to limit the invoice to certain product receipts, you may click the button *Actions/Retrieve product receipts* on the action pane tab *Vendor invoice*. In the product receipt selection form, you may only put a checkmark in the column *Include* for the packing slip PS312 as shown in Figure 3-24.

After closing the product receipt selection form by clicking the button *OK*, you may view the selected packing slip in the field *Product receipt* of the vendor invoice header. Before finally posting the invoice by clicking the button *Actions/Post/Post* on the action pane tab *Vendor invoice* of the invoice form, you need to enter the vendor invoice number in the header field *Number*.

Note: If you want to stop registering an invoice without saving it as a pending invoice, you have to click the button *Maintain/Delete* or *Maintain/Cancel* on the action pane of the vendor invoice form.

Exercise 3.16 – Vendor Invoice Not Related to a Purchase Order

Your vendor sends the invoice VI316, showing an invoice line with one hour of the procurement category “##-assembling” (entered in exercise 3.4) for a price of GBP 105. The invoice does not refer to a purchase order.

You accept this invoice and want to register it in the pending vendor invoices page, check the invoice total and then post it.

Instructions

You may register the invoice in the pending vendor invoice list page (*Accounts payable> Common> Vendor invoices> Pending vendor invoices*) clicking the button *New/Invoice* on the action pane tab *Vendor invoice* there.

In the lookup *Default quantity for lines* of the detail form, you may leave the option “Product receipt quantity”. After selecting the vendor number in the field *Invoice account*, you may add an invoice line clicking the button *Add line* on the tab *Lines* similar to entering an order line for a procurement category (see Figure 3-25).

Before finally posting the invoice by clicking the button *Actions/Post/Post* on the action pane tab *Vendor invoice* of the invoice form, you have to enter the vendor invoice number in the header field *Number*.

The screenshot shows the 'Vendor invoice (1 - agb) - Name: 99-Vendor of exercise 3.2' window. The 'Edit' button is highlighted in yellow. The 'Line view' tab is selected in the ribbon. The 'Invoice' header section shows 'VI316 : 99-Vendor of exercise 3.2'. The 'Vendor invoice header' section includes fields for 'Invoice account' (30021), 'Vendor' (99-Vendor of exercise 3.2), 'Purchase order' (empty), 'Product receipt' (empty), and 'Invoice status details' (Prepayment: checked). The 'Invoice identification' section has 'Number' (VI316) and 'Invoice description' (empty). The 'Invoice dates' section shows 'Posting date' (3/29/2012), 'Invoice date' (empty), and 'Due date' (5/28/2012). The 'Lines' section contains one line item: 'Add line' (checked), 'Remove' (unchecked), 'Invoice line' (dropdown), 'Financials' (dropdown), 'Inventory' (dropdown). The line item table has columns: B, Item number, Item name, Procurement category, Quantity, Unit, Unit price, Line net amount, Purchase order. The single row shows '99-assembling', '1.00', 'hour', '105.00', and '105.00'. The right pane displays 'Invoice totals' with values: Currency: GBP, Subtotal amount: 105.00, Total discount: 0.00, Charges: 0.00, Sales tax: 18.38, Invoice amount: 123.38, Discount amount: 3.70. A 'More...' link is also present.

Figure 3-25: Registering a vendor invoice not referring to a purchase order

Exercise 3.17 – Invoice Inquiry

You want to see the invoice of exercise 3.14. Therefore, open the invoice inquiry for the order concerned in the purchase order form. As an alternative, choose the appropriate menu path. Check the invoice header and lines as well as the related ledger transactions.

In exercise 3.3, you were looking for the summary account for your vendor. Can you find the ledger transaction for this account? Finally, open the transaction origin form and check, to which modules your invoice has been posting.

Instructions

You may access the invoice inquiry directly from the purchase order by clicking the button *Journals/Invoice* on the action pane tab *Invoice* of the purchase order form after selecting the appropriate purchase order. In order to access the posted vendor invoice in the accounts payable menu, you have to choose the form *Accounts payable> Inquiries> Journals> Invoice journal* applying an appropriate filter to select the invoice concerned.

Like the product receipt inquiry, the invoice inquiry consists of a tab *Overview*, which shows invoice header data, and a tab *Lines*, which shows the lines of the invoice selected on the tab *Overview*.

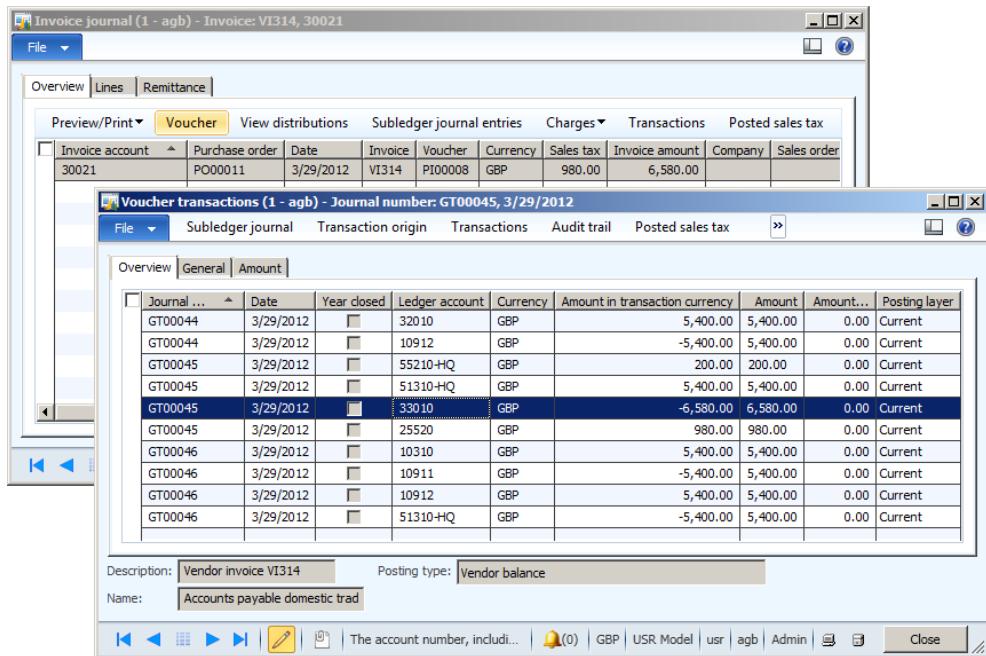


Figure 3-26: Ledger transactions referring to the selected purchase invoice

Clicking the button *Voucher* on the tab *Overview* of the invoice inquiry, you may access related ledger transactions. In the transactions displayed in Figure 3-26, the ledger transaction to the vendor summary account (account “33010” in the sample company) shows in the highlighted line. Clicking the button *Transaction origin*, you may access the transaction origin which shows vendor transactions and inventory transactions in addition to the ledger transactions.

Exercise 3.18 – Credit Note

The goods received in the first order line of exercise 3.11 show serious defects. You agree to return them to your vendor receiving the credit note VC318. The vendor will not send a replacement. Which ways do you know to register the credit note?

You decide to register the credit note in the original order. Enter the data required and post the credit note.

Instructions

In case you do not expect an item replacement, you may find following options to register a credit note referring to a purchase order:

- Registering a negative receipt in a new line of the original purchase order
- Registering a negative receipt in a new purchase order (purchase type „Purchase order“ or „Returned order“)

If the purchase order is already invoiced completely, it is not possible to post a credit note in the original purchase order if the procurement and sourcing parameter *Safety level of invoiced orders* is set to “Locked”. If invoiced orders are not locked, you may enter the credited quantity with a negative sign in a new line of the original purchase order as shown in Figure 3-27. Depending on the safety level parameter settings, you have to confirm the update of an invoiced purchase order.

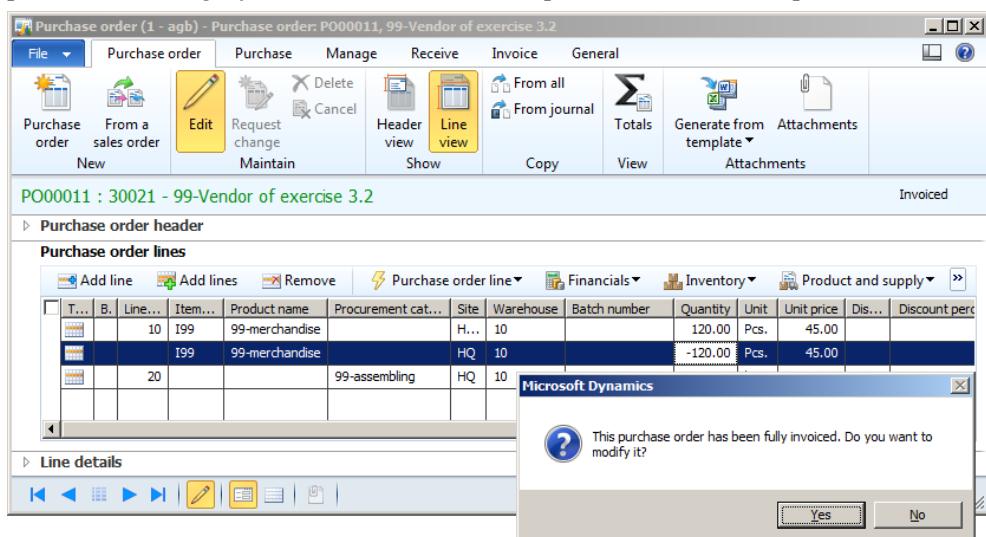


Figure 3-27: Registering the credit note in the original purchase order

In order to link the inventory value of the returned/credited item to the corresponding item receipt, select the new line and click the button *Inventory/Marking* in the action pane strip of the purchase order lines. In the marking form, select the checkbox *Set mark now* of the original order line in order to assign valuation. Since a confirmation is required after changing a purchase order, you have to post the confirmation clicking the button *Generate/Purchase order* or *Generate/Confirm* on the action pane tab *Purchase* of the purchase order form before you can post the credit note.

Clicking the button *Generate/Invoice* on the action pane tab *Invoice* of the purchase order then, you may access the vendor invoice form. In the lookup *Default quantity for lines* of the vendor invoice form, you may select “Ordered quantity”. Then you have to make sure to only show the line for the credit note on the tab *Lines*.

After inserting the credit note number in the header field *Number* of the vendor invoice form, you may post the credit note clicking the button *Post/Post* on the action pane tab *Vendor invoice*.

4 Sales and Distribution

Exercise 4.1 – Customer Record

A new domestic customer wants to order your items. Insert a new record for this customer containing name (starting with our user ID), primary address, a mode of delivery without carrier and an appropriate customer and sales tax group for domestic customers. In addition, the terms of payment and the cash discount entered in exercise 3.1 apply.

Deliveries to that customer should go to a different address. Therefore, enter a domestic delivery address of your choice, which should be the default for orders of this customer.

Instructions

In order to register a new customer, you have to access the customer list page in the sales and marketing module (*Sales and marketing> Common> Customers> All customers*) or in the accounts receivable module (*Accounts receivable> Common> Customers> All customers*). In the customer list page or in the related detail form, insert a record choosing the shortcut key *Ctrl+N* or the button *New/Customer* on the action pane tab *Customer*.

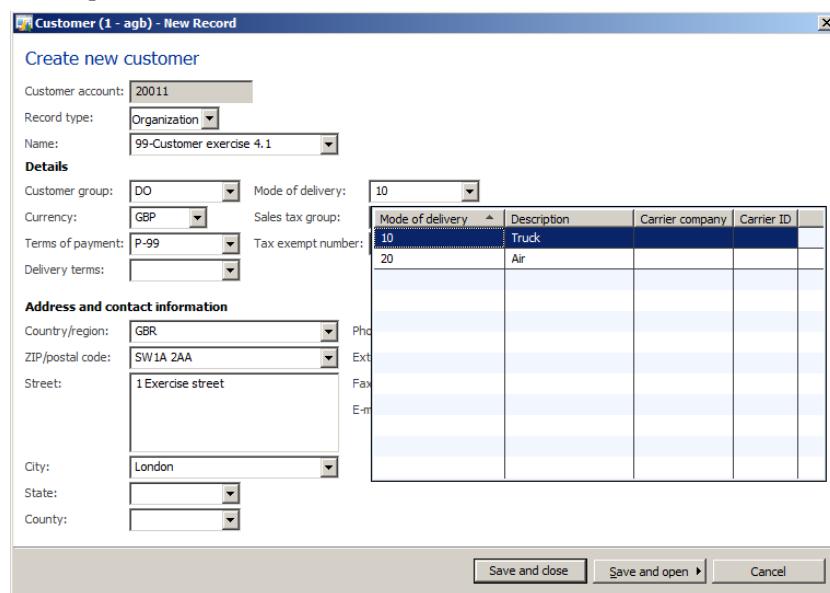


Figure 4-1: Entering customer data in the quick create dialog

The quick create dialog for new customers then displays, where the customer number (field *Customer account*) derives from the related number sequence if manual numbering doesn't apply. Make sure to apply the *Record type* "Organization" if you do not register a person as customer. After entering the customer name in the field *Name*, you have to select the appropriate group for domestic customers in the field *Customer group* ("DO" in the sample company "Anso Technologies Ltd.").

When selecting the *Mode of delivery* in the related lookup, make sure to choose a line with an empty *Carrier company*.

Then choose the appropriate *Sales tax group* for domestic customers (if it does not default from the customer group). The *Terms of payment* field is available in the next line. In the section *Address and contact information* of the quick create dialog, enter the primary address of your customer (see Figure 4-1).

Since you still have to enter the cash discount and the alternative delivery address, you want to close the quick create dialog by clicking the button *Save and open/ Customer* directly accessing the customer detail form.

On the tab *Addresses* in the customer detail form, click the button  in the action pane strip and enter the delivery address details in the *New address* dialog with a *Purpose* "Delivery" as shown in Figure 4-2.

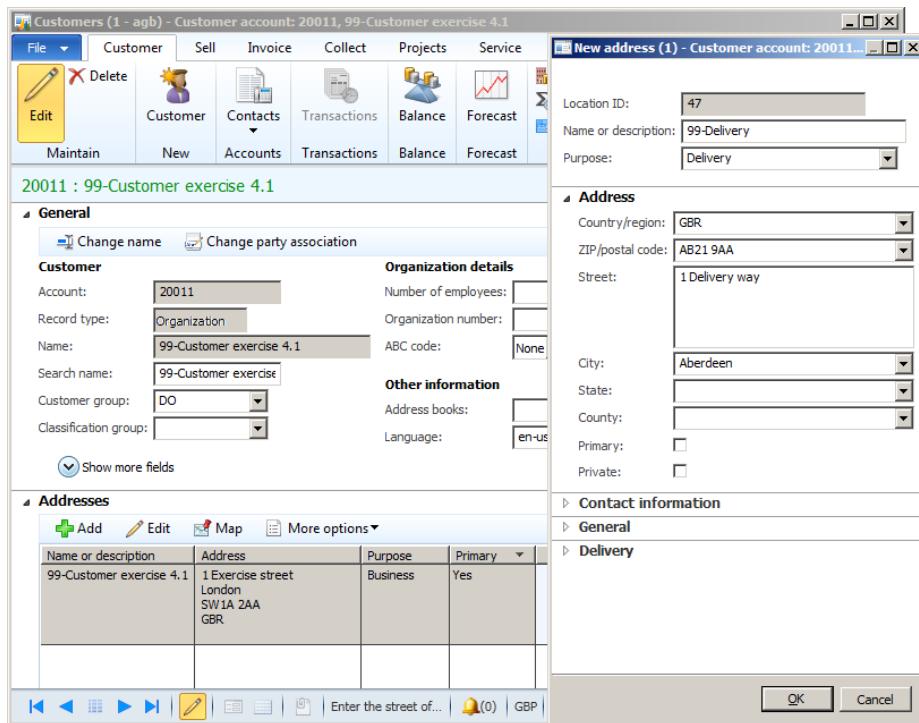


Figure 4-2: Registering the alternative delivery address in the customer form

The *Cash discount*, which should receive the terms recorded in exercise 3.1, is available on the tab *Payment defaults*. In order to enter the cash discount, the detail form has to be in edit mode.

Exercise 4.2 – Ledger Integration

You want to find out about ledger integration. To which summary account in the general ledger will an invoice for your new customer post?

Instructions

Like for vendors, the summary account for customers depends on the posting profile. In the accounts receivable parameters (*Accounts receivable> Setup> Accounts receivable parameters*, section *General* on the tab *Ledger and sales tax*) you may find the field *Posting profile* specifying the standard posting profile for customer transactions.

You may access this posting profile in the form *Accounts receivable> Setup> Customer posting profiles*, and check the summary accounts on the tab *Setup*. As shown in Figure 4-3, invoices to customers linked to the group “DO” will post to the ledger account “20010” in the sample company.

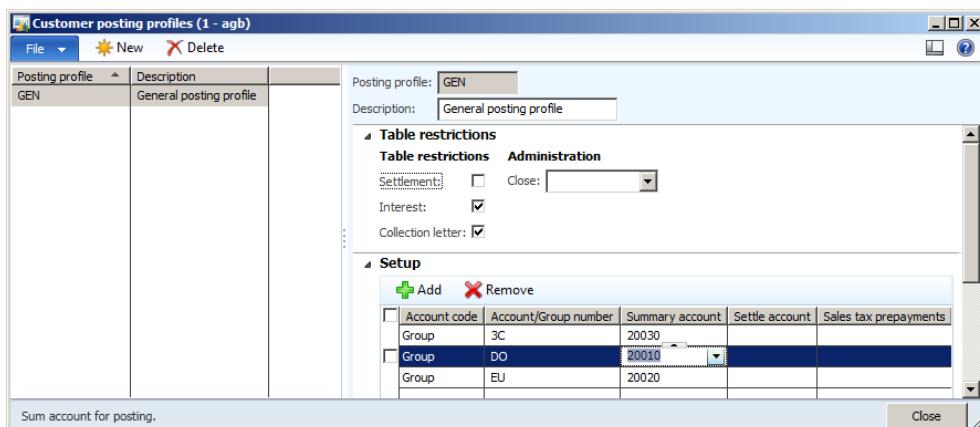


Figure 4-3: Specifying the customer summary account in the posting profile

Exercise 4.3 – Sales Categories

Your company offers installation services to the customers. Therefore you want to set up a sales category “##-installation” (## = your user ID) and make sure this sales category receives the item sales tax group referring to the standard tax rate.

Instructions

In order to register a new sales category, access the menu item *Sales and marketing> Setup> Categories> Sales categories* and click the button *Edit category hierarchy* in the

action pane strip to edit the product category hierarchy assigned to sales. The *Category hierarchy* form displays then, where you want to add the new category on top level (independent from the structure created in exercise 3.4), selecting the first node in the tree structure and clicking the button *New category node* in the action pane. In the new category, enter the *Name*, *Code* and *Friendly name* (see Figure 4-4).

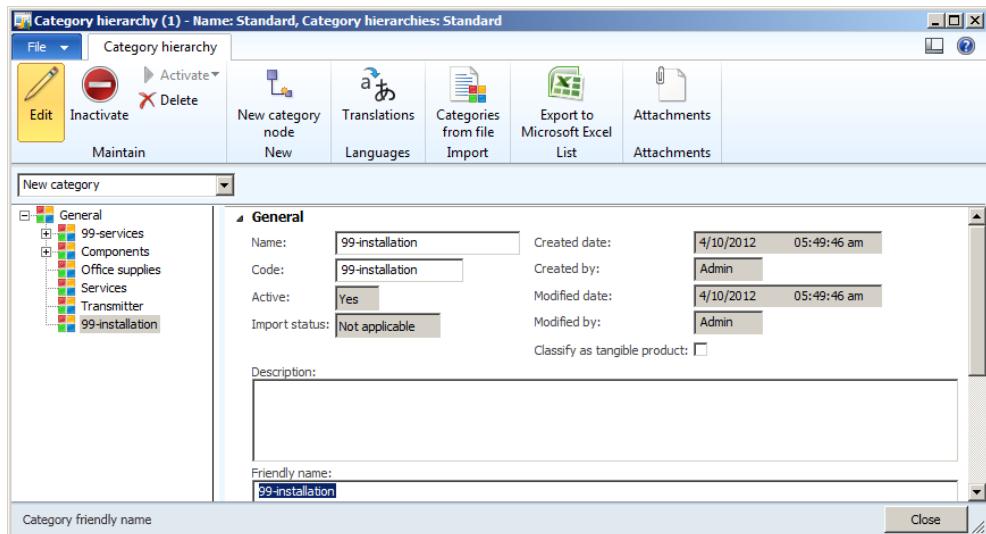


Figure 4-4: Inserting the new sales category in the category hierarchy

After closing the *Category hierarchy* form, you want to select the new category in the *Sales categories* form (closing and re-opening the form might be required to view the new category). On the tab *Item sales tax group* you may enter the tax group then.

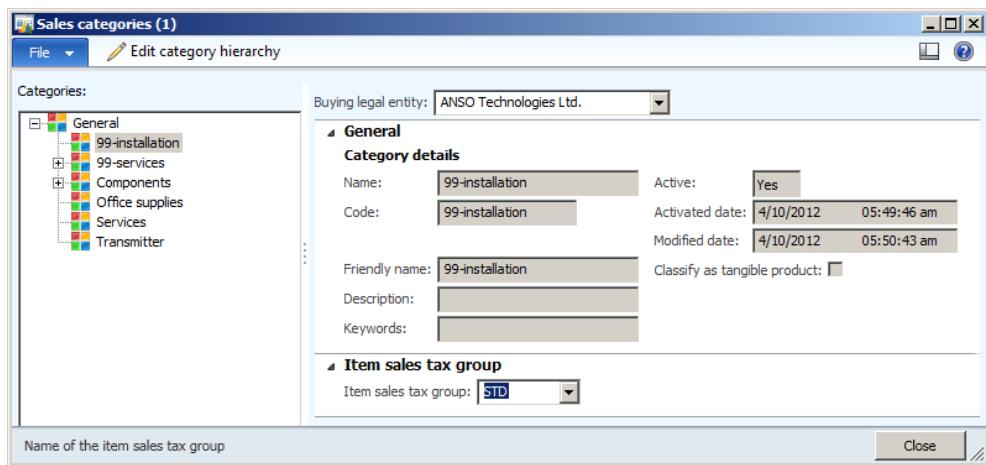


Figure 4-5: Entering the item sales tax group of a sales category

Exercise 4.4 – Price List

Your company requires an additional price list to cover new sales markets. Enter a new customer price group P-## (## = your user ID) for that price list and attach it to your customer of exercise 4.1.

The new price list should show a price of GBP 90.00 starting from the current date for the item of exercise 3.5. Record and post the price in a price/discount agreement journal. Finally you want to check if the price shows correctly on your customer.

Instructions

In order to register a new price list (price group), you want to access the form *Sales and marketing> Setup> Price/Discount> Customer price/discount groups*. In the price/discounts group form, make sure to select “Price group” in the lookup field *Show* then before inserting a new line to register an additional price list.



Figure 4-6: Creating a new price list

In order to register prices referring to the new price group, you want to access the form *Sales and marketing> Journals> Price/discount agreement journals*. In the journal form, click the button *New* in the action pane strip for registering a new journal. After selecting a journal name in the first column, enter a distinctive description in the 3rd column (*Name*).

After clicking the button *Lines* then, you may insert a journal line for the sales price. Make sure to choose “Price (sales)” in the column *Relation* before selecting “Group” in the *Account code* and your new price group in the column *Account selection*. For prices, the column *Item code* needs to show “Table” along with the product number in the *Item relation* before entering the price in the column *Amount in currency* (see Figure 4-7).

When you have finished entering the journal line, click the button *Post* in the action pane strip to activate the price.

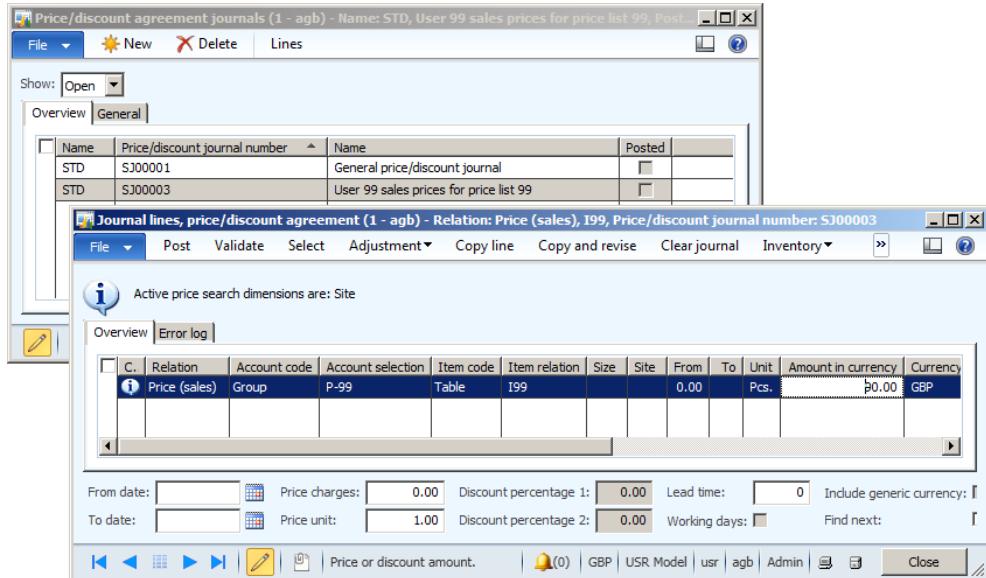


Figure 4-7: Registering the sales price referring to the new price list

Finally you want to link your customer to the new price list. After selecting your customer in the customer list page (*Sales and marketing> Common> Customers> All customers*), click the button *Edit* in the action pane to access the customer detail form. On the tab *Sales order default* you can find the lookup field *Price group*, where you have to choose your new price group. In order to check if the price applies correctly to your customer, click the button *Agreements* on the action pane tab *Sell* of the customer detail form then.

Exercise 4.5 – Line Discount

You agree with your customer of exercise 4.1 to grant a line discount of 10 percent for all items. Enter and post a trade agreement for that discount, which only applies to your customer. Make sure to enter a percentage, not a discount amount.

Which setting is required to make use of this discount in sales order lines?

Instructions

You may specify new line discounts in the form *Sales and marketing> Journals> Price/discount agreement journals*. Click the button *New* in the action pane strip of the journal form to register a new journal, select a journal and enter a distinctive description in the column *Name*.

After clicking the button *Lines* then, you may insert a journal line for the line discount. Make sure to choose "Line discount (sales)" in the column *Relation* before selecting "Table" in the *Account code* and the customer number of your customer in

the column *Account selection*. Selecting “All” in the *Item code* specifies a line discount applicable to all items.

For specifying a discount percentage, you need to select the percentage field in the lower part of the form (see Figure 4-8). The column *Amount in currency* in the line itself is here to enter a discount amount.

C.	Relation	Account code	Account selection	Item code	Item relation	Size	Site	From	To	Unit	Amount in currency
	Line discount (Sales)	Table	20011	All				0.00			0.00

From date: [] Price charges: [0.00] Discount percentage 1: [10.00] Lead time: [0] Include generic currency:
 To date: [] Price unit: [1.00] Discount percentage 2: [0.00] Working days: [] Find next:

Figure 4-8: Inserting the line discount for a specific customer

Finally, click the button *Post* in the action pane strip to activate the line discount.

As a prerequisite for applying the line discount in sales orders, the price/discount activation settings (*Sales and marketing> Setup> Price/Discount> Activate price/discount*) have to include a checkmark in the checkbox for the combination “Customer”/“All items” on the tab *Line discount*.

Exercise 4.6 – Sales Order

Your customer (entered in exercise 4.1) orders 20 units of your item entered in exercise 3.5. You may register the sales order starting in the customer form. Which quantity and which price display as default, where do they come from?

Switching to the header view, you want to check the delivery address and the price group of your order.

Instructions

In order to register a sales order, you may access the customer list page (*Sales and marketing> Common> Customers> All customers*) and search your customer. After selecting the customer, click the button *New/Sales order* on the action pane tab *Sell*.

Dynamics AX creates a sales order applying default data from your customer and immediately shows the line view of the sales order detail form, where you may enter the first order line. After selecting the item, the *Unit price* in the order line derives from the trade agreement for the sales price entered in exercise 4.4. The line

discount percentage derives from the trade agreement for the customer entered in exercise 4.5.

Since the default order quantity (from the default order settings) is different to the requested quantity, you have to override it. A dialog box with a warning message to apply the minimum quantity specified in the default order settings shows next (see Figure 4-9). You want to order the requested quantity anyhow, and therefore close this dialog box clicking the button *No*.

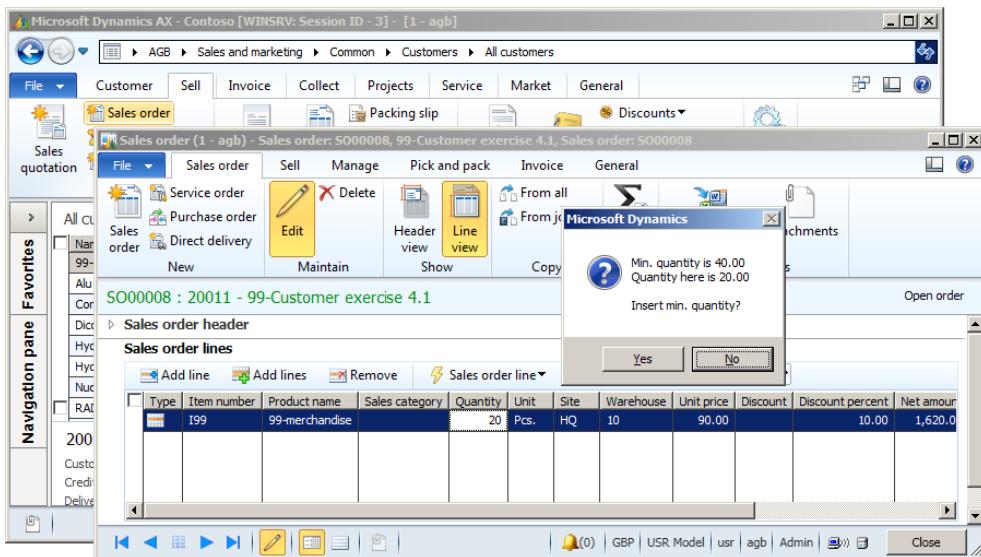


Figure 4-9: Dialog showing the minimum quantity when entering the sales order line

After switching to the header view by clicking the button *Header view* on the action pane tab *Sales order* of the order form, you may show the applicable *Price group* on the tab *Price and discount* of the sales order header.

Since your customer includes an alternative delivery address, that address is the default for delivery address of the order. You may view the delivery address of the order on the tab *Address*.

Exercise 4.7 – Charges

Circumstances require invoicing a handling fee to your customers. Enter a charges code C-## (## = your user ID) to which the standard tax rate applies, selecting the posting type “Customer revenue” and an appropriate revenue account for the credit posting.

In the sales order header of exercise 4.6, you want to make sure this new handling fee is charged to the customer by entering a charge of 10.00 pounds.

Instructions

You may manage charges in the form *Accounts receivable> Setup> Charges> Charges code*. After clicking the button *New* in the action pane strip you can enter the *Charges code*, the *Description* and the applicable *Item sales tax group* of the new charge. Switch to the tab *Posting* then, where you have to enter applicable ledger posting settings as shown in Figure 4-10.

Charges code	Description
C-99	Handling fee 99
FRG	Freight charges
HND	Handling fee
OTH	Other charges

Posting

Debit

- Type: Customer/Vendor
- Posting:
- Account:

Credit

- Type: Ledger account
- Posting: Customer revenue
- Account: 41010

Figure 4-10: Registering settings for ledger posting of the new sales charges code

After closing the charges code form, you want to access the sales order list page (*Accounts receivable> Common> Sales orders> All sales orders*) and select your order of exercise 4.6 there. Then click the button *Charges/Charges* on the action pane tab *Sell* in the sales order, which opens the charges transactions form referring to the order header.

After selecting your new *Charges code* in the charges transaction form, make sure to select the *Category “Fixed”* for entering a fixed charges amount as shown in Figure 4-11.

K.	Charges code	Category	Charges value
	C-99	Fixed	10.00

General

- Charges code: C-99
- Category: Fixed
- Charges value: 10.00
- Description: Handling fee 99
- Currency: GBP

Sales tax

Ledger

Intercompany

Figure 4-11: Inserting the fixed charge referring to the sales order header

Exercise 4.8 – Order Confirmation

Post and print the order confirmation for your order of exercise 4.6, selecting to display a print preview. Can you tell which amount shows in the order line and where the confirmation prints the charges?

Instructions

After making sure your order is selected in the sales order form (*Accounts receivable> Common> Sales orders> All sales orders*), click the button *Generate/Confirmation* on the action pane tab *Sell* to print the order confirmation.

In the posting form, select the checkboxes *Posting* and *Print confirmation*. Clicking the button *Printer setup/Confirmation* in the posting form, you may select the printing destination ("Screen").

The lines in the printed order confirmation show item quantity, price and discount as entered in exercise 4.6. The charges entered in exercise 4.7 display in the footer part of the order confirmation.

Note: As an alternative way for accessing the sales order form, you may choose the menu item in the *Sales and marketing* menu (instead of the *Accounts receivable* menu) or click the button *Related information/Orders/Sales orders* on the action pane tab *Sell* of the customer list page (*Sales and marketing> Common> Customers> All customers*) after selecting the appropriate customer.

Exercise 4.9 – Packing Slip

You need to find out, which order lines are available for shipping. The inquiry should not be limited to your orders; it should also include other orders available in your company. Which possibilities do you know?

Knowing your order of exercise 4.6 is among the orders to be shipped, you want to post the packing slip. Before posting, check following items in the sales order:

- Order status and document status
- Inventory quantity of the ordered item (button *Inventory/On-hand*)
- Inventory transaction related to the order line (button *Inventory/Transactions*)

Post and print a packing slip for the complete order quantity directly out of the sales order form, selecting a print preview as printing destination.

Now review the status of the items on the checklist above again. What is different after packing slip posting?

Instructions

In order to show order lines which are to be shipped until a certain date, you may select several inquiries including following menu items:

- *Sales and marketing> Common> Sales orders> Backorder lines*
- *Sales and marketing> Inquiries> Order status> Open sales order lines*
- *Sales and marketing> Inquiries> Order status> Backorder lines*
- *Inventory and warehouse management> Periodic> Release sales order picking*

Whereas the three inquiries named first are only applicable for displaying data, the release picking form additionally allows posting a picking list.

In order to check your sales order of exercise 4.6, you may access the sales order list page (*Sales and marketing> Common> Sales orders> All sales orders*). The order status is available in the column *Status* of the list page. After double-clicking on your order to access the sales order detail form, you may click the button *Show/Header view* on the action pane tab *Sales order* of the detail form to view the *Document status* on the tab *General* in the header view.

The status of your order shows “Open order” and the document status is “Confirmation” after posting the order confirmation in exercise 4.8. After switching to the line view, you may access the inquiries of inventory quantity and inventory transactions by clicking the button *Inventory/On-hand inventory* or *Inventory/Transactions* in the action pane strip of the *Sales order lines* tab. These inquiries show following results:

- The physical inventory is 60 units as a total of the packing slips posted in exercise 3.12 (The packing slip PS311 of exercise 3.11 has been reversed with credit note posting in exercise 3.18).
- The inventory transactions show a line with the ordered quantity in the issue status “On order”. The date fields *Physical date* and *Financial date* in the transaction are empty.

You may post the packing slip in the sales order form clicking the button *Generate/Packing slip* on the action pane tab *Pick and pack*. Selecting the option “All” in the field *Quantity* of the posting form you are going to post a packing slip for the total quantity. In order to post and print the packing slip, you have to select the checkboxes *Posting* and *Print packing slip* before finally posting the transaction by clicking the button *OK* in the posting form.

After posting the packing slip, the inquiries show following results:

- Order status “Delivered”; Document status “Packing slip”
- Inventory on-hand: 40 units (quantity before posting minus shipped quantity)
- Inventory transaction issue status “Deducted”;
Physical date according to packing slip posting;
Financial date empty

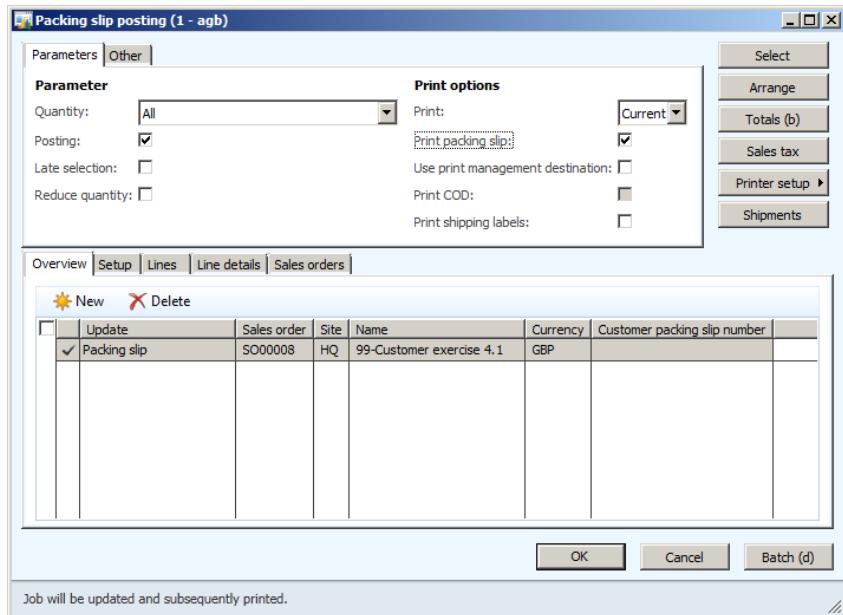


Figure 4-12: Posting form when posting a packing slip in sales

Note: If the checkbox *Picking requirements* is selected in the *Item model group* of your item, you have to post a picking list before packing slip posting.

Exercise 4.10 – Picking List

Your customer of exercise 4.1 orders another 20 units of the item entered in exercise 3.5. Enter an appropriate sales order.

Warehouse does not want to apply consolidated picking, but requires a picking list this time. Therefore, you want to post a picking list containing 10 units of the ordered item. Can you tell which setting controls if you need to enter picking list registration? If required, update the picking list registration.

Then post the packing slip for the picked items.

Instructions

Before starting to post the picking list, you may check if you need to enter picking list registration. Making sure the accounts receivable parameter *Picking route status* (*Accounts receivable> Setup> Accounts receivable parameters*, tab *Updates*) is set to “Completed”, you do not need to post a picking list registration to finish picking before packing slip posting.

Then register the sales order similar to the way described in exercise 4.6.

In order to prepare posting a partial quantity, enter the transaction quantity of 10 units in the column *Deliver now* of the sales order lines. Alternatively, you may

choose the column *Deliver now* in the *Line quantity* form (accessible by clicking the button *Line quantity* on the action pane tab *General* of the sales order form).

If you want to post a picking list in the sales order form, click the button *Generate/Picking list* on the action pane tab *Pick and pack*. In the posting form, select the option “Deliver now” in the field *Quantity* to apply the partial shipping quantity of 10 units entered in the order line before. Make sure the checkboxes *Posting* and *Print picking list* are selected as shown in Figure 4-13 and click the button *OK* to post and print the picking list.

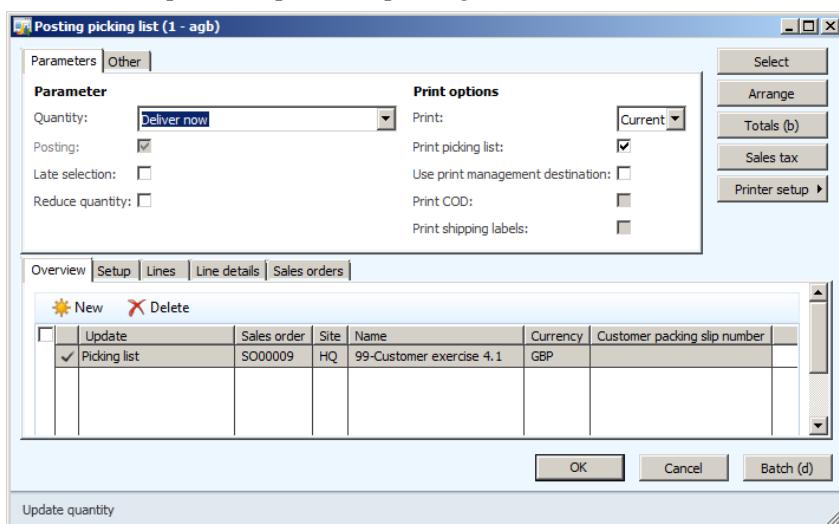


Figure 4-13: Posting the picking list

Then start posting the packing slip related to the picking list by clicking the button *Generate/Packing slip* on the action pane tab *Pick and pack* of the sales order form. In the posting form for the packing slip, select the option “Picked” in the lookup field *Quantity* to apply the picked quantity for posting. After selecting the checkboxes *Posting* and *Print packing slip*, click the button *OK* to post and print the packing slip finally.

Exercise 4.11 – Packing Slip Inquiry

You want to see the packing slip of exercise 4.10. Open the packing slip inquiry out of the sales order concerned. In a second step, open the packing slip inquiry choosing the appropriate menu path. Check packing slip header and lines and try to find out, if there are related ledger transactions.

Instructions

In order to display the posted packing slip starting in the sales order form, you may click the button *Journals/Packing slip journal* on the action pane tab *Pick and pack* of the order form.

In the packing slip inquiry, you may view the lines of the packing slip selected on the tab *Overview* of the inquiry by switching to the tab *Lines*. Clicking the button *Vouchers* on the tab *Overview* of the packing slip inquiry, you may access related ledger transactions.

If you want to access posted packing slips in the sales and marketing menu, you have to choose the menu item *Sales and marketing> Inquiries> Journals> Packing slip*. In the packing slip inquiry, you may find the requested packing slip by applying a filter as shown in Figure 4-14 (e.g. a filter by grid choosing the shortcut *Ctrl+G* or the command *File/Edit/Filter/Filter By Grid*).

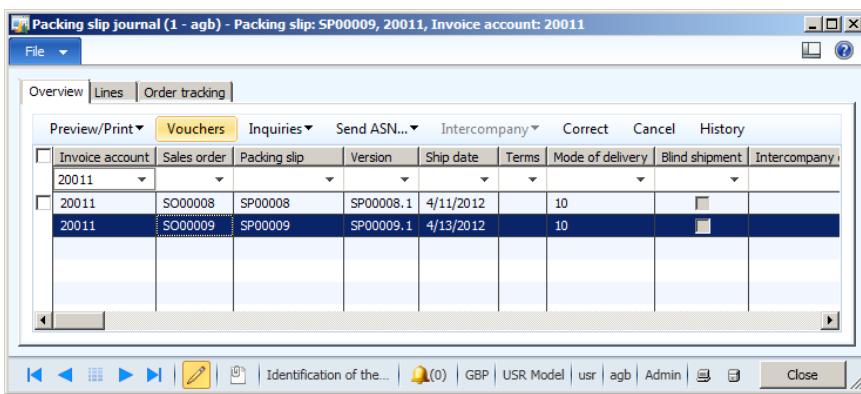


Figure 4-14: Packing slip inquiry applying a filter by grid

Exercise 4.12 – Invoice

You want to invoice the items shipped in exercise 4.9. Before posting the invoice, check following items:

- Order status and document status of the sales order
- Inventory transaction related to the order line (button *Inventory/Transactions*)

Post and print the invoice directly out of the sales order form, checking the invoice total in the posting form before posting.

Now review the status of the items on the checklist above again. What is different after invoice posting?

Instructions

Since you did not do any changes to the sales order after finishing exercise 4.9, the order status still is “Delivered” and the document status “Packing slip”. The inventory transaction still shows the issue status “Deducted”, the *Physical date* complies with the packing slip and the *Financial date* is empty.

Clicking the button *Generate/Invoice* on the action pane tab *Invoice* of the sales order form, you may post the invoice in the sales order form. In the invoice posting form, make sure the option “Packing slip” in the field *Quantity* is selected for invoicing the shipped quantity. The button *Totals* in the posting form is available to check the invoice total before posting the transaction as shown in Figure 4-15.

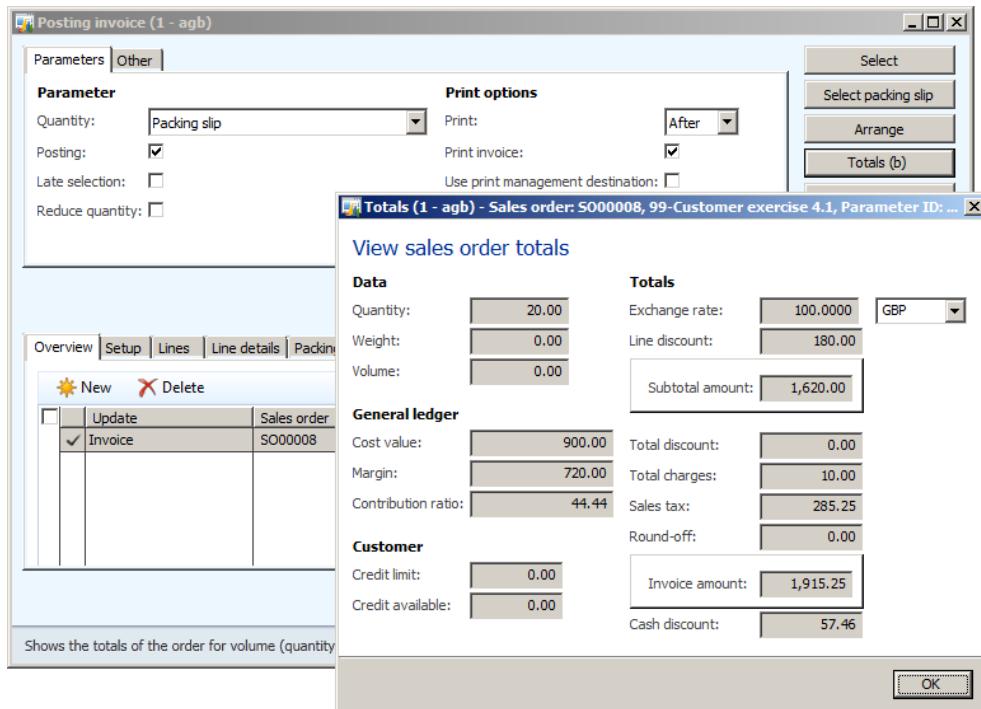


Figure 4-15: Showing totals before posting a sales invoice

After closing the *Totals* form, select the checkboxes *Posting* and *Print invoice* and click the button *OK* in the posting form to post and print the invoice.

When you have finished posting the invoice, the inquiries show following results:

- Order status “Invoiced”; Document status “Invoice”
- Inventory transaction issue status “Sold”;
- Physical date* according to packing slip posting;
- Financial date* according to invoice posting

Exercise 4.13 – Partial Invoice

You want to invoice the items picked and shipped in exercise 4.10. Post and print the invoice directly out of the sales order form, making sure to invoice only shipped items.

Instructions

After selecting the sales order of exercise 4.10 in the sales order form, click the button *Line quantity* on the action pane tab *General* of the order form to check that a quantity of 10 units of this order has been delivered. Alternatively, you may check the delivered quantity on the tab *Lines* of the packing slip inquiry (button *Journals/Packing slip journal* on the action pane tab *Pick and pack* of the order form).

In order to post the invoice, click the button *Generate/Invoice* on the action pane tab *Invoice* of the sales order form. When selecting “Packing slip” in the lookup field *Quantity* of the posting form, the posting form defaults the total quantity of all shipments not yet invoiced to the invoicing quantity.

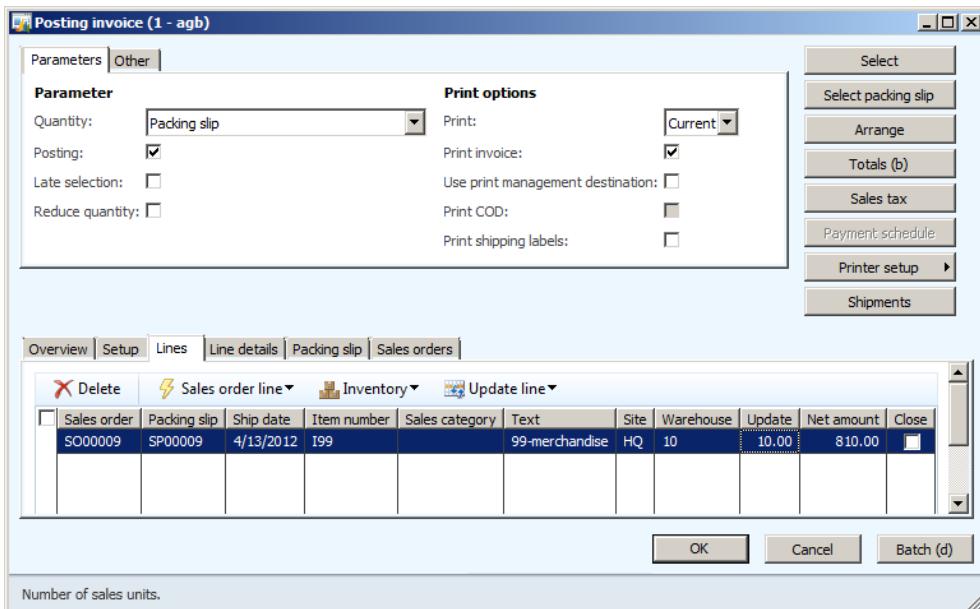


Figure 4-16: Accessing the tab *Lines* in the invoice posting form

You may check the invoicing quantity in the column *Update* on tab *Lines* of the posting form. In case of several partial shipments referring to an order, you may select to invoice specific packing slips clicking the button *Select packing slip* in the posting form.

If required, you may change the update quantity in the posting form after selecting “All” instead of “Packing slip” in the lookup field *Quantity*. Making sure the checkboxes *Posting* and *Print invoice* are selected, you may finally post the invoice clicking the button *OK* in the posting form.

Exercise 4.14 – Shipping with Invoice

Your customer of exercise 4.1 orders another unit of the product entered in exercise 3.5. In addition, he wants to order one hour of the installation service entered in exercise 4.3 for a price of GBP 110. This time you do not post a packing slip, you want to ship the items with the invoice.

Enter an appropriate sales order and immediately post the invoice. After posting the invoice, review the order status, the document status and the inventory transaction of the product.

Instructions

Record the sales order similar to exercise 4.6. Since the default order settings of your item include a minimum quantity of 40 units and a lot size (*Multiple* quantity) of 20 units, you have to click the button *No* rejecting the proposals in the dialog boxes for the minimum and for the multiple quantity when selling a quantity of one unit.

In addition to the order line for the item, you have to enter a second line with the *Sales category* of exercise 4.3 (see Figure 4-17).

The screenshot shows the Microsoft Dynamics AX Sales Order form. The title bar reads "Sales order (1 - agb) - Sales order: SO000010, 99-Customer exercise 4.1". The ribbon tabs are Sales order, Sell, Manage, Pick and pack, Invoice, and General. The action pane includes buttons for Service order, Purchase order, Sales order, Direct delivery, New, Edit, Delete, Header view, Line view, From all, From journal, Totals, Copy, View, Generate from template, and Attachments. The main area displays the sales order header and lines. The "Sales order lines" grid has columns: Type, Item number, Product name, Sales category, Quantity, Unit, Site, Warehouse, Unit price, Discount, Discount percent, and Net amount. Two lines are present: one for item I99 (99-merchandise) with a quantity of 1.00, Pcs., HQ, 10, unit price 90.00, discount 10.00, and net amount 81.00; and another for service 99-install... with a quantity of 1.00, h..., HQ, 10, unit price 110.00, discount 10.00, and net amount 99.00. The bottom navigation bar includes icons for back, forward, search, and close, along with buttons for Sales price of line per p..., Notifications (0), GBP, USR Model, usr, agb, Admin, and Close.

Type	Item number	Product name	Sales category	Quantity	Unit	Site	Warehouse	Unit price	Discount	Discount percent	Net amount
	I99	99-merchandise		1.00	Pcs.	HQ	10	90.00		10.00	81.00
		99-install...		1.00	h...	HQ	10	110.00		10.00	99.00

Figure 4-17: Inserting the sales order line for the sales category

Since you do not require an order confirmation or a packing slip this time, you may immediately post the invoice by clicking the button *Generate/Invoice* on the action pane tab *Invoice* of the sales order form. In the invoice posting form, you want to select the option "All" in the lookup field *Quantity*.

After posting the invoice, the inquiries show following results:

- Order status “Invoiced”; Document status “Invoice”
- Inventory transaction issue status of the item line “Sold”; *Physical date* and *Financial date* according to invoice posting

Exercise 4.15 – Invoice Inquiry

You want to view the invoice posted in exercise 4.12. Open the invoice inquiry and check the invoice header and lines as well as the related ledger transactions.

In exercise 4.2, you were looking for the summary account for your customer. Can you find the ledger transaction for this account? Finally, open the transaction origin form and check, to which modules your invoice has been posting.

Instructions

You may access the invoice inquiry in the sales order form by clicking the button *Journals/Invoice* on the action pane tab *Invoice*. If you want to access the posted invoice in the accounts receivable menu, you have to choose the form *Accounts receivable> Inquiries> Journals> Invoice journal* applying an appropriate filter to select the requested invoice.

The screenshot shows the 'Voucher transactions' window with the following data:

Journal ...	Date	Year closed	Ledger account	Currency	Amount in transaction currency	Amount	Amount...	Posting layer
GT00055	4/14/2012		41010-	GBP	-10.00	10.00	0.00	Current
GT00055	4/14/2012		20010	GBP	1,915.25	1,915.25	0.00	Current
GT00055	4/14/2012		10922	GBP	-900.00	900.00	0.00	Current
GT00055	4/14/2012		10921	GBP	900.00	900.00	0.00	Current
GT00055	4/14/2012		40210-HQ	GBP	-1,620.00	1,620.00	0.00	Current
GT00055	4/14/2012		35210	GBP	-285.25	285.25	0.00	Current
GT00055	4/14/2012		10310	GBP	-900.00	900.00	0.00	Current
GT00055	4/14/2012		51310-HQ	GBP	900.00	900.00	0.00	Current

Below the grid, there are fields for Description (Customer invoice SI00003), Posting type (Customer balance), Name (Accounts receivable domestic tr), and various navigation and search buttons.

Figure 4-18: Ledger transactions referring to the selected sales invoice

Like the packing slip inquiry, the invoice inquiry consists of a tab *Overview*, which shows invoice header data, and a tab *Lines*, which shows the lines of the invoice header selected on the tab *Overview*.

Clicking the button *Voucher* on the tab *Overview* of the invoice inquiry, you may access related ledger transactions. In the voucher transactions, you can view the transaction to the customer summary account (account “20010” in the sample company) as shown in the highlighted line of Figure 4-18.

Clicking the button *Transaction origin* in the voucher transactions, you may access the transaction origin form showing related transactions in all modules (in addition to the ledger transactions including customer and inventory transactions).

Exercise 4.16 – Free Text Invoice

You want to invoice specific services, for which no product or sales category is available, to your customer of exercise 4.1. Enter a free text invoice choosing an appropriate revenue account and post the invoice. What is the difference between a free text invoice and an invoice related to a sales order?

Instructions

You may record the new free text invoice in the form *Accounts receivable> Common> Free Text Invoices> All Free text invoices* by clicking the button *New/Free text invoice* in the action pane. Alternatively, you may click the button *New/Free text invoice* on action pane tab *Invoice* of the customer form after selecting your customer.

Make sure your customer is selected in the lookup field *Customer account* and switch to the tab *Invoice lines*. In the invoice lines, enter a line text in the column *Description* and select an appropriate ledger account in the column *Main account*. The line amount may be directly entered in the column *Amount* or specified by entering values in the columns *Quantity* and *Unit price*.

Description	Main account	Sales tax group	Item sales tax group	Quantity	Unit price	Amount
Line for exercise 4.16	41010	CDO	STD	1.00	100.00	100.00

Figure 4-19: Recording the free text invoice line

In order to post the invoice, click the button *Post/Post* in action pane of the free text invoice form. Similar to posting a sales order invoice, you want to select the checkboxes *Posting* and *Print invoice* in the posting form to post and print the invoice.

Unlike a sales order invoice, a free text invoice does not refer to a posted delivery or an item record.

Exercise 4.17 – Credit Note

Your customer complains defects on the items invoiced in exercise 4.12. You agree to an item return before crediting the invoice. Enter an appropriate return order and post the item receipt applying a suitable disposition code. After posting the packing slip return, you want to post and print the credit note.

Instructions

You may access item returns choosing the list page *Sales and marketing> Common> Return Orders> All return orders*. After clicking the button *New/Return order* in the action pane of the return order list page, a quick create dialog displays where you have to select your customer number before clicking the button *OK*.

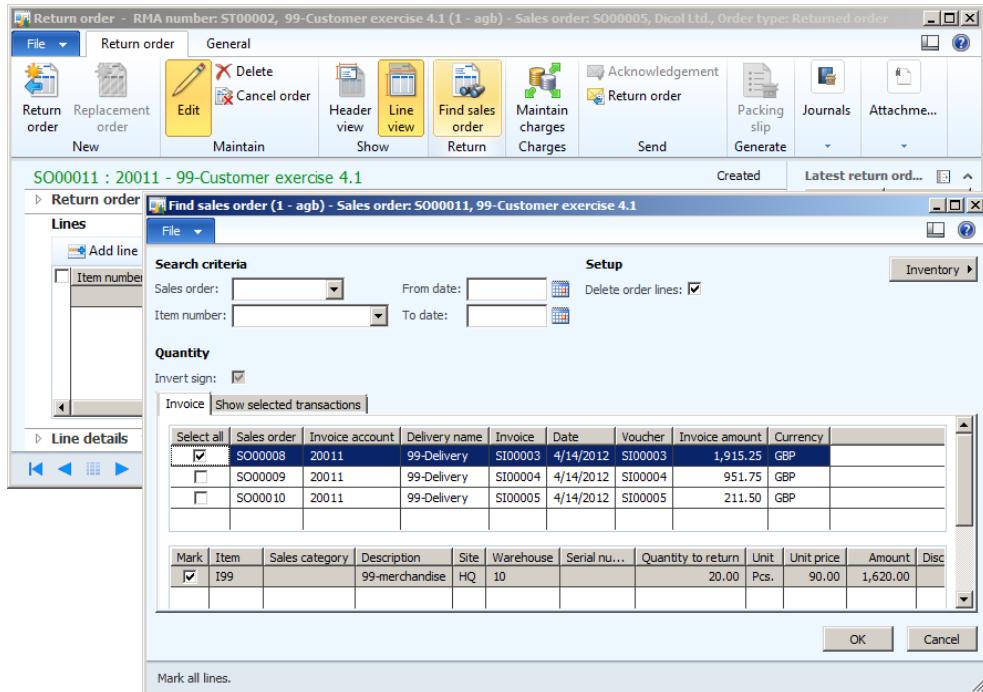


Figure 4-20: Selecting the invoice for the return order

The return order detail form then shows displaying the new return order, where you may click the button *Return/Find sales order* on the action pane tab *Return order*

to select your invoice of exercise 4.12 as shown in Figure 4-20. After clicking the button *OK* in the find order form, Dynamics AX transfers the invoice line to the return order lines.

Close the return order form then and access the item arrival journal (*Inventory and warehouse management> Journals> Item arrival> Item arrival*), where you have to insert a new journal header selecting a journal name on the tab *Overview*. On the tab *Default values* of the journal header, you want to choose the *Reference* “Sales order” and the *RMA number* of the return order entered in the return order form before (see Figure 4-21).

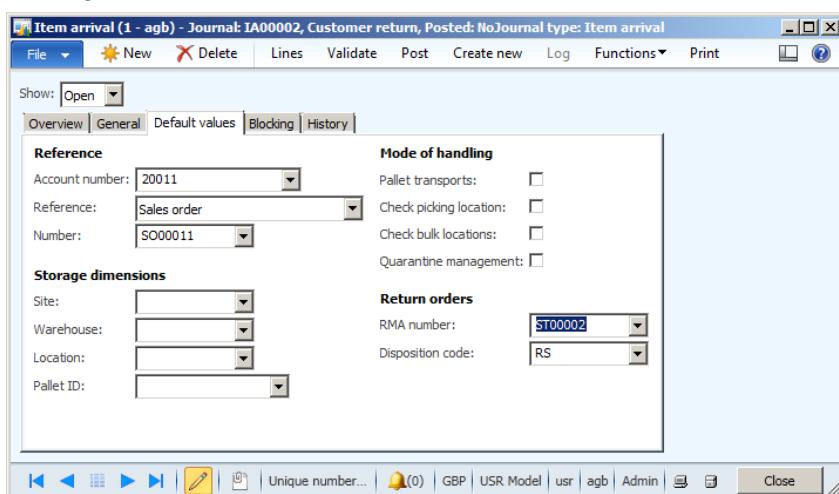


Figure 4-21: Registering the return order reference in the item arrival journal

In addition, you may choose a *Disposition code* to default the journal lines. When selecting the disposition code, check the column *Action* in the lookup making sure the selected code shows the option “Credit”.

Clicking the button *Functions/Create lines* in the journal header then, you may generate an arrival journal line applying to your return order line. In the dialog box for creating journal lines, you may select the checkbox *Initialize quantity* to default the quantity column in the journal lines.

Finally click the button *Post* in the item arrival journal to post the arrival and close the item arrival journal.

Then access the return order list page again (*Sales and marketing> Common> Return Orders> All return orders*). After selecting your return order, post the product receipt clicking the button *Generate/Packing slip* making sure the lookup *Quantity* in the posting form shows the option “All”. In the return order detail form, take a look at the sales order number assigned to the return order.

In order to post the credit note finally, open the regular sales order form (*Sales and marketing> Common> Sales Orders> All sales orders*) and select your return order filtering the sales order number of the return order. You may check the *RMA number* on the tab *General* in the header view of the sales order detail form.

Clicking the button *Generate/Invoice* on the action pane tab *Invoice* of the sales order form, you may finally post the credit note referring to the packing slip quantity posted in the return order before.

Exercise 4.18 – Direct Delivery

Your customer orders 100 units of the item entered in exercise 3.5. In order to avoid stocking that large quantity in your warehouse, you want to process a direct delivery. Enter an appropriate sales order and choose the option *Create direct delivery* to generate a purchase order for you vendor of exercise 3.2.

Your vendor confirms shipping the item with packing slip PS418. You want to post the product receipt in the purchase order. In the next step, check the status of the sales order, then post and print the sales invoice. After receiving the purchase invoice VI418, you want to post the invoice receipt.

Instructions

You may record the sales order in the sales order form (*Sales and marketing> Common> Sales orders> All sales orders*) or in the customer form (*Sales and marketing> Common> Customers> All customers*) similar to the previous exercises. Unlike when entering regular orders, you should select a specific site or warehouse ("HQ"/"90" in the sample company) for direct delivery orders to keep the inventory transactions separate from regular warehouse transactions. If you want to specify a default for the order lines of a sales order, you may enter the *Site* and *Warehouse* on the tab *General* of the header view.

In order to create the purchase order for direct delivery, click the button *New/Direct delivery* on the action pane tab *Sales order* of the sales order form. The create direct delivery form then displays as shown in Figure 4-22, where you have to select the checkbox *Include* (in the lines) or the checkbox *Include all* (header part) in order to specify the lines to be purchased. You may override the vendor number (defaulting from the released product) and the purchase price before finally generating the purchase order by clicking the button *OK*.

If your customer requires an order confirmation, you may generate it as described in exercise 4.8.

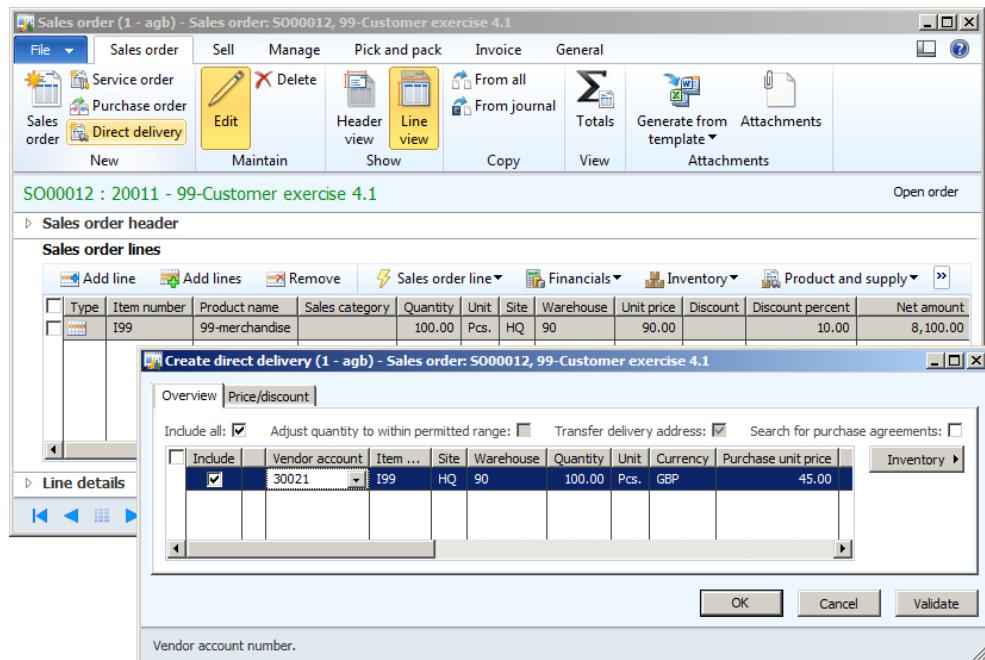


Figure 4-22: Creating the direct delivery out of the sales order

Clicking the button *Related information/Purchase order* on the action pane tab *General* of the sales order form you may directly access the related purchase order. Like any other purchase order, the purchase order has to be confirmed (click the button *Generate/Purchase order* or *Generate/Confirm* on the action pane tab *Purchase*) before you can post the product receipt.

When posting the product receipt by clicking the button *Generate/Product receipt* on the action pane tab *Receive* of the purchase order, a direct delivery automatically posts the sales packing slip in parallel. In order to print the sales packing slip, you may select the checkbox *Print sales documents* in the posting form of the product receipt.

After posting the packing slip receipt, the status of purchase order is "Received" and the status of the sales order is "Delivered". Finally, post the sales invoice (similar to exercise 4.12) and the purchase invoice (similar to exercise 3.14) independent from each other.

5 Production Control

Exercise 5.1 – Components

Your company wants to produce a new finished item, which consists of two components. You want to enter these components in Dynamics AX, registering an item with the product number I-##-C1 and the name “##-Component 1” (## = your user ID) and an item with the number I-##-C2 and the name “##-Component 2” in the released product form. Variants, serial or batch numbers do not apply.

For both items, choose an appropriate product subtype, item group (raw material/parts) and tracking dimension group. The selected storage dimension group should only contain site and warehouse as active dimensions. The item model group should be a group referring to the inventory model “FIFO”. The unit of measure for the items is “Pieces”, and the item sales tax groups should refer to the standard tax rate.

The base purchase price and the base cost price of both items is 100 pounds. In addition, select your vendor of exercise 3.2 to be the main vendor for the items. The flushing principle should be “Manual”. For purchasing and inventory, you should enter the main site in the *Default order settings* and the main warehouse of the main site in the *Site specific order settings*.

Note: If the number sequence for product numbers is set up for automatic numbering, you do not need to enter a product number.

Instructions

You may create the components in the shared product list page (*Product information management> Common> Products> All products and product masters*) and release them as described in exercise 3.5.

Alternatively, you may create the components directly in the released products list page (*Product information management> Common> Released products*). For this purpose you may click the button *New/Product* on the action pane tab *Product* of the released product form. In the *New released product* dialog you want to enter the *Product number* (if no automatic number sequence applies), the *Product name* and the *Search name* then (see Figure 5-1).

Clicking the button *Show more fields* at the bottom of the dialog, you may immediately enter additional data including the *Item model group*, the *Item group*, the *Storage dimension group* and the *Tracking dimension group* (see Figure 5-2). In addition, enter the standard item sales tax group for purchasing.

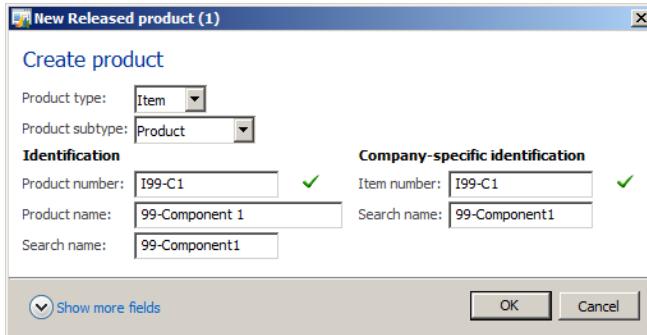


Figure 5-1: Creating a new released product

Note: If the Dynamics AX 2012 Feature Pack applies to your installation, additional fields referring to retail and process industries display. Leave them empty.

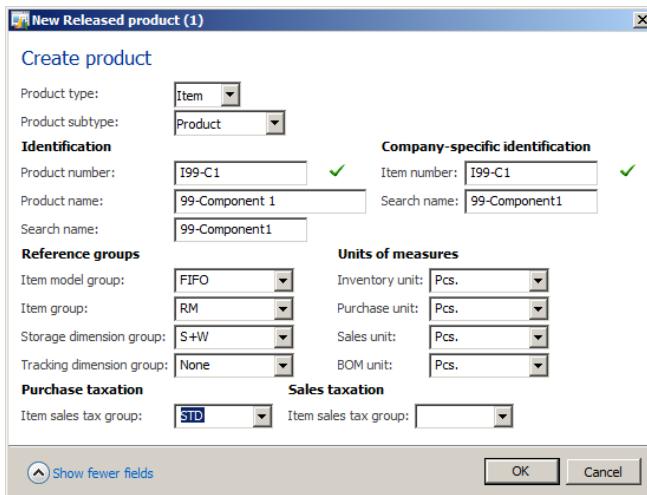


Figure 5-2: Registering additional data in the create released product dialog

Then close the dialog clicking the button **OK**. Making sure your new product is selected in the released products list page then, you may click the button **Edit** on the action pane tab *Product* to access the released product detail form.

In the released product detail form, you may check and edit the product data entered in the create dialog. However, editing of the product name is not possible there. For this purpose you would need to access the shared product form (*Product information management> Common> Products> All products and product masters*).

In order to register required purchasing data in the released product detail form, expand the tab *Purchase* and enter the base price of GBP 100.00 in the field *Price*. In the field *Vendor*, select your vendor of exercise 3.2 as the main vendor.

If the default for the unit of measurement is different from the unit required in this exercise ("Pieces") and you did not select the appropriate unit of measurement in

the *New released product* dialog, it may be necessary to change the inventory unit of your product on the tab *Manage inventory* before changing the purchase unit in the field *Unit* of the *Purchase* tab.

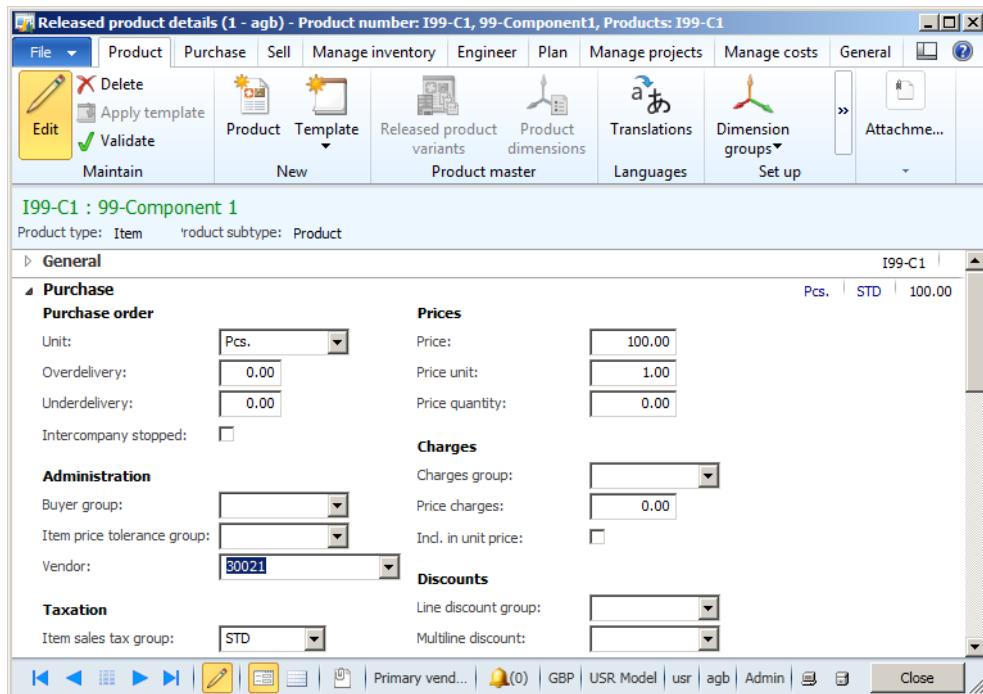


Figure 5-3: Entering purchase related data in the released product form

On the tab *Engineer*, choose the *Flushing principle* “Manual” to apply manual posting of item consumption. Since the components do not refer to standard cost price valuation, you may enter the base cost price of GBP 100.00 in the field *Price* on the tab *Manage costs*.

Then click the button *Order settings/Default order settings* on the action pane tab *Manage inventory* of the released product form and enter the main site (“HQ” of the sample company) in the fields *Purchase site* and *Inventory site* of the default order settings. Since you want to purchase the components, the *Default order type* “Purchase order” applies.

After closing the default order settings, you may access the site-specific order settings clicking the button *Order settings/Site specific order settings* on the action pane tab *Manage inventory*. In the site-specific order settings, you want to insert a line referring to the main site (“HQ”) containing the main warehouse (“10”) in the columns *Purchase warehouse* and *Inventory warehouse*.

After registering the first component, insert the second component. Optionally, you may at first create a template in the first product clicking the button *New/*

Template/Create personal template on the action pane tab *Product* of the released product detail form (not available in the list page). When creating the second product, select the template in the lookup *Apply template* of the *New Released product* dialog. No matter whether applying a template or not, you have to enter default order settings and site-specific order settings separately.

Exercise 5.2 – Finished Item

For the finished item, enter an item with the product number I-##-F (if no automatic number sequence is assigned) and the name “##-Finished product” in the released product form. Variants, serial or batch numbers do not apply.

Select an appropriate product subtype, item group (finished product) and tracking dimension group. The selected storage dimension group should only contain site and warehouse as active dimensions. The item model group should be a group referring to the inventory model “FIFO”. The unit of measure for the item is “Pieces”, and the item sales tax groups should refer to the standard tax rate.

The base cost price is 500 pounds and the base sales price 1,000 pounds. For inventory and sales, you should enter the main site in the *Default order settings* and the main warehouse of the main site in the *Site specific order settings*.

Instructions

You may insert the finished item in the released products form including data for the *Product number*, the *Product name*, the *Search name*, the *Item model group*, the *Storage dimension group*, the *Tracking dimension group* and the units of measurement similar to the components as described in the previous exercise.

Unlike components, the finished product refers to a different item group specifying separate ledger accounts for inventory posting (“FP” in the sample company). Since the product is intended to be sold, make sure to enter the *Item sales tax group* for sales and the base sales price on the tab *Sell* of the released product detail form.

After entering the base cost price of GBP 500.00 in the field *Price* on the tab *Manage costs*, click the button *Order settings/Default order settings* on the action pane tab *Manage inventory* to access the default order settings. For a finished product referring to a bill of materials, select the *Default order type* “Production”. In the fields *Inventory site* and *Sales site* of the default order settings, enter the main site (“HQ” of the sample company). Then close the default order settings and open the site-specific order settings clicking, where you want to insert a line referring to the main site (“HQ”) containing the main warehouse (“10”) in the columns *Inventory warehouse* and *Sales warehouse*.

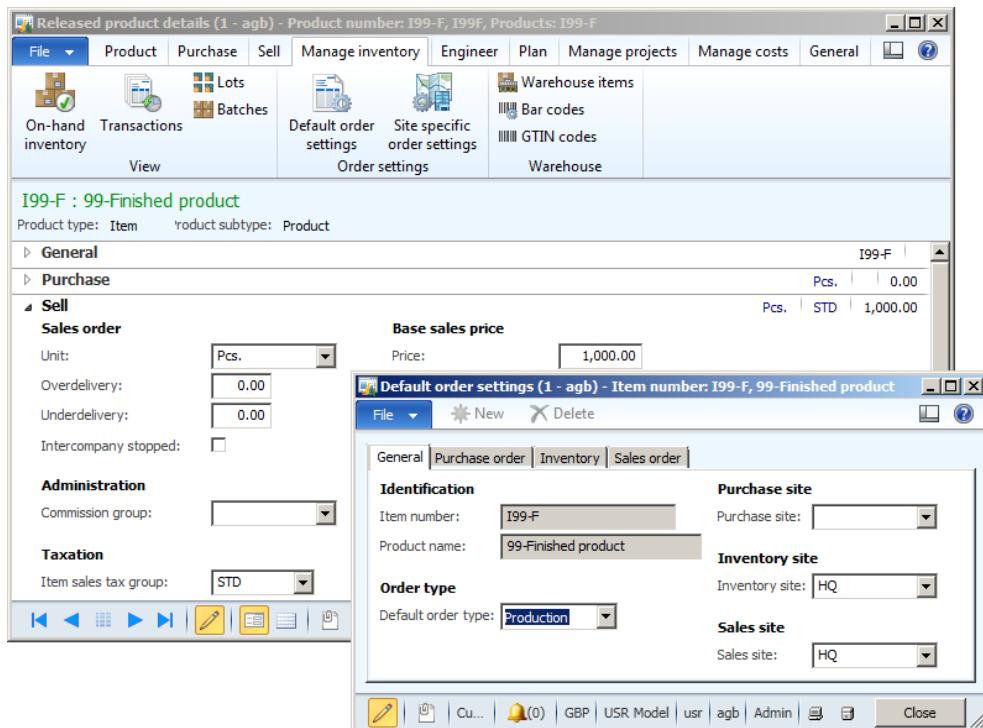


Figure 5-4: Entering default order settings for the finished product

Note: If working in the Microsoft Dynamics AX 2012 Feature Pack, the lookup *Production type* is available on the tab *Engineer* of the released product form. In this case you have to select the option “BOM” there. This setting parallel provides the default value “Production” for the default order settings.

Exercise 5.3 – Bill of Materials

Once item records for the finished item and its components are available, you may enter a bill of materials for the finished item of exercise 5.2 choosing the appropriate button in the action pane of the released product form.

The BOM applies to the main site and contains two units of the first and one unit of the second item entered in exercise 5.1. The warehouse for picking the components should be the main warehouse. Once you have finished entering the components, approve and activate the BOM.

Instructions

In order to register a bill of materials in the released products form, click the button *BOM/Lines* on the action pane tab *Engineer* after selecting your finished item. In the BOM lines form, click the button *Create BOM* in the action pane strip of the upper pane to set up a new bill of materials.

In the dialog box which shows then, enter the item name in the field *Description* and the main site in the field *Site*. After closing the *Create BOM* dialog box clicking the button *OK*, you may enter the components in the lower part of the BOM lines form as shown in Figure 5-5.

BOM	Name	Site	From date	To date	From qty.	Active	Approved by	Approved
BM00005	99-Finished product	HQ			0.00	<input type="checkbox"/>		<input type="checkbox"/>

Item number	Size	Warehouse	Resource consumption	Quantity	Per series	Unit	Conf...	Item type	Product name
I99-C1	10		<input type="checkbox"/>	2.0000	1	Pcs.			99-Component 1
I99-C2	10		<input checked="" type="checkbox"/>	1.0000	1	Pcs.			99-Component 2

Figure 5-5: Registering the required BOM lines

When you are finished with BOM registration, you may approve the bill of materials clicking the button *Approve* in the action pane strip of the upper pane. In the lookup field *Approved by* of approval dialog, select the employee responsible for the approval (e.g. your own employee ID). After selecting the checkbox *Approve bill of materials?*, you may click the button *OK* in the dialog to approve the BOM and the BOM version.

Clicking the button *Activation* in the BOM lines form activates the BOM version, which means it is the default BOM version for the finished item then.

Exercise 5.4 – Route Setup

In order to better understand the function of capabilities, route groups and cost categories, you want to set them up.

As a start, register a capability C-## (## = your user ID) with the name “##-specific”. Then you want to enter a route group R-## for manual posting of working time consumption. Estimation and costing should be based on setup time and run time.

Finally you want to set up a new cost category G-## (together with a shared category applying to production), assigning an appropriate cost group of your choice, ledger accounts similar to existing cost categories, and an activated cost price of 100 pounds.

Instructions

You may register resource capabilities in the form *Organization administration> Common> Resources> Resource capabilities*. After clicking the button *New* in the action pane strip there, enter the new capability ID and description (see Figure 5-6).

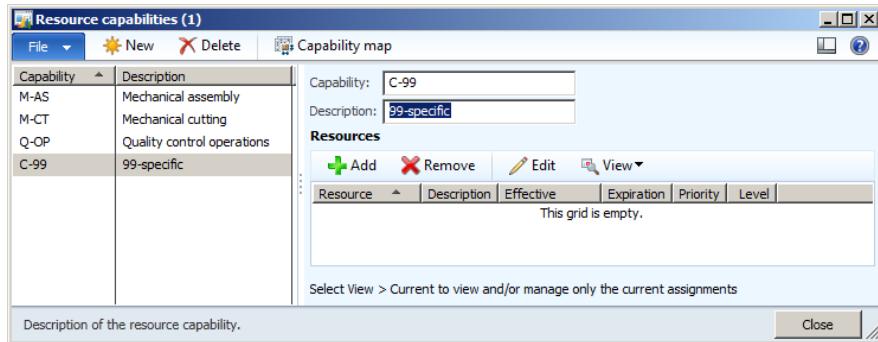


Figure 5-6: Creating a new capability

Route groups are available in the form *Production control> Setup> Routes> Route groups*. After clicking the button *New* and entering the group ID and name, you may switch to the tab *General* and select the checkboxes *Setup time* and *Run time* in the field group *Estimation and costing*. This setting specifies that estimation and costing will calculate setup and run time.

In order to specify manual posting of time consumption, you want to make sure all checkboxes in the field group *Automatic route consumption* are cleared as shown in Figure 5-7.

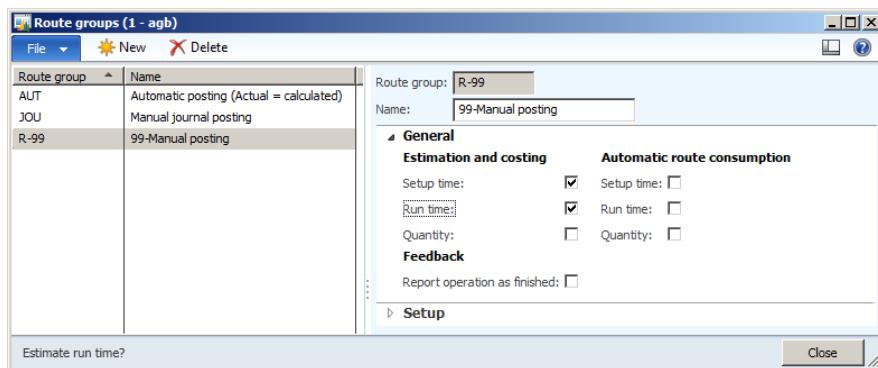


Figure 5-7: Setting up the new route group

Before you can insert a new cost category, you have to set up a related shared category in the form *Production control> Setup> Routes> Shared categories*. After clicking the button *New* in the shared category form, enter the category ID and the name of the category. In order to be able to use the category in production control, select the checkbox *Can be used in Production*.

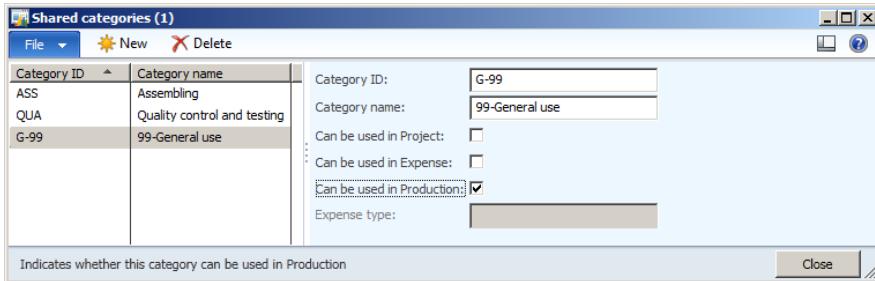


Figure 5-8: Entering the shared category

When you have finished creating the shared category, you may insert the related cost category in the form *Production control> Setup> Routes> Cost categories*. After clicking the button *New* in the action pane strip of the cost categories form, select the new shared category in the lookup *category ID* and – on the tab *Production* – the cost group (e.g. “RAS” in the sample company). On the tab *Ledger-resources*, enter applicable ledger accounts (refer to existing cost categories to learn appropriate accounts).

In order to specify the applicable cost price, click the button *Price* in the cost category form to access the cost category prices. In the cost category price form, insert a line containing the cost price per hour as shown in Figure 5-9 before clicking the button *Activate* to activate the price.

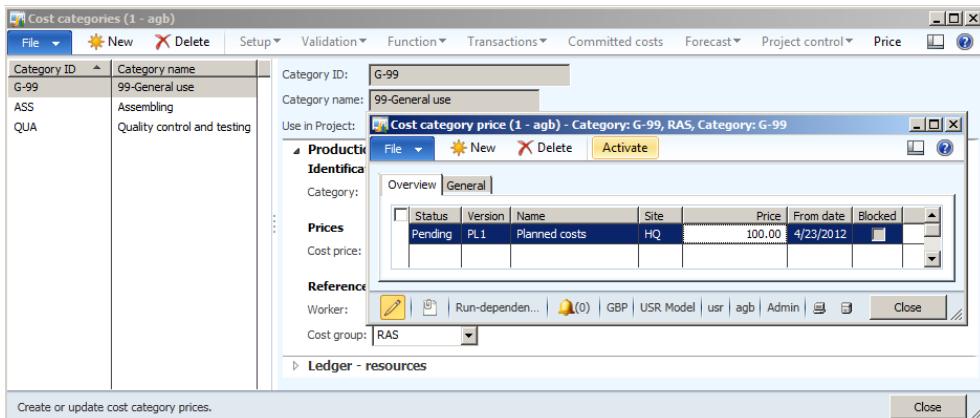


Figure 5-9: Registering the cost price for the new cost category

Exercise 5.5 – Resources and Resource Group

In order to produce the finished product of exercise 5.2, new resources are required. Enter a new resource group W-## (## = your user ID) with the name “##-assembly”, referring to the main site and an appropriate production unit. The cost categories are the ones entered in exercise 5.4. For the resource group calendar, choose a regular calendar.

Then you want to enter two new resources, W-##-1 and W-##-2, of the type "Machine". For both resources, the route group and the cost categories of exercise 5.4 apply. The ledger accounts for the resources may be similar to existing resources. Assign both resources to the new resource group W-#, but only the resource W-##-2 to the capability entered in exercise 5.4.

Instructions

You may enter the new resource group in the form *Organization administration> Common> Resources> Resource groups* clicking the button *New/Resource group* in the action pane. After entering identification, description and site you may switch to the tab *Operation*, where you want to select the cost category of exercise 5.4 in the *Setup category* and the *Run time category*. On the tab *Calendars* you may assign the calendar to the resource group as shown in Figure 5-10.

Resource group	Description	Site
ASL	Assembly lines	HQ
FAS	Final assembly	HQ
TLA	Testing laboratory	HQ
TTO	Testing tool	HQ
W-99	99-assembly	HQ

Resource group: W-99
 Description: 99-assembly
 Site: HQ

General
 Operation
 Ledger
 Financial dimensions
Calendars

Add Remove Edit View

Calendar	Expiration
STD	Never

Identification of calendar.

Figure 5-10: Entering the new resource group

Then close the resource group form and open the form *Organization administration> Common> Resources> Resources*. Clicking the button *New/Resource* in the action pane, you may create a new resource entering identification and description. In the lookup *Type* you want to leave the default "Machine". Since the exercise does not specify any requirements on efficiency percentage or finite capacity settings, you may also leave the defaults on the tab *General*.

On the tab *Operation*, you may select the *Route group* as well as the *Setup category* and the *Run time category* choosing the groups you have entered in exercise 5.4.

On the tab *Ledger*, you may select ledger accounts similar to the accounts specified on existing resources. The ledger account fields on the resource may remain empty, if the production control parameter *Ledger posting* is not set to "Item and resource" (*Production control> Setup> Production control parameters, tab General*).

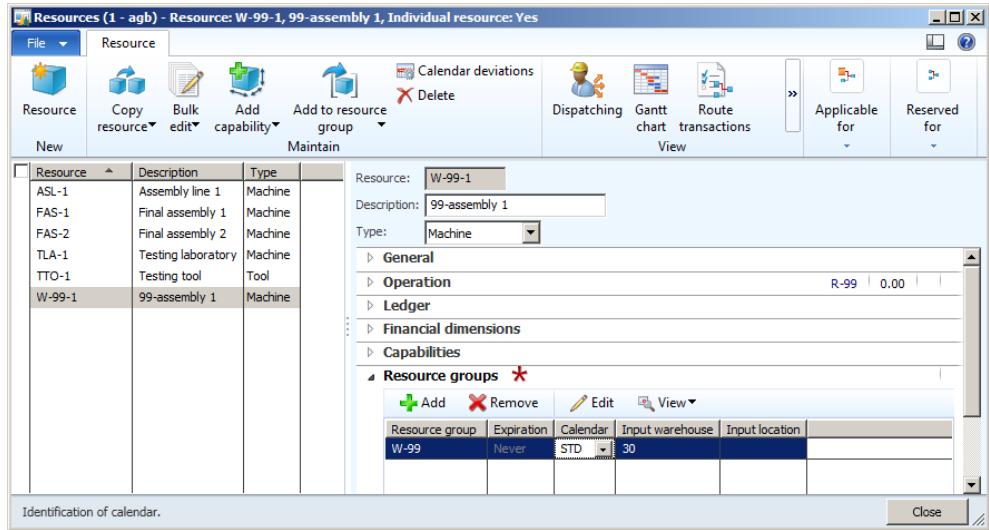


Figure 5-11: Entering a resource and assigning it to the resource group

On the tab *Resource groups* of the resource form, you may click the button *Add* in the action pane strip and assign the new resource to your resource group and calendar (see Figure 5-11).

After creating the first resource, you may enter the second resource the same way. In addition to the settings of the first resource, the second resource has to be assigned to the capability of exercise 5.4. You may do this on the tab *Capabilities* clicking the button *Add* in the action pane strip.

Exercise 5.6 – Operation

In order to produce your product, you need a new operation. Register that operation ## (## = your user ID) with the name “##-processing”.

Instructions

In order to register a new operation, you may access the form *Production control> Setup> Routes> Operations*.

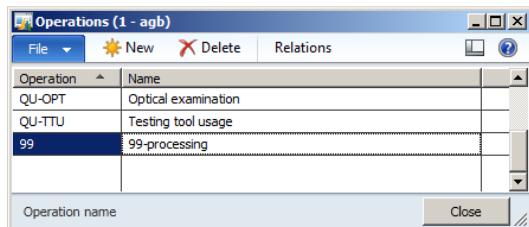


Figure 5-12: Registering the new operation

In the operations form, you want to insert a new record with operation ID and name as shown in Figure 5-12.

Exercise 5.7 – Route

Manufacturing your product also requires a new route. You may enter this route based on the elements set up in previous exercises.

After selecting your item I-##-F of exercise 5.2 in the released product form, open the route form clicking the appropriate button. Insert a new route, which contains the operation ## of exercise 5.6 as the only route operation.

The run time for the operation is one hour per unit. Select the resource W-##-1 of exercise 5.5 as costing resource, providing defaults for route group and cost categories. Resources applicable to the operation must belong to the resource group W-## and show the capability C-## of exercise 5.4.

Finally approve and activate the route.

Instructions

Entering a new route works similar to entering a new bill of materials. After selecting the finished product in the released product form (*Product information management> Common> Released products*), you want to click the button *View/Route* on the action pane tab *Engineer*. In the route form, you want to click the button *Create route* in the action pane strip of the upper pane to set up a new route.

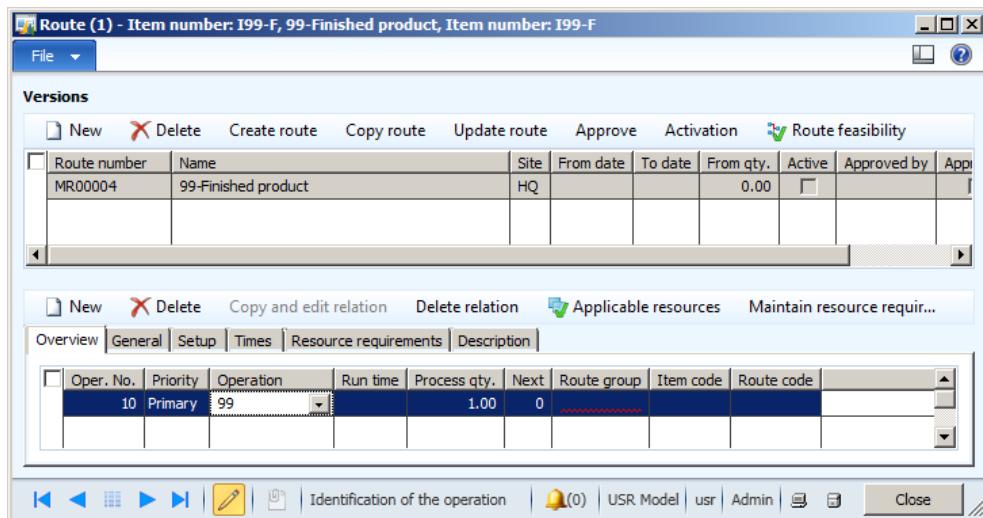


Figure 5-13: Registering the new route

In the dialog box which shows then, you may enter the item name in the field *Description* and the main site in the field *Site*. After closing the *Create route* dialog box clicking the button *OK*, you may insert a new route operation clicking the

button *New* in the lower part of the route form. In the operation line, select your operation of exercise 5.6 as shown in Figure 5-13.

Then you may access the lookup field *Costing resource* on the tab *Setup*, where you want to select the first resource entered in exercise 5.5. Select the button *Yes* in the dialog which displays then, transferring defaults for the route group and cost categories from the costing resource to the route operation.

Since Dynamics AX also transfers default time settings from the costing resource, you have to enter the *Run time* of 1.00 on the tab *Times* (or the tab *Overview*) afterwards.

On the tab *Resource requirements*, you may insert a line referring to the resource group of exercise 5.5 and a second line referring to the capability (see Figure 5-14). When entering the first requirement (concerning the resource group), you want to click the button *No* in the dialog which asks whether to use this resource group for costing and to override the costing data already entered.

Requirement type	Requirement	Operation scheduling	Job scheduling
Resource group	W-99	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Capability	C-99	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 5-14: Specifying resource requirements for a route operation

When you are finished registering the route operation, you may approve the route clicking the button *Approve*. In the lookup field *Approved by* of approval dialog, select the employee responsible for the approval (e.g. your own employee ID). After selecting the checkbox *Approve route?*, you may click the button *OK* in the dialog to approve the route and the route version.

Clicking the button *Activation* in the route form activates the route version, which means it is the default route version for the finished item then.

Exercise 5.8 – Production Order

Your company needs five pieces of the finished item entered in exercise 5.2. Enter an appropriate production order and check the bill of materials and the route in the order.

Instructions

In order to register a production order in the form *Production control> Common> Production Orders> All production orders*, you may insert a new record clicking the button *New/Production order* on the action pane tab *Production order*.

Dynamics AX then shows the *Create production order* dialog, where you want to choose your finished item. The finished item provides the default for the *BOM number* and the *Route number*. In the field *Quantity*, you have to update the order quantity to five units as shown in Figure 5-15 according to the exercise.

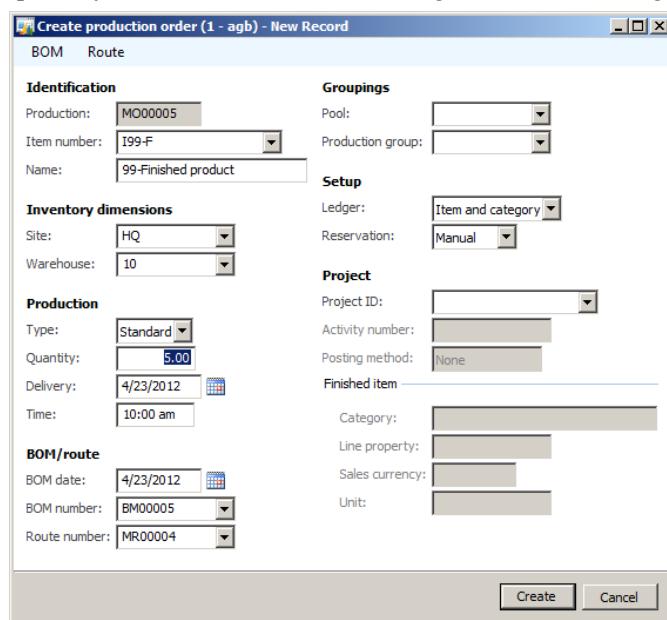


Figure 5-15: Entering the order quantity in the create production order form

Clicking the button *Create* in the create order dialog finally inserts the new production order in the status “Created” as shown in Figure 5-16.

If you want to edit the bill of materials, you may click the button *Production details/BOM* on the action pane tab *Production order* of the production order form. Editing the route is possible clicking the button *Production details/Route*.

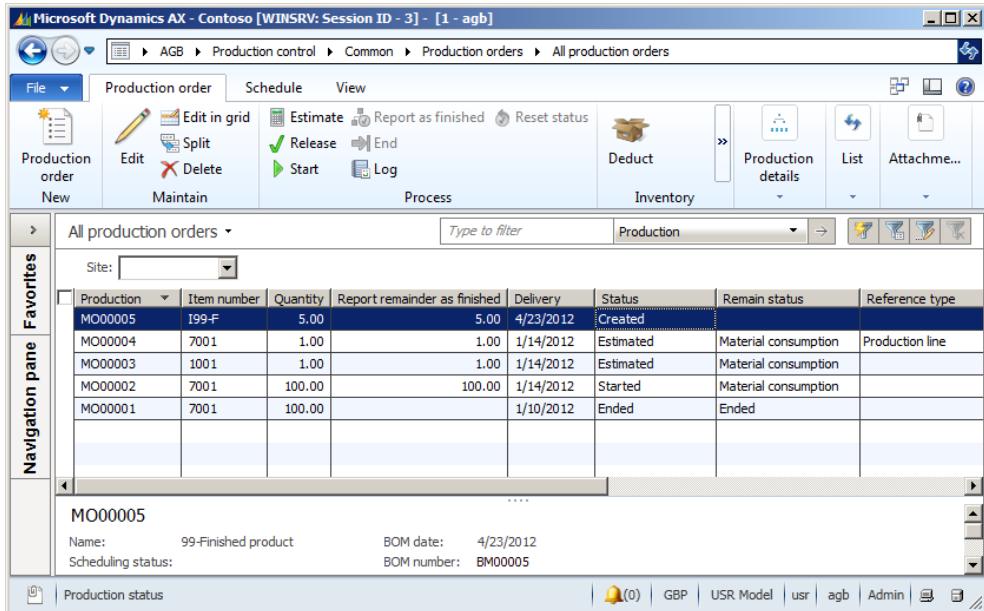


Figure 5-16: The new production order in the production order list page

Note: If working in the Microsoft Dynamics AX 2012 Feature Pack, the additional button *New/Batch order* is available on the action pane tab *Production order* of the production order form. Batch orders, which refer to process manufacturing, are similar to regular production orders, but provide additional functionality including the option to manage by-products and co-products.

Exercise 5.9 – Change Status

Run estimation for your production order of exercise 5.8. Once the estimation is finished, check the price calculation. Then you want to update the order choosing to run operations scheduling, job scheduling and releasing one after the other.

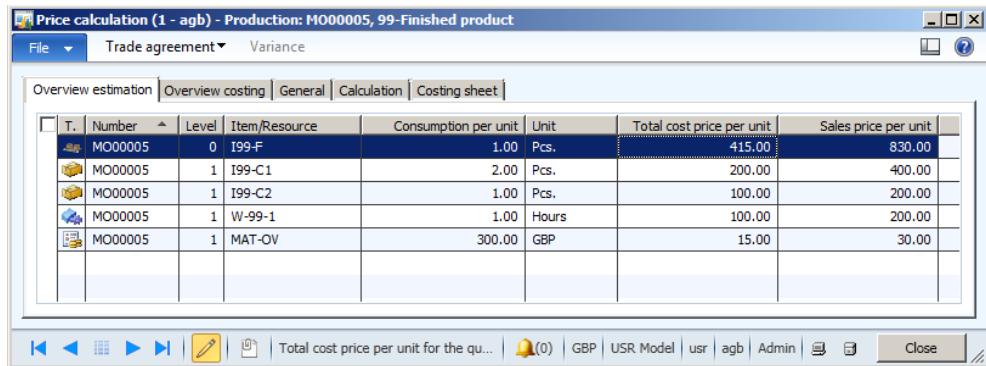
When starting the order, make sure to print a complete picking list as a print preview. You do not want to post the picking list. Is it possible to apply these settings as a default for all users?

Instructions

After selecting your order in the production order form, you may run the estimation clicking the button *Process/Estimate* on the action pane tab *Production order*.

You may then access the cost price calculation based on the costs of component items and resource operations by clicking the button *Related information/Price calculation* on the action pane tab *View*. On the tab *Overview Estimation* of the

calculation form, you may view the cost and sales price calculation for one unit of your finished item as shown in Figure 5-17.



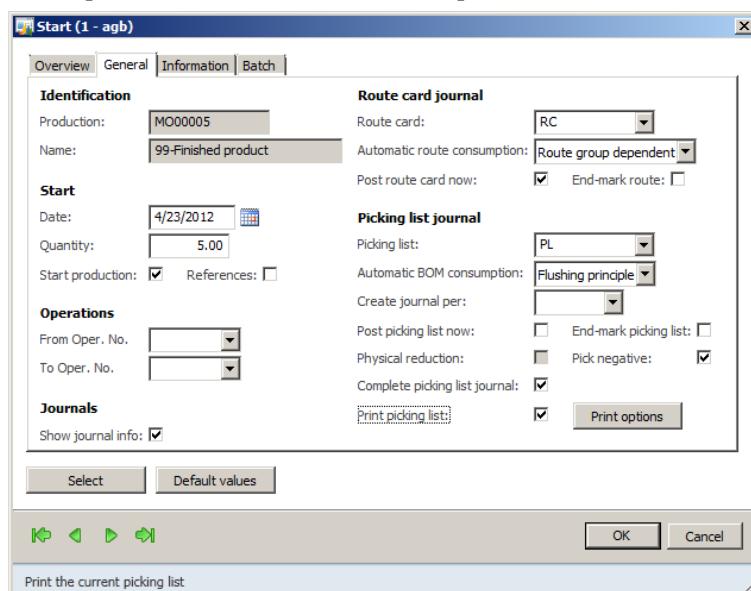
The screenshot shows a software interface titled 'Price calculation (1 - agb) - Production: MO00005, 99-Finished product'. The main area displays a table with the following data:

T.	Number	Level	Item/Resource	Consumption per unit	Unit	Total cost price per unit	Sales price per unit
	MO00005	0	I99-F	1.00	Pcs.	415.00	830.00
	MO00005	1	I99-C1	2.00	Pcs.	200.00	400.00
	MO00005	1	I99-C2	1.00	Pcs.	100.00	200.00
	MO00005	1	W-99-1	1.00	Hours	100.00	200.00
	MO00005	1	MAT-OV	300.00	GBP	15.00	30.00

Figure 5-17: Inquiry of the price estimation

You may run operations scheduling and job scheduling of the production order by clicking the button *Production order/Schedule operations* and *Production order/Schedule jobs* on the action pane tab *Schedule* of the production order form then.

In order to release the production order, click the button *Process/Release* on the action pane tab *Production order* of the production order form.



The screenshot shows the 'Start (1 - agb)' dialog box. The 'General' tab is selected. The 'Identification' section contains 'Production: MO00005' and 'Name: 99-Finished product'. The 'Start' section includes 'Date: 4/23/2012', 'Quantity: 5.00', and 'Start production: References: '. The 'Operations' section has 'From Oper. No.' and 'To Oper. No.' dropdowns. The 'Journals' section has 'Print picking list: Print options: '. At the bottom, there are 'Select' and 'Default values' buttons, and a footer with 'OK', 'Cancel', and a note 'Print the current picking list'.

Figure 5-18: Printing the picking list when starting the production order

Then start the production order clicking the button *Process/Start*. In order to print a complete picking list when starting the order, select the checkboxes *Complete picking list journal* and *Print picking list* on the tab *General* of the update form as shown in Figure 5-18. Clearing the checkbox *Post picking list now* will prevent

posting the picking list. Since the option selected in the lookup *Automatic BOM consumption* is “Flushing principle” and you have set the flushing principle of your BOM items to “Manual” in exercise 5.1, the picking list journal will not contain a consumption quantity.

Clicking the button *Print options* in the update form, you may select the print destination “Screen” to show a print preview.

In order to specify the update settings as a default for all users, you may click the button *Default values* in the update form. In the default value form, you have to adjust the update settings as required before clicking the button *User default*.

Exercise 5.10 – Purchasing Components

In order to process the production order of exercise 5.8, the required components need to be available in inventory.

Enter a purchase order, purchasing nine units of the first and five units of the second item of exercise 5.1 from your vendor of exercise 3.2. Once you have finished entering and confirming the purchase order, you want to post the packing slip receipt and the vendor invoice.

Instructions

You may enter the purchase order in the purchase order form, which you may access clicking the button *New/Purchase order* on the action pane tab *Procurement* of the vendor list page (*Procurement and sourcing> Common> Vendors> All vendors*) like in Chapter 3. Alternatively, you may access the purchase order form through the menu item *Procurement and sourcing> Common> Purchase orders> All purchase orders*.

The screenshot shows the Microsoft Dynamics AX 2012 Purchase Order form. The title bar reads "Purchase order (1 - agb) - Purchase order: PO00014, 99-Vendor of exercise 3.2, Purchase order: PO00014". The ribbon tabs include File, Purchase order, Purchase, Manage, Receive, Invoice, and General. The action pane on the left has buttons for Purchase order (New), From a sales order, Edit (highlighted in yellow), Request change, Cancel, Header view, Line view, Copy, View, Totals, Generate from template, and Attachments. The main area displays the purchase order header information: PO00014 : 30021 - 99-Vendor of exercise 3.2. Below it, the "Purchase order lines" section shows two lines:

T...	B...	Line n...	Item n...	Product name	Procurement cat...	Site	Warehouse	Batch number	Quantity	Unit	Unit price	Disc...
		10	I99-C1	99-Compone...		HQ	10		9.00	Pcs.	100.00	
			I99-C2	99-Compone...		HQ	10		5.00	Pcs.	100.00	

At the bottom, there are navigation buttons (Back, Forward, List, New, Save, Print, Close) and status indicators (Quantity order..., Notifications, GBP, USR Model, usr, agb, Admin).

Figure 5-19: Registering the purchase order to supply the components

In this exercise, you want to enter an order header referring to your vendor and two order lines containing your components as shown in Figure 5-19.

After confirming the purchase order clicking the button *Generate/Confirm* on the action pane tab *Purchase*, you may receive the products clicking the button *Generate/Product receipt* on the action pane tab *Receive*.

In order to post the invoice, you may click the button *Generate/Invoice* on the action pane tab *Invoice* (see exercise 3.15).

Exercise 5.11 – Picking List

You may now pick the components required for the production order of exercise 5.8. Enter and post a picking list journal, picking nine units of the first and five units of the second item. Picking should be done from the warehouse to which you have posted the items in exercise 5.10.

Instructions

After selecting your order in the production order form (*Production control> Common> Production Orders> All production orders*), you may click the button *Journals/Picking list* on the action pane tab *View* to access the picking list journals referring to your order. In the picking list journals, you may view the unposted picking list that has been created when starting the order in exercise 5.9. The journal is not posted since the checkbox for posting the picking list has been cleared in the update form when starting the order.

The screenshot shows two overlapping windows. The top window is titled "Production journal (1 - agb) - Journal MJ00017, Picking list, Journal type: Picking listProd..." and displays a grid of journal entries. One entry is selected, showing "PL" in the Name column and "MJ00017" in the Journal column. The bottom window is titled "Production journal lines, picking list (1 - agb) - Date: 4/23/2012, Picking list journal: MJ00017" and shows a list of picking lines. The "Post" button is highlighted in yellow. The picking lines grid has columns for Date, Lot ID, Item number, Site, Warehouse, Proposal, Consumption, Unit, End, and Log. Two lines are listed: one for item I99-C1 (Lot ID IL00133) with quantity 5.00, and another for item I99-C2 (Lot ID IL00134) with quantity 5.00. A summary at the bottom indicates a total released quantity of 5.00.

Figure 5-20: Registering the consumed quantity in picking list journal lines

You may select this journal and click the button *Lines* to switch to the journal lines. In the journal lines you may enter the picked quantity in the column *Consumption* as shown in Figure 5-20. Then post the journal clicking the button *Post*.

As an alternative, you may delete the existing journal and create a new journal without using a consumption proposal (manually entering journal lines) or applying a proposal (clicking the button *Picking list/Create lines* in the action pane strip of the journal header).

Exercise 5.12 – Job Card

Choosing a job card, you want to record the working time required to process manufacturing. Enter and post a job card line referring to the production order of exercise 5.8, producing five units in the time between 8:00 AM and 2:00 PM (6 hours). You do not want to post reporting as finished in parallel.

Instructions

After selecting your order in the production order form, you may click the button *Journals/Job card* on the action pane tab *View* to access the job card journals referring to your order. In the job card journals, you want to click the button *Create new* inserting a header record and switching to the job card lines.

When inserting a job card line as shown in Figure 5-21, you need to select the job identification before updating the resource (if different to the scheduled resource) and entering the start and end time (providing the number of hours) and the quantity produced. Then you may post the journal clicking the button *Post*.

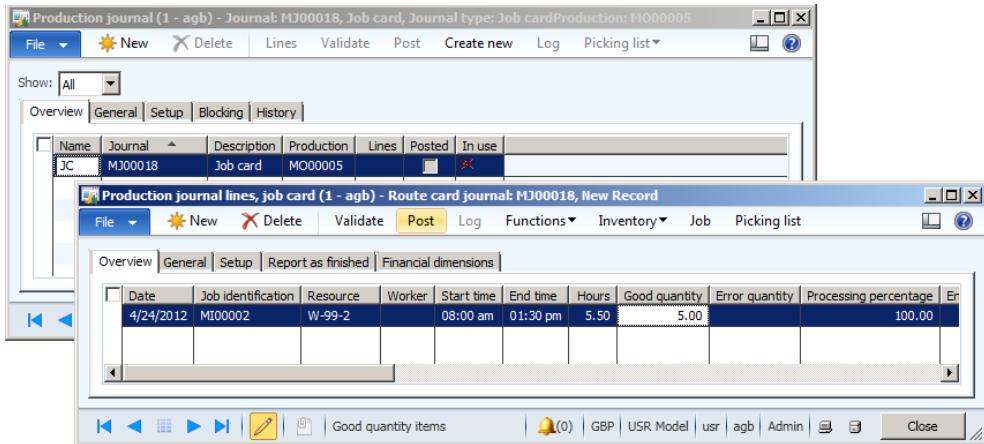


Figure 5-21: Registering the job card line

Exercise 5.13 – Ending Production

Report the whole quantity for the production order of exercise 5.8 as finished, choosing the button *Process/Report as finished* in the production order form. On the tab *General* of the update dialog, select the checkboxes *End job* and *Accept error*. Finally, you may end the production order, locking it for further postings. After ending, view the price calculation inquiry to compare estimation and costing.

Instructions

In order to post the inventory transaction receiving the finished item on stock, you want to report your production order as finished clicking the button *Process/Report as finished* on the action pane tab *Production order* of the production order form.

On the tab *General* of the update dialog, you may leave the default in the field *Good quantity* posting a complete receipt. Select the checkboxes *End job* and *Accept error* to post final reporting as finished of the order by ignoring missing journal entries.

After posting, you may check the inventory transaction by clicking the button *Inventory/Transactions* on the action pane tab *Production order*. The quantity in inventory (five units after receiving the finished item) is available clicking the button *Inventory/On-hand* on the action pane of the production order form.

After receiving all finished items, you may cost and end the order by clicking the button *Process/End* on the action pane tab *Production order*.

Clicking the button *Related information/Price calculation* on the action pane tab *View* of the production order form, you may compare estimated and realized costs on the tab *Overview Costing* of the calculation form. As shown in Figure 5-22, the costing overview compares estimated and actual quantity and value of BOM and route lines – if specified including overheads.

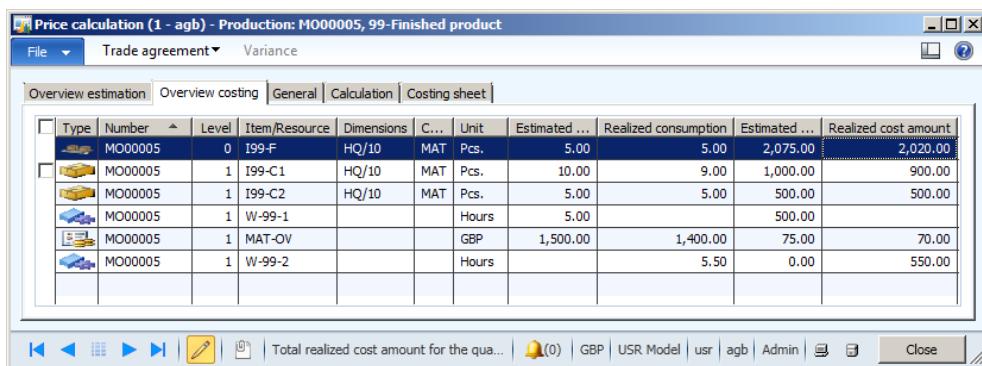


Figure 5-22: Price calculation inquiry comparing estimated and actual consumption

6 Operations Planning

Exercise 6.1 – Forecast Settings

You require a sales forecast for items that you have set up in previous exercises – the merchandise item of exercise 3.5 and the finished item of exercise 5.2. Your forecast should be in a scenario separate from other forecasting scenarios.

To meet this constraint, you want to insert a new forecast model F-## (## = your user ID) without applying submodels. In a second step, you want to register a new forecast plan Y-##. You need to assign your forecast model to this forecast plan and to include demand forecasts in the plan. The number sequences required may be similar to settings in existing forecast plans.

Instructions

In order to set up a new forecast model, you want to access the form *Inventory and warehouse management> Setup> Forecast> Forecast models* and insert a line there including model ID and name as shown in Figure 6-1.

Model	Name
F12	Forecast 2012
F13	Forecast 2013
F14	Forecast 2014
F15	Forecast 2015
F99	99-Forecast

Model: F99
Name: 99-Forecast
Stopped:
Cash flow forecasts:
Project
Submodel

Describe the current model.

Figure 6-1: Inserting the new forecast model

In order to set up the new forecast plan, you want to access the form *Master planning> Setup> Plans> Forecast plans*. On the tab *General* of the forecast plan form, you may link the new forecast plan to the new forecast model by selecting it in the lookup *Inventory forecast model* as shown in Figure 6-2.

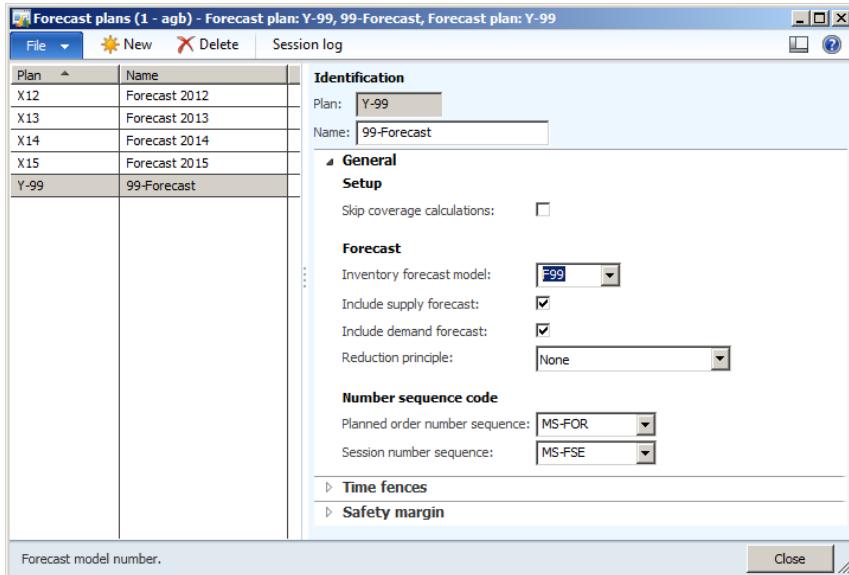


Figure 6-2: Assigning the forecast model to the forecast plan

Exercise 6.2 – Demand Forecast

For the next quarter, you expect your customer of exercise 4.1 to order 200 units of your merchandise item and 100 units of your finished item on the last day of each month.

You need to record these figures in a sales forecast, applying your forecast model of exercise 6.1. Once you have finished, you want to start forecast scheduling for your forecast plan, checking the results afterwards.

Instructions

One way to access the demand forecast (sales forecast) for items is to click the button *Forecast/Demand forecast* on the action pane tab *Plan* of the released product form (*Product information management> Common> Released product*) after selecting the appropriate item.

Selecting your forecast model in a new line of the demand forecast, you want to enter the date, the customer number and the quantity. Supposing a sales price is specified for the item, Dynamics AX calculates the sales amount. In order to register the monthly forecast for a quarter, you may either choose an allocation method and click the button *Create lines* in the middle pane of the demand forecast form (see Figure 6-3) or manually enter three lines in the upper pane.

Figure 6-3: Registering the sales forecast in the demand forecast form

After specifying the demand forecast for the first item, you may close the demand forecast form. Then select the second item in the released product form and enter the demand forecast according to the exercise.

Once you have finished entering forecasts, you may run forecast scheduling choosing the menu item *Master planning> Periodic> Forecast scheduling* then, selecting your forecast plan in the update form.

In order to check the result of this forecast schedule, you may for example access the released product form and click the button *Requirement/Gross requirement* on the action pane tab *Plan* there. After selecting your forecast plan in the lookup *Plans* of the gross requirements form, you may check the results of forecast scheduling.

Exercise 6.3 – Min./Max. Principle

You want to apply a Min./Max. coverage principle to your finished item of exercise 5.2. Select an appropriate coverage group in the released product form and enter a minimum quantity of 500 units and a maximum quantity of 1000 units in the item coverage of the item.

Once you have finished, you want to run local master scheduling in the net requirements form and check the result. In a second step, change the minimum quantity to one unit. After running local master scheduling a second time, can you explain the result?

Instructions

After selecting your finished item in the released products list page, you want to open to the detail form and select a *Coverage group* on the tab *Plan* referring to the

coverage code “Min./Max.” (“MAX” in the sample company) as shown in Figure 6-4.

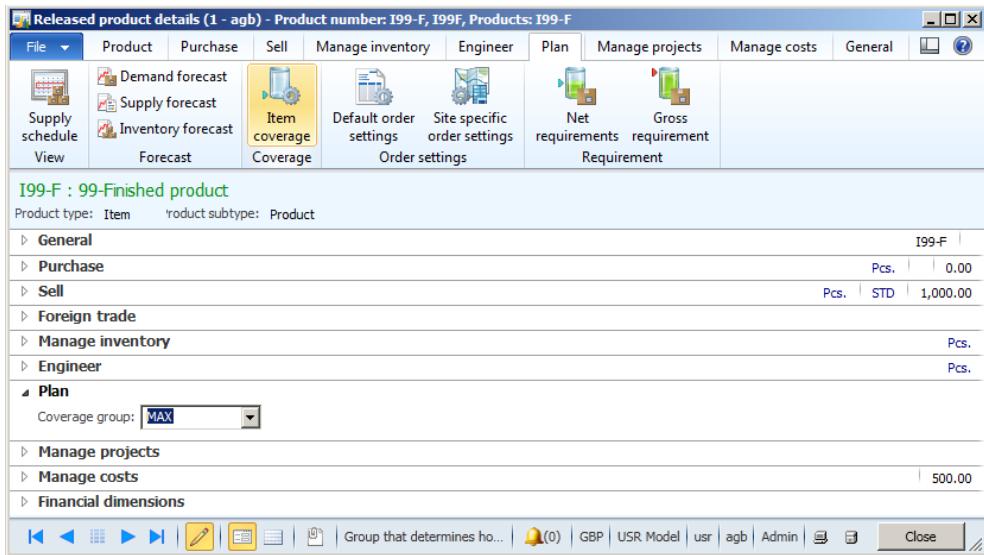


Figure 6-4: Selecting the coverage group in the released product form

You may then access the item coverage form by clicking the button *Coverage/Item coverage* on the action pane tab *Plan* of the released product form. In the item coverage, register the item coverage entering a new line similar to exercise 3.7. Unlike exercise 3.7, the current exercise not only requires entering a minimum quantity (500 units) in the column *Minimum* of the item coverage, but also a maximum quantity of 1000 units in the column *Maximum*.

After closing the item coverage form, you may access the net requirements form clicking the button *Requirement/Net requirements* on the action pane tab *Plan* of the released product form.

Clicking the button *Update/Master scheduling* in the net requirements form, you may run local master scheduling for your item (compare exercise 3.7). Since five units received in exercise 5.13 are available on stock, master scheduling generates a planned production order of 995 units to reach the maximum quantity of 1000 units.

If you change the minimum quantity in the item coverage afterwards to one unit and run master scheduling in the net requirements form again, the planned order to reach the maximum quantity will be removed. The reason is that the actual quantity on hand is not lower than the minimum quantity which triggers generating planned orders.

Exercise 6.4 – Period Principle

You want to apply a coverage principle summarizing requirements per period for your finished item of exercise 5.2 now. Choose an appropriate coverage group in the item record and delete the Min./Max. record in the item coverage.

Your customer of exercise 4.1 orders 100 units of the finished item. Enter a sales order for this requirement without posting a packing slip or invoice.

You may run local master scheduling in the net requirements form now. Check the results and enter a second order of your customer containing 150 units of the finished item for the same delivery date as the first order.

Start local master scheduling a second time and check the result again.

Instructions

After clicking the button *Coverage/Item coverage* on the action pane tab *Plan* of the released product form, you want to delete the item coverage record entered in exercise 6.3. In the released product form, you may change the coverage group of your item to a coverage group referring to the coverage code “Period” (“PER” in the sample company) then.

In order to register the sales order of 100 units, you may access the customer list page (*Sales and marketing> Common> Customers> All customers*), select your customer and click the button *New/Sales order* on the action pane tab *Sell* for creating a sales order like in exercise 4.6. In the line view of the sales order form, you may insert an order line as shown in Figure 6-5.

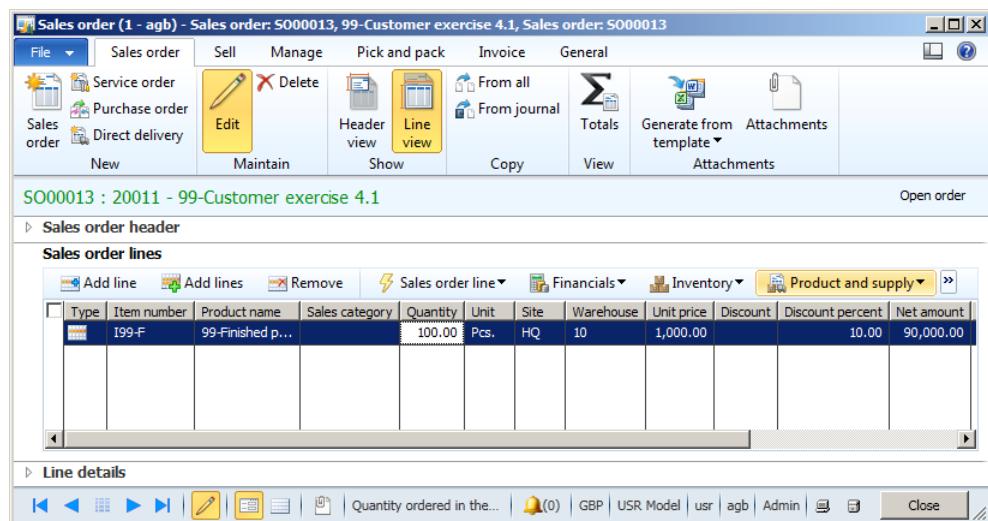


Figure 6-5: Registering the sales order

In the next step, you may access the net requirements directly in the sales order by clicking the button *Product and supply/Net requirements* in the action pane strip of

the *Sales order lines* tab. Clicking the button *Update/Master scheduling* in the net requirements, you may run local master scheduling generating a planned production order of 95 units based on the settings entered in the current exercise.

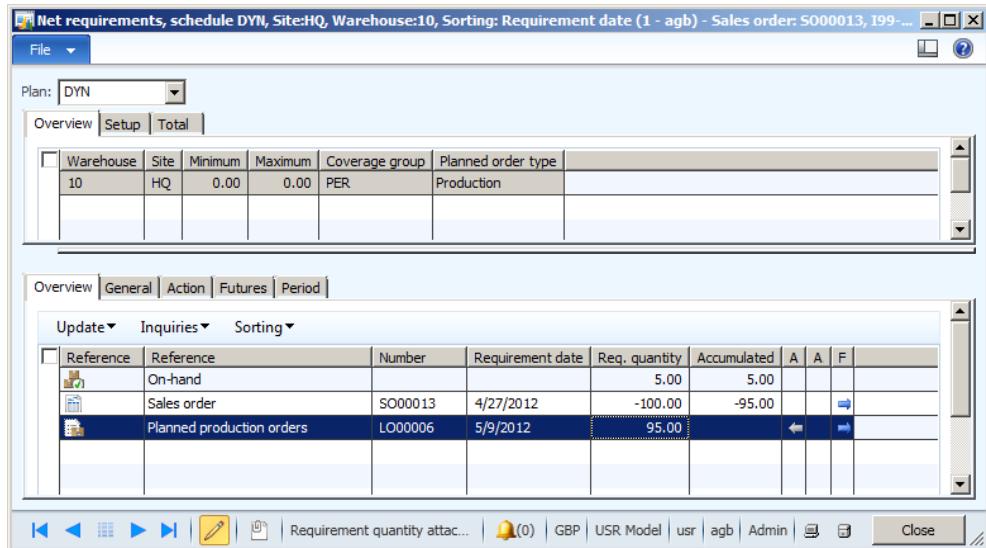


Figure 6-6: Planned production order based on the first sales order

After entering the second sales order for your finished item, which contains a delivery date within the same coverage period as the first order, master scheduling in the net requirements form will generate a planned production order covering the requirement of both sales orders (see Figure 6-7).

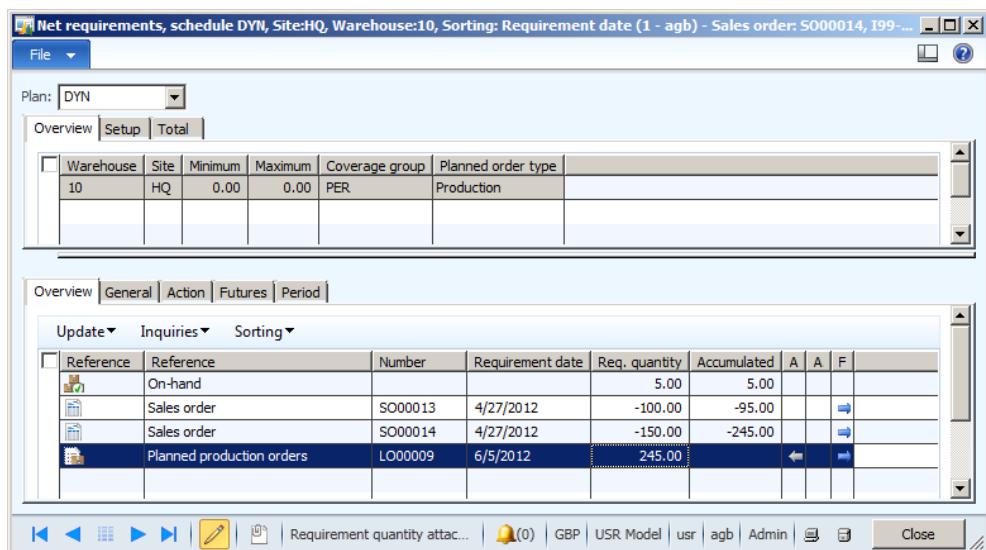


Figure 6-7: Planned production order covering both sales orders

7 Inventory Management

Exercise 7.1 – Dimension Groups

In order to investigate the functionality of dimension groups, you want to create a new storage dimension group D-## and a tracking dimension group D-## (## = your user ID). You should set up the dimension groups in a way that the dimensions *Site*, *Warehouse* and *Batch number* are required in every transaction. For the warehouse dimension, separate financial inventory valuation should apply.

Instructions

You may register the new storage dimension group in the form *Product information management> Setup> Dimension groups> Storage dimension groups*. After clicking the button *New* in the action pane strip, you may enter the *Name* and *Description*.

After saving the new dimension group choosing the command *File/Save* or the keyboard shortcut *Ctrl+S*, you may specify dimension settings in the lower pane of the storage dimension form. According to the exercise, the checkbox *Active* should only be selected for the dimensions *Site* and *Warehouse*. In order to require the warehouse to be entered in every transaction, select the checkbox *Mandatory*. In addition to the checkbox *Physical inventory*, the checkbox *Financial inventory* has to be selected for the warehouse dimension to apply separate financial inventory valuation.

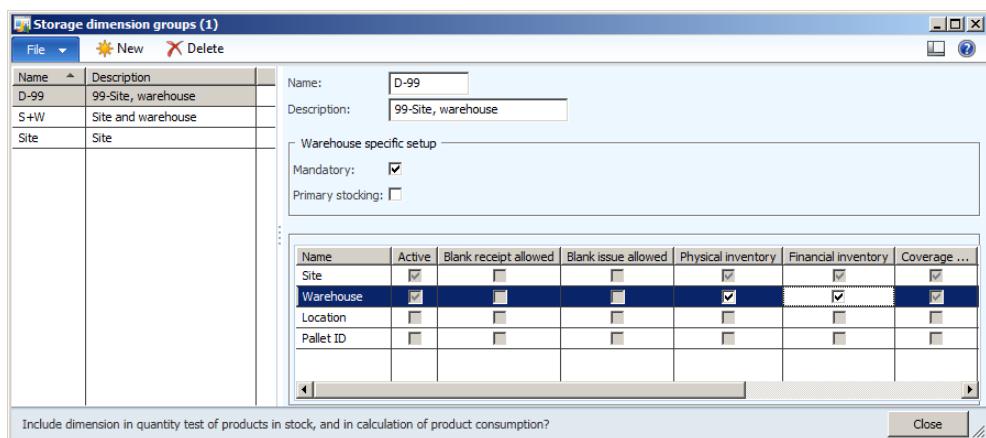


Figure 7-1: Specifying the dimension settings of the storage dimension group

When you have finished entering the storage dimension group, you may register the new tracking dimension group in the form *Product information management>*

Setup> Dimension groups> Tracking dimension groups. According to the exercise, only select the checkboxes *Active* and *Physical inventory* in the *Batch number* line.

Exercise 7.2 – Inventory Model Group

In order to prepare the next exercise, you want to enter a new item model group T-## (## = your user ID) with FIFO valuation, assigning the inventory model “FIFO”. The ledger integration for physical and financial inventory should be active. The item model group applies to stocked products and a negative financial inventory is allowed. All other checkboxes remain cleared.

Then you want to set up a second item model group S-## for standard cost valuation, which got the same settings as the first group, except that the inventory model is “Standard cost” and a negative physical inventory is possible.

Instructions

You may register the new item model group in the form *Inventory and warehouse management> Setup> Inventory> Item model groups*. After clicking the button *New* in the action pane strip you may enter the new group ID and name. Then you may switch to the tab *Setup* where you want to make sure the checkboxes *Stocked product*, *Financial negative Inventory*, *Post physical inventory* and *Post financial inventory* are selected as shown in Figure 7-2.

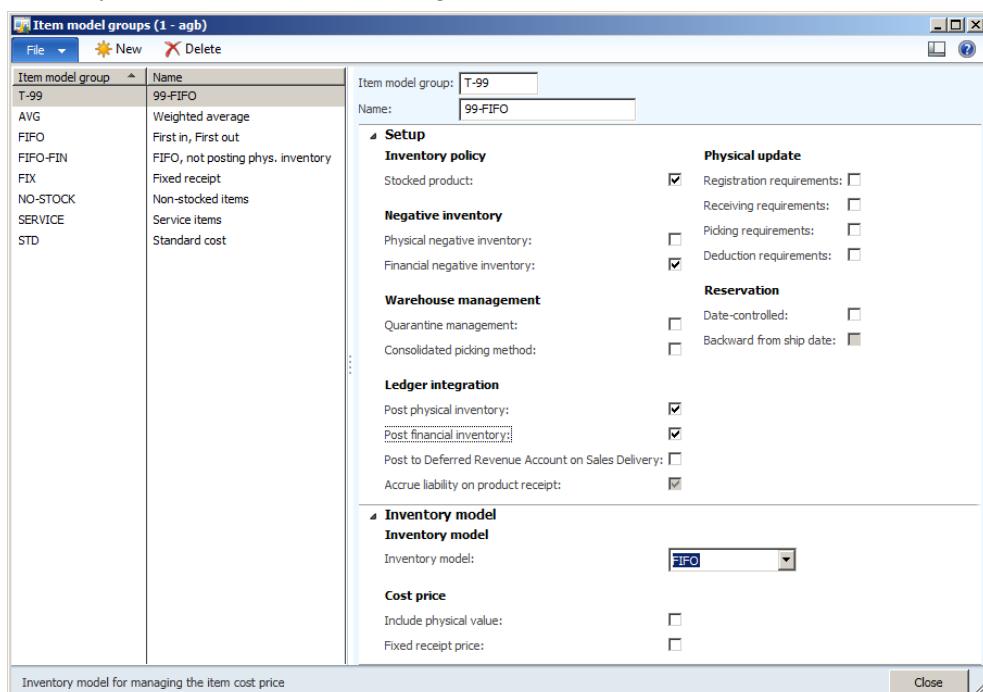


Figure 7-2: Settings in the item model group for FIFO valuation

On the tab *Inventory model*, choose “FIFO” in the lookup field *Inventory model* and make sure the checkbox *Fixed receipt price* is cleared.

When entering the second item model group (standard cost valuation), differences to the first model group are the selection “Standard cost” in the *Inventory model* and the selected checkbox *Physical negative Inventory*.

Exercise 7.3 – Product Record

Entering two new items in the released products form, you want to examine the consequences of the settings in the dimension groups and the item model group:

- Item I-##-S to show standard cost pricing (item model group S-##)
- Item I-##-T to show FIFO valuation (item model group T-##)

For both items, the product subtype is “Product” and the storage and the tracking dimension group are the groups you have set up in exercise 7.1. In addition, select an appropriate item group for merchandise and the unit of measure “Pieces”. The item sales tax groups for purchasing and sales should refer to the standard tax rate. The base purchase price and the base cost price are 50 pounds, the base sales price is 100 pounds. For purchasing, inventory and sales, you should enter the main site in the *Default order settings* and the main warehouse of the main site in the *Site specific order settings*.

For the item I-##-S, you need to register and activate a standard cost price. Enter a standard cost price of 50 pounds for the main site in the item price form.

Instructions

You may create the two items directly in the released products list page (*Product information management> Common> Released products*) as described in exercise 5.1, applying appropriate item names to clearly distinguish the items.

Like in exercise 5.1, you may create a personal template in order to facilitate data input before inserting the new item records. The template in the current exercise should be based on the item of exercise 3.5.

Based on this template, you only need to change following data in the *New released product* dialog:

- *Storage dimension group* and *Tracking dimension group* (from exercise 7.1)
- *Item model group* (from exercise 7.2, applying the standard cost valuation group for the standard cost item and the FIFO group for the FIFO item)

In addition, you have to register the default order settings and site-specific order settings for the two items clicking the appropriate buttons on the action pane tab *Manage inventory* of the released product form.

For the standard cost price item, you have to register the standard cost price additionally. After selecting the item in the released product form, click the button

Set up/Item price on the action pane tab *Manage costs* in order to access the item price form. On the tab *Pending prices* of the item price form, you may insert an item price line including *Price type*, *Version* (referring to standard costs), *Site* and *Price* as shown in Figure 7-3. Then save the price line and click the button *Activate* to activate the cost price, moving it to the tab *Active prices* in the item price form.

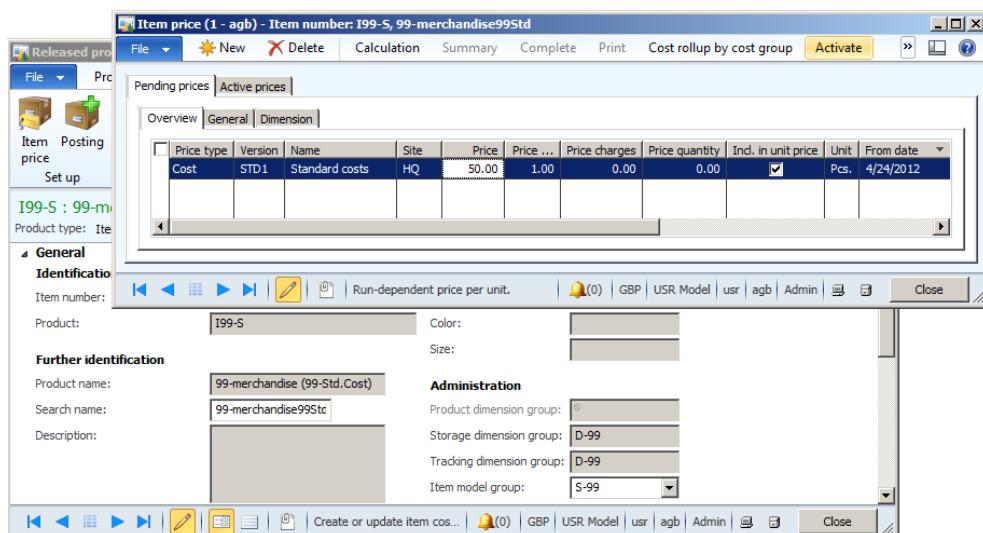


Figure 7-3: Registering the standard cost price on the pending prices tab

Exercise 7.4 – Inventory Value of Transactions

You want to enter a purchase order referring to your vendor of exercise 3.2, which contains a line of 100 units of the first and 100 units of the second item entered in exercise 7.3. Enter 60 pounds in the purchase price of both order lines.

Try to find out, if you may post a product receipt without inserting a batch number. Choosing the option *View details* in the batch number column, you may create the batch number B001 for both items in the batch table. In the purchase order lines, you may insert the batch number afterwards.

Once you have finished, you may confirm the purchase order. Then you want to post the product receipt and the invoice receipt for the complete quantity. If you look at the item transactions and the quantity on hand, can you explain the difference of the cost amount and the cost price of the two items?

Note: If required, you may show the column for the dimension *Batch number* in the order lines clicking the button *Inventory/Dimensions display*.

Instructions

In order to register the purchase order for the two items, you may access the vendor list page (*Procurement and sourcing> Common> Vendors> All vendors*) and

search for your vendor there. After selecting your vendor, click the button *New/Purchase order* on the action pane tab *Procurement* for creating a purchase order like in exercise 3.9.

In the line view of the purchase order form, insert two order lines containing your items of exercise 7.3 as shown in Figure 7-4. Since you want to order the items for a purchase price different from the default of the item record, you have to change the price in the order lines.

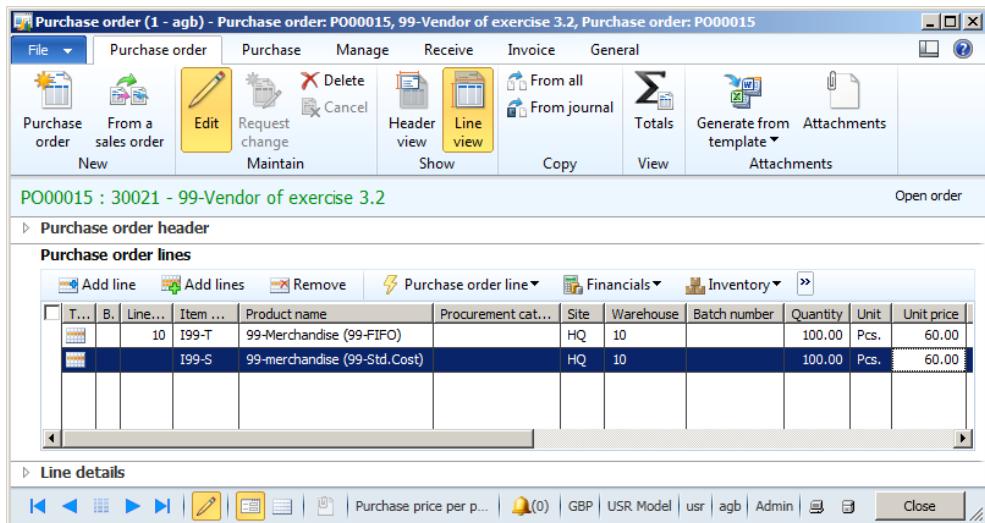


Figure 7-4: Registering the purchase order lines

Then confirm the purchase order (button *Generate/Confirm* on the action pane tab *Purchase*) and try to post the product receipt (button *Generate/Product receipt* on the action pane tab *Receive*).

An error message displays when trying to post the packing slip receipt without entering a batch number. The reason is that the tracking dimension group of the ordered items specifies batch numbering.

For your items, you did not specify a *Batch number group* (on the tab *Manage inventory* of the released product form) providing automatic batch numbers. Therefore, you have to manually record new batch numbers accessing the batch number table through the option *View details* as shown in Figure 7-5. After inserting the batch number in the batch number table, you may select it in the lookup of the batch number field in the purchase order line.

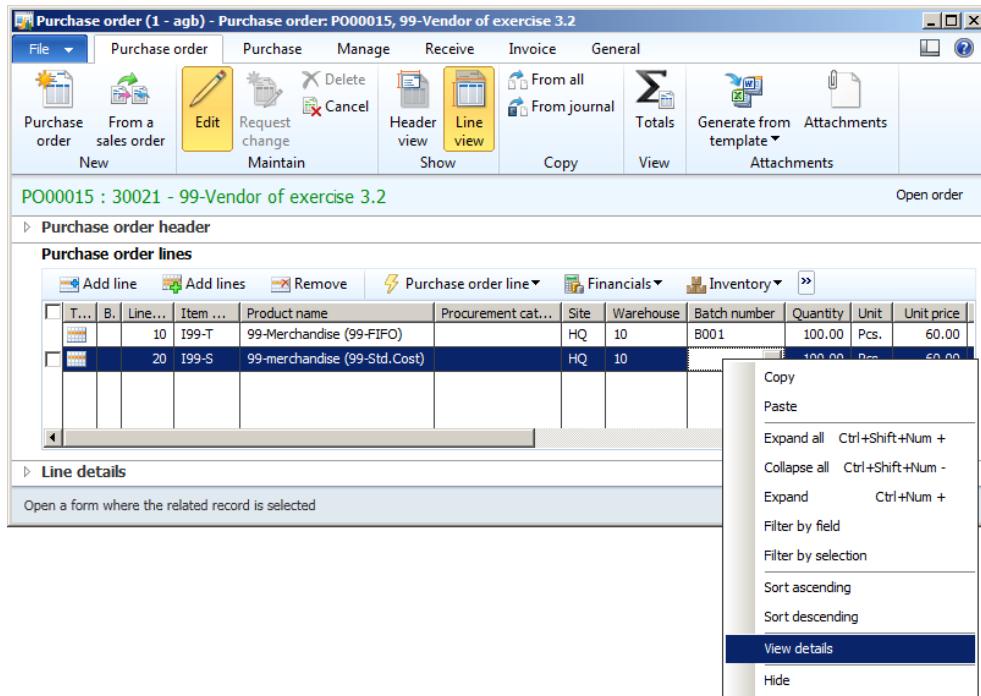


Figure 7-5: Accessing the batch number table from the purchase order line

Since entering the batch number in the order lines means a change to the purchase order, you have to confirm it again order (button *Generate/Confirm* on the action pane tab *Purchase*) before you can post the product receipt (button *Generate/Product receipt* on the action pane tab *Receive*).

In order to post the invoice, you may click the button *Generate/Invoice* on the action pane tab *Invoice* (see exercise 3.15).

After posting the invoice, your item referring to FIFO valuation shows an inventory value (financial cost amount) of GBP 6,000.00 and a cost price of GBP 60.00. You may view these figures in the inventory transaction and in the inventory quantity, which you may access clicking the button *Inventory/Transactions* or *Inventory/On-hand* in the appropriate purchase order line.

The item referring to standard cost valuation shows a value of GBP 5,000.00 in the transaction and on-hand quantity and a cost price of GBP 50.00. This is the standard cost price specified in the item price form in exercise 7.3. The difference between the standard cost amount and the purchase amount displays in the field *Adjustment* on the tab *Update* of the inventory transaction as shown in Figure 7-6. It posts to the ledger account for purchase price deviation ("53920" in the sample company).

The screenshot shows the 'Inventory transactions' window with the financial date set to 4/25/2012. The transaction details are as follows:

Physical	Financial	Settlement
Physical date: 4/25/2012	Financial date: 4/25/2012	Financially closed: []
Physical voucher: IW00015	Financial voucher: IV00013	Settled quantity: []
Route: []	Invoice: VI74	Amount settled: []
Packing slip: PS73	Cost amount: 6,000.00	
Physical cost amount: 5,000.00	Adjustment: -1000.00	
Physical revenue: []	Profit and loss, posted amount: []	
	Unposted invoice: []	

Ledger

- Physically posted:
- Financially posted:
- Physical turnover posted: []

Buttons at the bottom include: Back, Forward, New, Save, Cancel, Close.

Figure 7-6: Inventory value adjustment of the standard cost item

Exercise 7.5 – Valuation of Purchase Orders

You want to order 100 units of the first and 100 units of the second item of exercise 7.3 from your vendor of exercise 3.2. Enter an appropriate purchase order choosing the batch number B001 and a purchase price of GBP 120.00 in both order lines.

Once you have finished entering the order, you should confirm it and post the product receipt and the vendor invoice for the whole quantity. In the *Product receipt date* (tab *Setup* of the product receipt posting form) and in the *Posting date* in the vendor invoice, you should enter the day after the posting date of exercise 7.4 (e.g. July 2, if exercise 7.4 has been on July 1).

After posting the invoice, check the inventory transactions as well as the inventory quantity and value (cost amount) of the two items.

Instructions

You may register the new purchase order similar to exercise 7.4, this time entering a purchase price of GBP 120.00 in both order lines. Optionally, you may create the order lines by copying (button *Copy/Copy from all* on the action pane tab *Purchase order*) the lines of exercise 7.4 after creating the new purchase order header. In the copied lines, make sure to change the purchase price in the lines.

Then confirm the purchase order (button *Generate/Confirm* on the action pane tab *Purchase*). In order to provide a chronological order when posting the product receipt (button *Generate/Product receipt* on the action pane tab *Receive*), set the posting date (*Product receipt date* on the tab *Setup* of the posting form) to a day after exercise 7.4, if you do the current exercise on the same day as that exercise. The

same applies when posting the vendor invoice, where you want to check the field *Posting date* in the vendor invoice form.

Once you have finished posting the vendor invoice, close the purchase order and open the released product form (*Product information management> Common> Released products*).

In the released products, select your FIFO item first and click the button *View/On-hand inventory* on the action pane tab *Manage inventory*. As shown in Figure 7-7, the tab *On-hand* of the on-hand inquiry for your FIFO item shows a financial cost amount (inventory value) of GBP 18.000.00, which is the total purchase amount of exercise 7.4 and 7.5 for the item, and a cost price of GBP 90.00, which is the average of both exercises.

The screenshot shows the 'On-hand' inquiry window for item 199-T. The window has tabs at the top: Overview, Transactions, Net requirements, Intercompany on-hand, Quantity adjustment, Counting history, and Dimensions display. The 'On-hand' tab is selected. The main area is divided into sections:

- Item**: Item number: 199-T, Product name: 99-merchandise (99-FIFO)
- Inventory dimensions**: Site: HQ
- Units**: Show: Inventory unit (dropdown), Unit: Pcs.
- Physical inventory**: Posted quantity: 200.00, Deducted: (empty), Picked: (empty), Received: (empty), Registered: (empty)
- On-hand**: Physical inventory: 200.00, Physical reserved: (empty), Available physical: 200.00, Available for reservation: 200.00
- Ordered in total**: Arrived: (empty), Ordered: (empty)
- Various**: On order: (empty), Quotation receipt: (empty), Quotation issue: (empty)
- Total available**: 200.00
- Cost details**: Physical cost amount: (empty), Financial cost amount: 18,000.00, Cost price: 90.00

At the bottom, there are navigation icons (back, forward, search, etc.) and a toolbar with buttons for Current average cost price or standard cost..., Bell icon (0), GBP, USR Model, usr, agb, Admin, and Close.

Figure 7-7: On-hand inquiry of the FIFO item after posting the invoice

The cost price of your standard price item still shows GBP 50.00 in the on-hand inquiry, since differences to the standard price are adjusted as shown in previous exercise.

Exercise 7.6 – Valuation of Sales Orders

Your customer of exercise 4.1 orders 150 units of the first and 150 units of the second item of exercise 7.3. Enter an appropriate sales order choosing the batch number B001 in both order lines. Then you may post the sales invoice for the

whole order quantity. For the *Invoice date* on the tab *Setup* of the posting form, you should enter the day after the posting date of exercise 7.5 (e.g. July 3, if exercise 7.5 has been on July 2).

After posting the invoice, check the inventory transactions as well as the inventory quantity and cost amount of the two items again.

Instructions

You may create the sales order like in exercise 4.6 selecting your customer in the customer list page (*Sales and marketing> Common> Customers> All customers*) and clicking the button *New/Sales order* on the action pane tab *Sell*. In the current exercise, you want to enter two order lines of 150 units referring to the items of exercise 7.3 (see Figure 7-8).

The screenshot shows the Microsoft Dynamics AX Sales Order window for Sales Order SO00015. The window title is "Sales order (1 - agb) - Sales order: SO00015, 99-Customer exercise 4.1, Customer account: 20011". The action pane strip at the top includes buttons for Service order, Purchase order, Sales order, Direct delivery, New, Edit, Delete, Manage, Pick and pack, Invoice, General, Header view, Line view, From all, From journal, Totals, Copy, View, Generate from template, and Attachments. The main area displays the sales order header and lines. The sales order lines grid shows two items:

Type	Item num...	Product name	Sales cat...	Quantity	Unit	Site	Warehouse	Batch number	Unit price	Disc...	Discount percent
	I99-T	99-merchandise (99-FIFO)		150.00	Pcs.	HQ	10	B001	100.00		10.00
	I99-S	99-merchandise (99-Std.Cost)		150.00	Pcs.	HQ	10	B001	100.00		10.00

Figure 7-8: Registering the required sales order

In order to show the column *Batch number* in the sales order lines, you may click the button *Sales order line/Dimensions* in the action pane strip of the order lines. In the dimensions display dialog, select the checkbox *Batch number* then.

In order to provide the required chronological order of transactions when posting the invoice in the next step, set the posting date (*Invoice date* on the tab *Setup* of the posting form) to a day after exercise 7.5, if you do the current exercise on the same day as that exercise.

After posting the invoice, select the order line of your standard cost item and click the button *Inventory/Transactions* in the action pane strip of the order lines to display the inventory transaction. The column *Cost amount* of the inventory transaction shows an amount of GBP 7,500.00, which is 150 units multiplied with the cost price of 50 pounds. Clicking the button *Inventory/On-hand*, you may view

the financial cost amount of GBP 2,500.00 for the current on-hand inventory, which is 50 units multiplied with 50 pounds.

Unlike the standard cost item, the FIFO item applies an average price valuation for the cost amount of inventory transactions. If you check the inventory transaction of your FIFO item as shown in Figure 7-9, it displays a cost amount of GBP 13,500.00 (which is 150 units multiplied with 90 pounds). Clicking the button *Inventory/On-hand*, you may view the financial cost amount of GBP 4,500.00 for the current on-hand inventory, which is the remaining 50 units multiplied with 90 pounds.

Inventory transactions (1 - agb) - Financial date: 4/27/2012, Yes, Lot ID: IL00157

File ▾ Inventory ▾ Ledger ▾ Functions ▾ Configuration details

Overview General Update Ledger Reference Other Financial dimensions - financial Financial dimensions - physical Inventory dimensions

Physical		Financial		Settlement	
Physical date:	4/27/2012	Financial date:	4/27/2012	Financially closed:	
Physical voucher:	SI00007	Financial voucher:	SI00007	Settled quantity:	
Route:		Invoice:	SI00007	Amount settled:	
Packing slip:		Cost amount:	-13,500.00		
Physical cost amount:	-13,500.00	Adjustment:			
Physical revenue:		Profit and loss, posted amount:	13,500.00		
		Unposted invoice:			
Ledger					
Physically posted:	<input checked="" type="checkbox"/>	Financially posted:	<input checked="" type="checkbox"/>	Physical turnover posted:	<input type="checkbox"/>

Date of physical transaction | | | Date of physical transaction | (0) | GBP | USR Model | usr | agb | Admin | | | Close

Figure 7-9: Preliminary valuation for the sales transaction of the FIFO item

The final cost amount for items referring to FIFO valuation is not available immediately when posting a transaction. You have to close or recalculate inventory as shown in the next exercise to receive the final cost price.

Exercise 7.7 – Closing Inventory

You want to perform a *Recalculation* in the inventory closing form in order to calculate the correct inventory value of your items according to the valuation method. In the recalculation form, select an appropriate filter to limit calculation to your items and set the recalculation date to the posting date of exercise 7.6 (e.g. July 3).

Then check the cost price and amount of the inventory transactions and the inventory quantity for the two items. Which changes come from recalculation, can you explain the result?

Instructions

In order to run the inventory recalculation, you may access the menu item *Inventory and warehouse management > Periodic > Closing and adjustment* and click the button *Recalculation* in the action pane strip there.

In the *Recalculate inventory* update form, adjust the date *Recalculate inventory up to* as specified in the current exercise and set a filter selecting your items of the previous exercise.

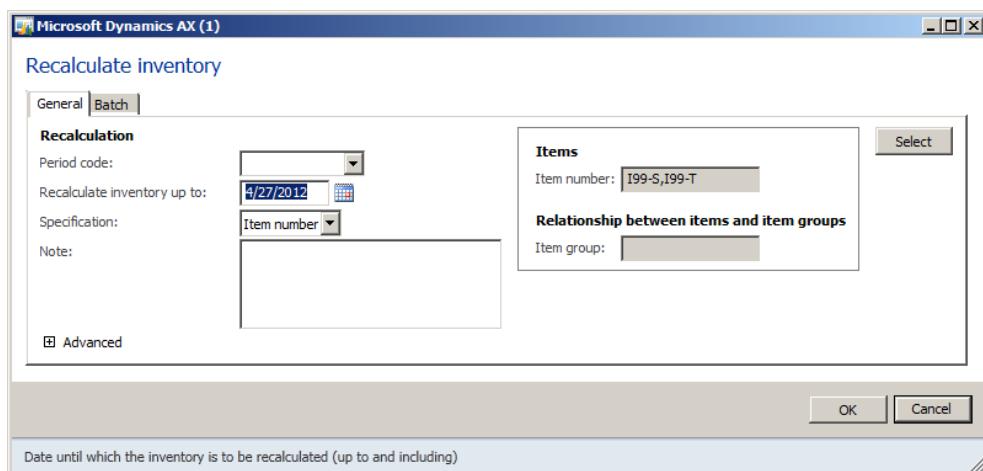


Figure 7-10: Recalculation filtering on the requested items

Whereas recalculation does not change the inventory value of your standard price item, it does adjust the cost amount of your FIFO item.

After recalculating the FIFO item transactions, the inventory issue transaction of the sales order calculates according to the FIFO principle:

- GBP 6,000.00 for 100 units of the first purchase order
(100 units with a price of 60 pounds)
- GBP 6,000.00 for 50 units of the second purchase order
(50 units with a price of 120 pounds)
- Total cost amount of the inventory issue therefore: GBP 12.000,00
(GBP 6,000.00 + GBP 6,000.00)

In order to view the inventory transactions, you may access the released product form (*Product information management > Common > Released products*), select your FIFO item and click the button *View/Transactions* on the action pane tab *Manage inventory*.

The transaction referring to the sales order now shows a total cost amount of GBP 12.000,00 in the column *Cost amount* of the tab *Overview*. Switch to the tab *Update* then. As shown in Figure 7-11, the difference of GBP 1,500.00 to the preliminary cost amount of GBP 13,500.00 (compare Figure 7-9) posts as adjustment.

Physical			Financial			Settlement		
Physical date:	4/27/2012		Financial date:	4/27/2012		Financially closed:		
Physical voucher:	SI00007		Financial voucher:	SI00007		Settled quantity:		
Route:			Invoice:	SI00007		Amount settled:		
Packing slip:			Cost amount:	-13,500.00				
Physical cost amount:	-13,500.00		Adjustment:	1500.00				
Physical revenue:			Profit and loss, posted amount:	13,500.00				
			Unposted invoice:					
Ledger								
Physically posted:	<input checked="" type="checkbox"/>		Financially posted:	<input checked="" type="checkbox"/>		Physical turnover posted:	<input checked="" type="checkbox"/>	

Figure 7-11: Adjustment in the issue transaction of the FIFO item

The remaining inventory value (financial cost amount) of your FIFO item now is GBP 6,000.00, adding the adjustment amount of GBP 1,500.00 to the original amount of GBP 4,500.00 (see exercise 7.6). The amount of GBP 6,000.00 is the same as the cost amount of the units of the second purchase order remaining on stock. Clicking the button *View/On-hand inventory* on the action pane tab *Manage inventory* of the released products form, you may view the cost price of 120 pounds for the FIFO item, which is the purchase price of the second order.

Exercise 7.8 – Journal Transaction

In the main warehouse, you find 100 units of the item I-## that you have set up in exercise 3.5. Post an appropriate transaction in an inventory adjustment journal.

Instructions

After accessing the form *Inventory and warehouse management> Journals> Item transaction> Inventory adjustment*, you may register a new journal by clicking the button *New* or *Create new* in the action pane strip.

If clicking the button *Create new*, Dynamics AX creates a journal header and immediately opens the journal lines form. Otherwise, you have to click the button *Lines* for accessing the journal lines.

In the journal lines, you want to enter the item number and quantity. Dynamics AX retrieves defaults for the columns *Site*, *Warehouse* and *Cost price* from the released product record. Since your item only includes site and warehouse as active dimensions, you do not need to enter a batch or serial number.

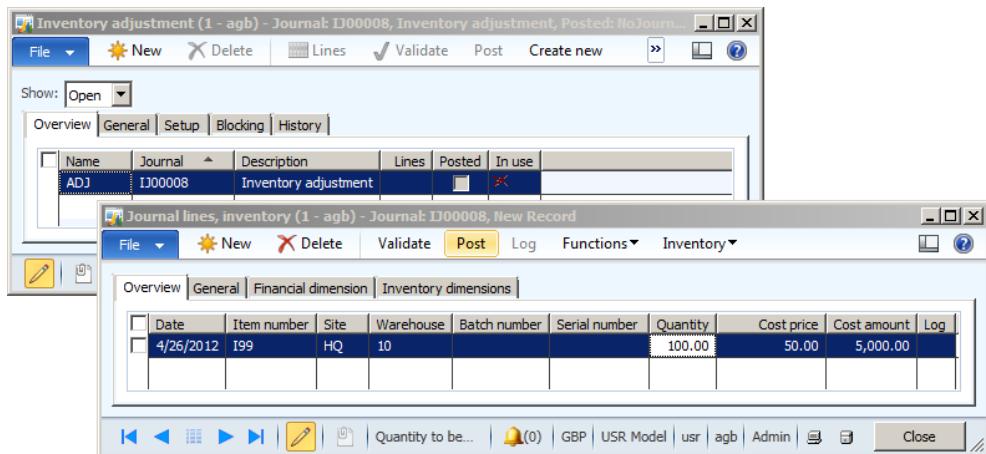


Figure 7-12: Registering the journal line

When registering an item receipt (quantity with a positive sign), you have to pay attention to the cost price of the transaction. Since there is no separate transaction like an invoice adjusting the price, the cost amount in the journal line specifies the inventory value of the transaction finally. For issue transactions (quantity with a negative sign), Dynamics AX will adjust the cost amount according to the valuation principle as shown in the previous exercise.

When you have finished registering the journal line, click the button *Post* in the action pane strip of the journal header or lines to post the journal.

Exercise 7.9 – Transfer Journal

You want to transfer the quantity received in exercise 7.8 to another warehouse. Register an appropriate inventory transfer journal and post it. After posting, check the transactions and the quantity of your item on the selected warehouse.

Instructions

You may record the journal for an item transfer in the form *Inventory and warehouse management > Journals > Item transaction > Transfer* similar to the inventory adjustment journal in exercise 7.8 before.

Unlike the inventory adjustment journal, the lines of a transfer journal include a to-site and to-warehouse in addition to the from-site and warehouse (see Figure 7-13). If additional dimensions apply to the item, the appropriate from- and to-dimension values have to be entered additionally.

In order to transfer the quantity from the from-dimensions (*From site, From warehouse*) to the to-dimensions (*To site, To warehouse*), you have to enter a negative sign in the quantity field.

Date	Item number	From site	To site	From warehouse	To warehouse	From batch number	To batch number	Quantity
4/26/2012	I99	HQ	S1	10	21			-100.00

Figure 7-13: Registering the item transfer journal line

Clicking the button *Post* when finished with registering the journal line, you may post the journal.

After posting the inventory transfer journal, you may check the posted transactions – e.g. clicking the button *Inventory/Transactions* in the transfer journal lines or the button *View/Transactions* on the action pane tab *Manage inventory* of the released products form. Although entering a transfer is done in a single line, the posted transactions show two lines: One for the item issue from the main warehouse and one for the item receipt at the other warehouse.

In order to check the inventory quantity resulting from your posted transfer, you may click the button *Inventory/On-hand* in the posted transactions and view the tab *Overview* in the on-hand inquiry.

Exercise 7.10 – Inventory Counting

You want to perform inventory counting on the main warehouse for the item I-## that you have set up in exercise 3.5. The quantity counted is 51 units. You may create a counting journal line either registering it manually or automatically generating it, filtering on your item and the main warehouse. After inserting the counted quantity, you should post the journal and check the quantity on hand.

Instructions

In order to register inventory counting, you may access the form *Inventory and warehouse management> Journals> Item counting> Counting* and create a new journal. In the dialog box for selecting applicable inventory dimensions, you want to select the dimension *Warehouse*.

After switching to the counting journal lines form, you may generate appropriate journal lines clicking the button *Create/Items*. In the dialog box for creating counting journal lines, you want to select the main warehouse and apply a filter choosing your item as shown in Figure 7-14 before clicking the button *OK*.

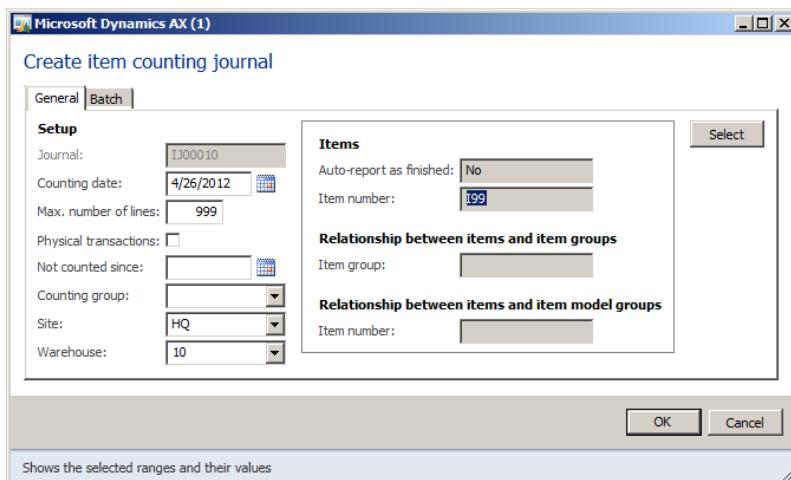


Figure 7-14: Generating counting journal lines for your item

In the column *Counted* of the counting journal line, you want to enter the counted quantity of 51 units. Dynamics AX immediately calculates the difference of two units comparing the counted quantity to the posted physical quantity. As shown in Figure 7-15, the posted physical quantity shows in the column *On-hand* and the counting difference shows in the column *Quantity*.

Date	Item number	Site	Warehouse	Batch number	On-hand	Counted	Quantity	Worker
4/26/2012	199	HQ	10		49.00	51.00	2.00	

Figure 7-15: Registering the counted quantity in the counting journal line

Clicking the button *Post*, you may post the counting difference (column *Quantity*) adjusting the posted physical quantity to the counted quantity.

After posting the counting journal, you may check the on-hand quantity of your item (e.g. clicking the button *View/On-hand inventory* on the action pane tab *Manage inventory* of the released products form).

Exercise 7.11 – Manual Quarantine

Because of quality issues reported, you want to execute a quality check of the quantity you have transferred in exercise 7.9. Enter a manual quarantine order, choosing an appropriate quarantine warehouse. Check the quantity on hand of

your item and start the quarantine order. After performing quality inspection, you may end quarantine, checking the inventory quantity before and after ending.

Instructions

In order to check the inventory quantity of your item (100 units on the new warehouse of exercise 7.9), you may click the button *View/On-hand inventory* on the action pane tab *Manage inventory* of the released products after selecting your item.

In order to register the quarantine order, you may access the form *Inventory and warehouse management> Periodic> Quality management> Quarantine orders* and click the button *New* there. In the quarantine order line, enter the item number, site, warehouse, quarantine warehouse and quantity as shown in Figure 7-16.

Note: As a prerequisite for the quarantine order, a quarantine warehouse (warehouse of the type “Quarantine”) referring to the site of the selected warehouse has to be available. You may check this in the warehouse form (*Inventory and warehouse management> Setup> Inventory breakdown> Warehouses*).

Q...	Item number	Site	Warehouse	Batch number	Location	Quarantine warehouse	Quarantine location	Quantity	Status
IQ00001	7001	HQ	30	B00001		11		50.00	Started
IQ00003	4001	HQ	10			11		5.00	Created
IQ00004	I99	S1	21			29		100.00	Created

Figure 7-16: Registering the quarantine order

Clicking the button *Start* in the quarantine order, you want to transfer the recorded quantity to quarantine. In the on-hand inquiry of the item (e.g. clicking the button *View/On-hand inventory* on the action pane tab *Manage inventory* of the released products form), you may view the physical quantity of your item on the quarantine warehouse in the status “Physically reserved” now.

In the quarantine order form, you may then end quarantine and retransfer the item to the original warehouse by clicking the button *End* after selecting your order. The on-hand inquiry of the item then shows the physical quantity of your item on the warehouse where it has been before quarantine.

Exercise 7.12 – Transfer Order

You want to transfer 50 units of the item relocated in exercise 7.9 back to the main warehouse processing a transfer order. Before entering the transfer order, make sure a transit warehouse is assigned to the warehouse from where the item ships.

Then register an appropriate transfer order and post the shipment. After posting, check the inventory transactions as well as the inventory quantity of your item on all warehouses. Finally, receive the item transfer at the main warehouse.

Instructions

In order to check the transit warehouse, access the warehouse form (*Inventory and warehouse management > Setup > Inventory breakdown > Warehouses*) and select the warehouse, to which the item has been transferred in exercises 7.9 – this is the shipping warehouse now. On the tab *General* of the warehouse form, make sure a *Transit warehouse* is assigned to this warehouse.

In order to register the transfer, you may access the form *Inventory and warehouse management > Periodic > Transfer orders* and click the button *New* in the action pane strip. After selecting the appropriate *From warehouse* and the *To warehouse* in the transfer order header (upper pane of the form), you want to switch to the lower pane and click the button *Add* before entering the transfer order line as shown in Figure 7-17.

Transfer number	From warehouse	To warehouse	Transfer status	Ship date	Receipt date
IF00002	21	10	Created	4/29/2012	4/29/2012
IF00001	10	21	Received	1/3/2012	1/3/2012

Item number	Batch number	Location	Serial number	Transfer quantity	Ship date	Receipt date	Product name
I99				50.00	4/29/2012	4/29/2012	99-merchandise

Figure 7-17: Entering the transfer order

Then you may post the shipment by clicking the button *Posting/Ship transfer order*. In the upper pane of the *Shipment* posting form, choose “All” in the column *Update* and select the checkbox in the column *Edit lines* before clicking the button *OK* to post the shipment.

You may check the transactions by clicking the button *Inventory/Transactions* in the lower pane of the transfer order form after selecting your order. In the on-hand inquiry of the item (e.g. clicking the button *View/On-hand inventory* on the action pane tab *Manage inventory* of the released products form), you may view that the shipped quantity of your item is on the transit warehouse now.

In order to receive the item at the main warehouse, click the button *Posting/Receive* in the transfer order form after selecting your order. In the *Receive* posting form, choose “All” in the column *Update* and select the checkbox *Edit lines* before clicking the button *OK* to post the receipt.

8 Finance Administration

Exercise 8.1 – Financial Dimensions

Your organization introduces business areas for reporting. For that purpose, you want to set up an additional financial dimension “##Areas” (custom dimension), showing the shared values “Area ## 1” and “Area ## 2” (## = your user ID).

Instructions

You may access financial dimensions choosing the menu item *General ledger> Setup> Financial dimensions> Financial dimensions*. After clicking the button *New* in the action pane strip of the financial dimensions form, select the option “<Custom dimension>” in the lookup *Use values from* before entering the *Dimension name*.

Note: Numbers are not allowed in the dimension name.

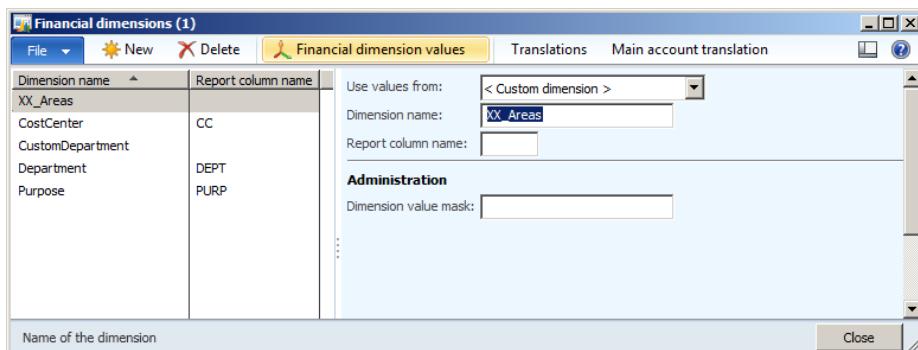


Figure 8-1: Creating the new financial dimension

Then click the button *Financial dimension values* in the action pane strip to access the dimension values form. After clicking the button *New* in the action pane strip of the dimension values form, enter the first *Dimension value* and make sure to choose “Shared value” in the lookup *Select level of dimension value to display*. Then enter the second dimension value and close the form.

Exercise 8.2 – Main Accounts

You want to set up following main accounts (## = your user ID):

- Main account “111C-##”, Name “Petty cash”, account type “Balance Sheet”
- Main account “111B-##”, Name “##-Bank”, account type “Balance Sheet”
- Main account “6060-##”, Name “##-Consulting”, account type “Expense”
- Main account “ZZ##”, Name “## account structure test”, account type “Balance Sheet”

Create these accounts making sure to apply the appropriate chart of accounts.

Instructions

In the ledger form (*General ledger> Setup> Ledger*), you may check the field *Chart of accounts* specifying which chart of accounts applies to your company.

When accessing the main accounts list page (*General ledger> Common> Main accounts*), Dynamics AX displays the accounts included in that chart of accounts. Clicking the button *Edit* in the main accounts list page, you may access the main accounts form.

In order to register the first new main account, click the button *New* in the action pane of the main accounts form. After entering the account ID and name, select the *Main account type* “Balance sheet” (see Figure 8-2).

Figure 8-2: Inserting a new main account

After the first account you may register the other accounts the same way, but making sure to select the right main account type according to the exercise instructions.

Exercise 8.3 – Account structures

Whereas the other main accounts created in the previous exercise are in an account number range referring to existing account structures, you want to set up a new account structure only applying to the main account “ZZ##”.

Create and activate a new account structure configuration “ZS##”, containing main accounts and the financial dimension “##Areas” which is linked only to your main account “ZZ##”.

Add your new account structure to the chart of accounts of your test company.

Notes: If you are sharing your Dynamics AX training database with other people, be sure to remove your account structure from the chart of accounts once you have finished all exercises of Chapter 8 in order to avoid confusing other people with too many applicable financial dimensions.

Instructions

You may access account structure settings choosing the menu item *General ledger> Setup> Chart of accounts> Configure account structures*. When clicking the button *New/Account structure* in the action pane of the account structures form, the *Create an account structure* dialog displays where you want to enter the name and description of the new structure. Making sure the checkbox *Add main account* is selected, you may click the button *OK* in the dialog to create the account structure.

In order to apply the account structure to your “ZZ” main account, which you have entered in previous exercise 8.2, click on the funnel button  on the right of the *MainAccount* field. The dialog *Which values are allowed for the MainAccount field* displays then, where you want select the option *Specify which values are allowed* entering a filter on your account in the filter line (see Figure 8-3).

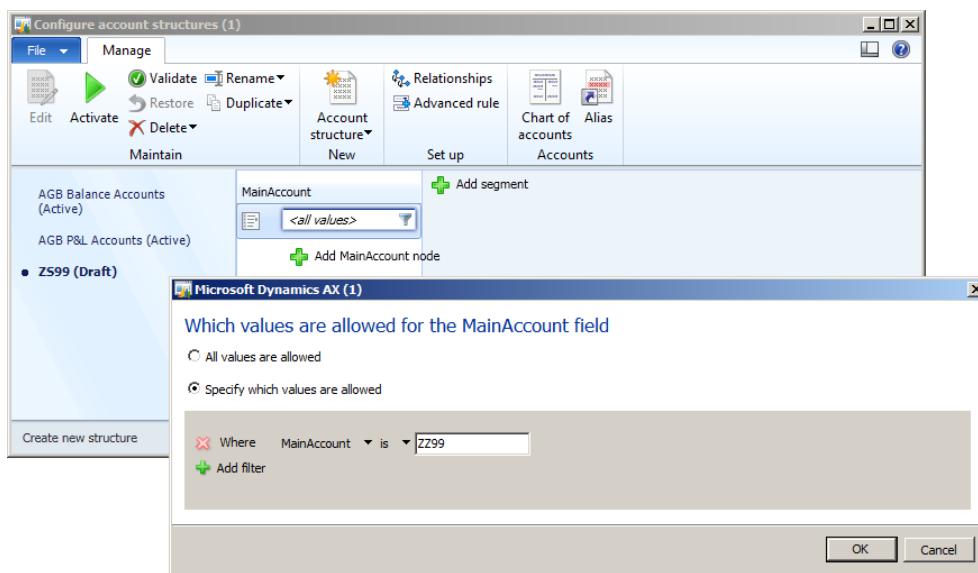


Figure 8-3: Specifying a filter on which main account applies to the account structure

After clicking the button *OK* in the dialog, the filter displays in the *MainAccount* field of the account structures form.

In order to add the financial dimension of exercise 8.1 to your new account structure, click the button *Add segment* in the header of the second column in the account structure form then. In the related dialog you may select your financial dimension before clicking the button *Add segment* in the dialog.

Finally, activate the new account structure by clicking the button *Activate* in the action pane of the *Configure account structures* form and then clicking the button *Yes* in the confirmation dialog.

Before starting to assign the account structure, check which chart of accounts applies to your company in the ledger form (*General ledger> Setup> Ledger*, compare exercise 8.2).

Then open the form *General ledger > Setup > Chart of accounts > Chart of accounts* and select the chart of accounts applying to your company. On the *Account structures* tab, click the button *Add* and select your new account structure applying a double-click in the lookup (see Figure 8-4).

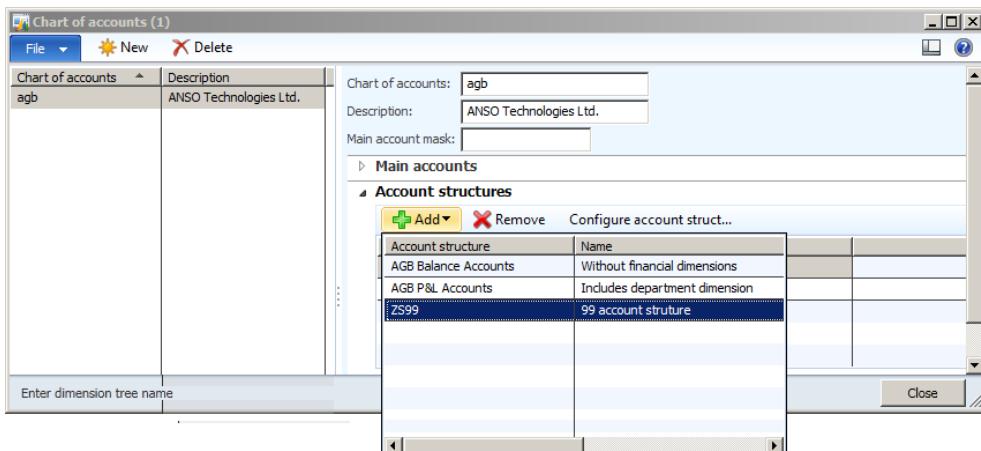


Figure 8-4: Assigning the account structure to the chart of accounts

Exercise 8.4 – Bank Accounts

Your company opens a new bank account at your preferred bank. Register an appropriate bank account “B-##”, referring to any routing number and bank account number you like. On the tab *Currency management* you may select the main account “111B-##” and leave the default currency.

Instructions

In order to register the bank account, you want to click the button *New/Bank account* in the form *Cash and Bank management> Common> Bank accounts*. In the new record, enter required bank account data as shown in the example of Figure 8-5.

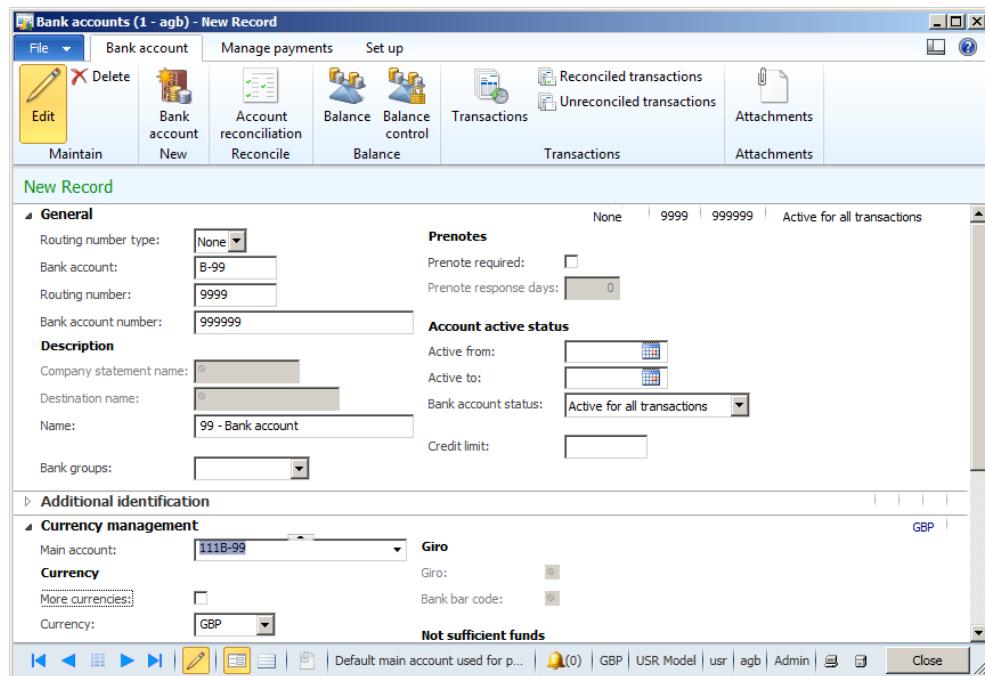


Figure 8-5: Inserting the new bank account

Exercise 8.5 – Journal Names

You want to register the transactions of the exercises below in your own journals. For that purpose, you want to register a journal name “G-##” (## = your user ID) with the type “Daily”, a journal name “I-##” with the type “Vendor invoice recording” and a journal name “P-##” with the type “Vendor disbursement”. Choose an existing number sequence for all of the journal names.

Instructions

By setting up your individual journal names, you may separate your journal registrations from other users. In order to set up the new journals as requested, you want to access the form *General ledger> Setup> Journals> Journals names* inserting new records as shown in Figure 8-6. When registering the journal names, you have to make sure to select the right journal type.

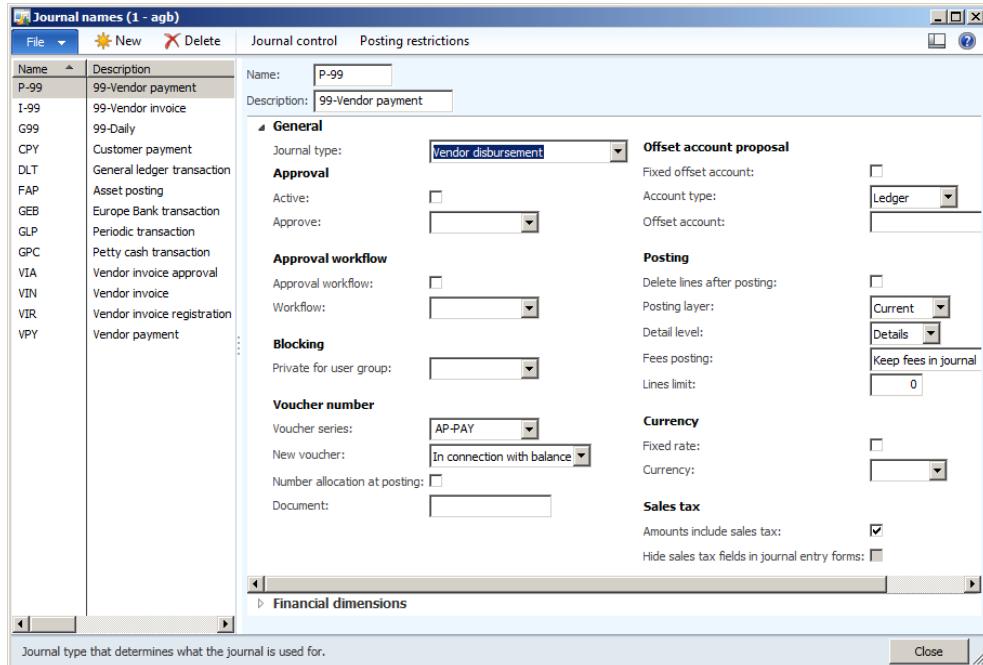


Figure 8-6: Setting up the journal names

Exercise 8.6 – Segmented Entry in General Journals

You want to transfer GBP 50.00 from your main account "ZZ##" in "Area ## 1" to your petty cash account "111C-##" (both accounts entered in exercise 8.2).

Register an appropriate transaction in a general journal, choosing your journal name "G##". Which segments apply to your main account "ZZ##" and how can you show them? Check the value lookup for the main account and the financial dimension.

Then post the journal and check the balance and the transactions on both accounts of the journal line.

Instructions

You may register the transaction in a general journal, which is available in the form *General ledger> Journals> General journal*. In the general journal, click the button *New* creating a new journal header. Select your journal name of exercise 8.5 in the column *Name* then.

Clicking the button *Lines* in the action pane strip, you want to access the journal voucher lines form where you may enter a new line. In the first line of the lines form, you may leave the defaults in the column *Date* and *Account type* ("Ledger").

In the column *Account*, click the small arrow at the top of the field to view the applicable account structure. Then click on the down-arrow on the right of the *Account* field to access the value lookup. Next, type "ZZ" for filtering on main accounts starting with "ZZ" in the account ID or description and click on your main account in the lookup to select it.

According to the account structure, which you have created and linked to your "ZZ" main account in exercise 8.3, the financial dimension of exercise 8.1 applies as second segment. Click a second time on the down-arrow on the right of the *Account* field, which now opens the value lookup for the financial dimension, since this presently is the active segment.

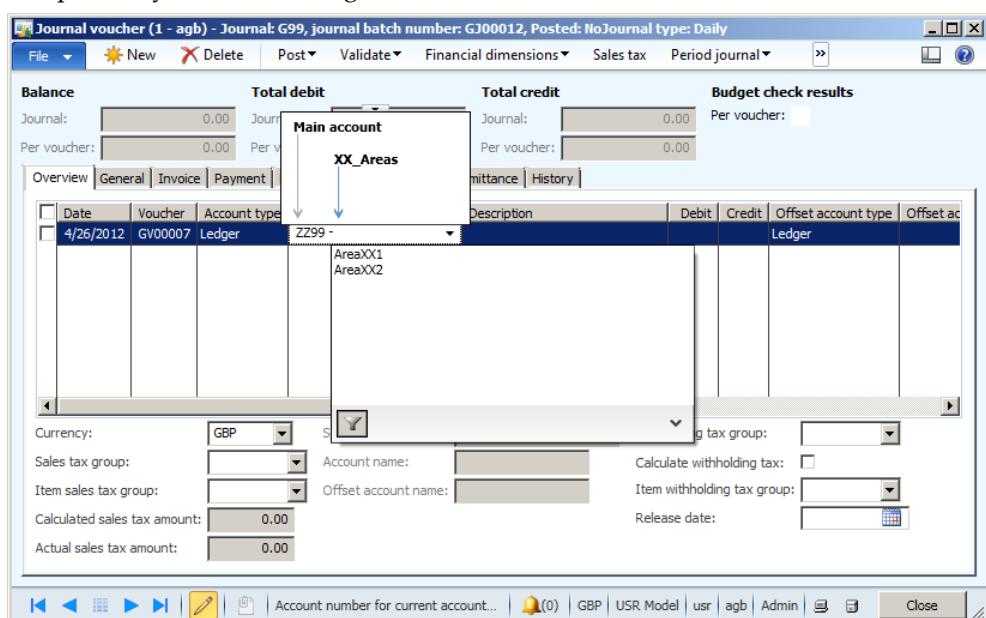


Figure 8-7: Applying segmented entry control when entering a ledger account

After selecting the appropriate financial dimension value you may leave the *Account* field and enter a transaction text in the column *Description*. Then enter the transaction amount in the column *Credit*.

Making sure the *Offset account type* is "Ledger", you may enter your petty cash account in the *Offset account* field (similar to entering the account in the *Account* field before). Depending on the account structure applying to the offset account, it may be necessary to enter financial dimension values in the offset account.

Once you have finished entering the line, you may post the journal clicking the button *Post/Post*.

Once you have posted the transaction posting, you may view it clicking the button *Journal entries/Posted* in the action pane of the main accounts list page (*General*

*ledger> Common> Main accounts) after selecting one of the two main accounts concerned. The account balance, which shows GBP – 50.00 on the “ZZ” account and GBP + 50.00 on the petty cash account, is available clicking the button *Journal entries/By currency*.*

Exercise 8.7 – General Journal

You want to withdraw GBP 100.00 from the bank account “B-##” entered in exercise 8.4 and put it to your petty cash account “111C-##” entered in exercise 8.2. Register the appropriate transaction in a general journal, choosing your journal name “G-##”.

Check the balance and transactions of the bank account and of the petty cash account before posting. Then post the journal and check the balance and the posted transactions again.

Instructions

The balance of the petty cash account is available in the main accounts list page (*General ledger> Common> Main accounts*), where you may click the button *Journal entries/By currency* after selecting the appropriate main account.

Accessing the bank accounts list page (*Cash and Bank management> Common> Bank accounts*), you may check the balance of your bank account in the factbox or in the balance form, which opens by clicking the button *Balance/Balance* on the action pane tab *Bank account* after selecting your account (compare Figure 8-9 below, showing the balance after posting the journal).

Clicking the button *Transactions/Transactions* in the action pane of the bank accounts list page or the button *Journal entries/Posted* in the action pane of the main accounts form, you may access the bank transactions or ledger transactions.

Since you did not post any transaction to your bank account, it shows a balance of zero and no transaction. Balance and transactions on the petty cash account comply with the transaction posted in previous exercise 8.6.

You may register the withdrawal required in the current exercise in a general journal (*General ledger> Journals> General journal*), creating a new journal header by clicking the button *New* and selecting your journal name of exercise 8.5 in the column *Name*.

Click the button *Lines* to access the journal lines then, where you want to select “Bank” in the column *Account type* before choosing your bank account in the column *Account* (see Figure 8-8). After entering an appropriate transaction text, you may record the transaction amount in the column *Credit*.

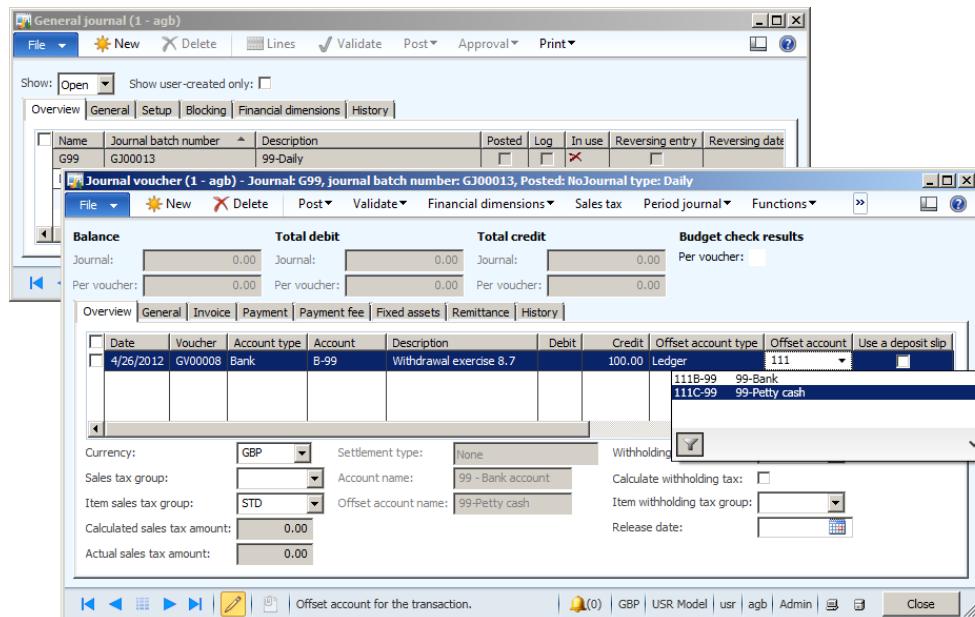


Figure 8-8: Registering the general journal line

The *Offset account type* is “Ledger” and the offset account is the petty cash account of exercise 8.2. Once you have finished entering the line, you may post the journal clicking the button *Post/Post*.

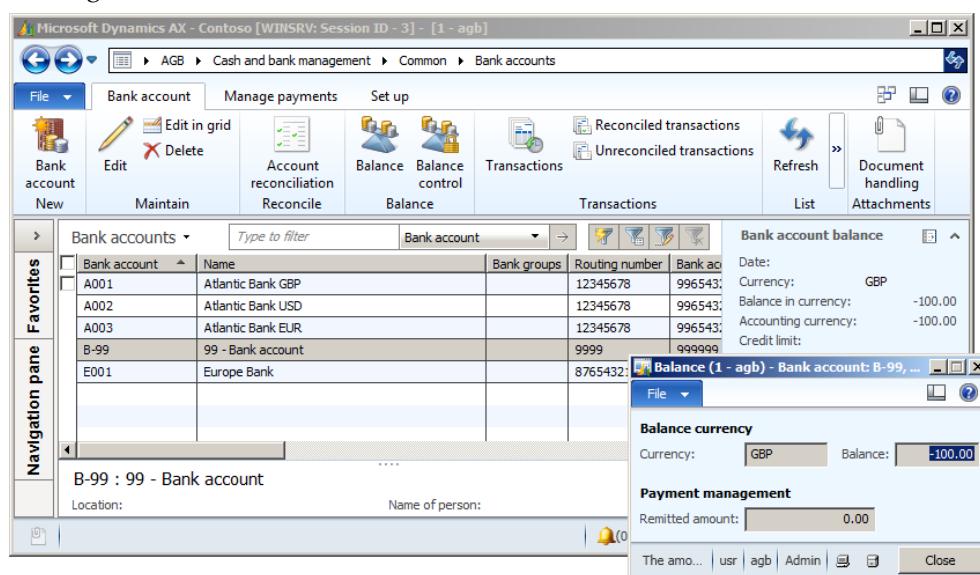


Figure 8-9: Inquiry of the bank account balance after posting the transaction

After posting, you may check balance and transactions again as shown above. Your bank account now shows a balance of GBP -100.00 resulting from the posted withdrawal.

Note: In order to check the bank account balance before posting, you may also click the button *Inquiries/Balance control* in the journal line.

Exercise 8.8 – Purchase Invoice

The vendor, which you have entered in exercise 3.2, sends the invoice "VI808" showing a total of GBP 50.00. The invoice refers to expenses, for which you have entered the main account "6060##" in exercise 8.2.

Selecting an invoice journal in the accounts payable menu, you want to record this invoice choosing your journal name "I-##". The terms of payment and the cash discount entered in exercise 3.1 apply to this invoice.

Check the vendor balance and transactions of your vendor as well as the ledger balance and transactions of your expense account before posting. Then post the invoice and check the balance and the transactions again.

Instructions

In order to check the vendor balance, you may click the button *Balance/Balance* on the action pane tab *Vendor* of the vendor form (*Accounts payable> Common> Vendors> All vendors*) after selecting your vendor. In order to check the vendor transactions, you may click the button *Transactions/Transactions*.

In a similar way, you may check the balance and transactions of your expense account clicking the appropriate buttons in the main accounts list page (see exercise 8.6 and 8.7).

Accessing the form *Accounts payable> Journals> Invoices> Invoice journal*, you want to register the invoice then. After inserting a new journal header referring to your journal name of exercise 8.5, you may access the journal lines by clicking the button *Lines*.

As shown in Figure 8-10, insert a line choosing your vendor in the column *Account*. Dynamics AX then retrieves defaults from the vendor record for the terms of payment and cash discount, which display in the lower pane of the journal line form. After entering the invoice number in the column *Invoice*, you may record the invoice amount in the column *Credit*. Making sure the offset account type is "Ledger", you may enter your expense account in the column *Offset account*.

Clicking the button *Post/Post*, you may finally post the invoice journal.

After posting, you may check the balance and transactions again as shown above. Since your journal is set up to include sales tax in the invoice amount entered (checkbox *Amount incl. sales tax* on the tab *Setup* of the journal header), the balance

and transaction amount on your expense account is reduced by the sales tax amount.

The screenshot shows the 'Invoice journal (1 - agb)' window. The main title bar reads 'Journal voucher (1 - agb) - Journal: I-99, journal batch number: GJ00014, Posted: NoJournal type: Vendor invoice recording'. The window is divided into several sections:

- Balance:** Displays 'Total debit' and 'Total credit' fields, both currently at 0.00.
- Budget check results:** Shows 'Per voucher:' fields for debit, credit, and offset account type.
- Overview:** A grid table with columns: Date, Voucher, Account type, Account, Invoice, Description, Debit, Credit, Offset account type, and Offset account. One row is visible: 4/26/2012, PG00002, Vendor, 30021, VI808, , 50.00, Ledger, 6060-99.
- Invoice:** Fields include Terms of payment (P-99), Due date (6/25/2012), Payment ID, Tax exempt number, Sales tax group (VDO), Item sales tax group (STD), Calculated sales tax amount (7.45), Actual sales tax amount (0.00).
- Sales tax:** Fields include Cash discount (D-99), Cash discount date (5/10/2012), and Discount amount (-1.50).
- Document:** Fields include Document and Document date.
- Account name:** Fields include Account name (99-Vendor of exercise) and Offset account name (99-Consulting).
- Currency:** Currency is set to GBP.

Figure 8-10: Registering the invoice journal line

Exercise 8.9 – Vendor Payment

You want to pay the invoice "VI808", which you have posted in the previous exercise. Register the payment, choosing a vendor payment journal applying your journal name "P-##". Withdrawing applicable cash discount, you want to pay from your bank account "B-##" entered in exercise 8.4.

Check the vendor balance and the bank account balance before posting. Then post the payment and check the balances again, in addition controlling the voucher transaction and the transaction origin of the payment transaction.

Instructions

You may check the vendor balance and the bank account balance as you did in the previous exercises.

In order to register the vendor payment, you want to access the form *Accounts payable> Journals> Payments> Payment journal*. After inserting a new journal header referring to your journal name of exercise 8.5, you may access the journal lines by clicking the button *Lines*. In the journal lines form, you want to insert a record choosing your vendor in the column *Account*.

The easiest way to apply the payment to a certain invoice is available choosing the open transaction settlement form, which you may access by clicking the button *Functions/Settlement* in the journal line. In the open transaction settlement form (see Figure 8-11), select the checkbox *Mark* in the line showing the invoice of exercise 8.8 and close the form (no button *OK* available).

Is marked	Mark	Full settlement	Use cash discount	Voucher	Account	Company accounts	Date	Due date	Invoice	Amount	Currency
<input type="checkbox"/>	<input type="radio"/>	Normal		PI00012	30021	agb	4/23/2012	6/22/2012	VI511	1,645.00	GBP
<input type="checkbox"/>	<input type="radio"/>	Normal		PI00013	30021	agb	4/25/2012	6/24/2012	VI74	14,100.00	GBP
<input type="checkbox"/>	<input type="radio"/>	Normal		PI00014	30021	agb	4/26/2012	6/25/2012	VI75	28,200.00	GBP
<input checked="" type="checkbox"/>	<input type="radio"/>	Normal		PG00002	30021	agb	4/26/2012	6/25/2012	VI808	50.00	GBP

Figure 8-11: Selecting the invoice to be paid in the open transaction settlement form

The payment amount then transfers to the *Debit* field in the payment journal line. Since your payment is within the cash discount period, cash discount is deducted from the invoice amount.

After selecting the offset account type "Bank", you may enter your bank account in the column *Offset account* as shown in Figure 8-12. Clicking the button *Post/Post*, you may post the journal.

After posting the vendor payment, open the bank accounts list page (*Cash and Bank management> Common> Bank accounts*) and select your bank account. Then click the button *Balance/Balance* on the action pane tab *Bank account* to check the balance, which now is the total of the current transaction and the transaction of exercise 8.7.

The bank transactions display after clicking the button *Transactions/Transactions* in the action pane of the bank accounts list page. Clicking the button *Voucher* in the bank transactions, you may access the ledger transactions related to the selected bank transaction. In the ledger transactions (voucher transactions), you may click the button *Transaction origin* to show related transactions in all modules.

In order to show the vendor balance and transactions, you may access the vendor form where similar inquiries are available (compare exercise 8.8).

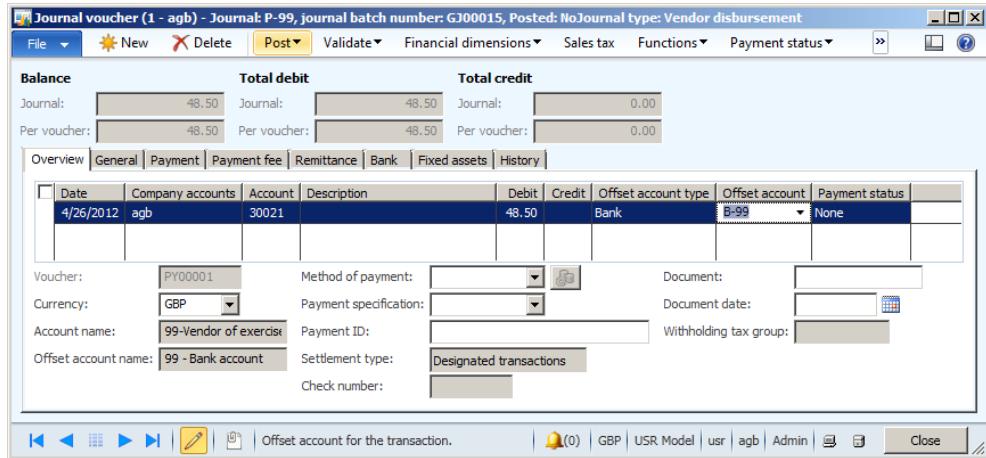


Figure 8-12: Journal line before posting the vendor payment

Exercise 8.10 – Transaction Reversal

Your vendor of exercise 3.2 sends the invoice "VI810", showing a total of GBP 30.00. Register and post the invoice like you did in exercise 8.8.

Afterwards you notice that the invoice is incorrect and want to reverse the transaction. Check the vendor balance and transactions of your vendor as well as the ledger balance and transactions of your expense account before reversing. Then reverse the invoice and check the balance and the transactions again.

Instructions

Accessing the form *Accounts payable> Journals> Invoices> Invoice journal*, you may register the invoice like in exercise 8.8. After posting the invoice, you want to access the vendor form to check balance and transactions (compare exercise 8.8).

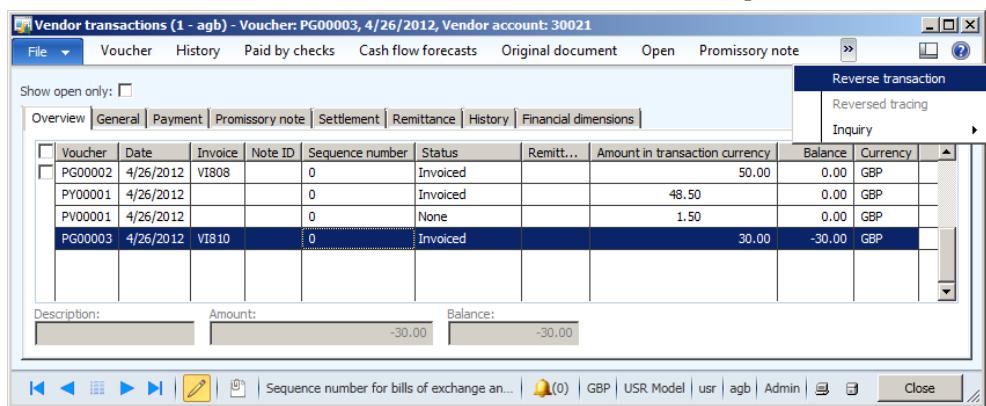


Figure 8-13: Selecting the invoice for reversal in the vendor transactions

In order to reverse the current invoice, you have to access the vendor transactions clicking the button *Transactions/Transactions* on the action pane tab *Vendor* of the vendor form (*Accounts payable> Common> Vendors> All vendors*) after selecting your vendor. Making sure the appropriate invoice is selected, you may click the button *Reverse transaction* in the transaction form as shown in Figure 8-13. When clicking the button *OK* in the following dialog box which provides the option to enter a specific posting date, Dynamics AX will post a reversing transaction.

After posting the reversal, you may check the balance and transactions as you did in previous exercises.



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