



Affordable, Adaptable ERP Software



*Manufacturing Data Training  
Guide*

Version 5.40

Fitrix™

***Manufacturing Data ♦ Training Guide***

***Version 5.40 – Revised May 2013***

## ***Fitrix Manufacturing Course Workbook***

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# **Chapter 1 – Getting Started with Fitrix**

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## **Learning Objectives**

To become familiar with the Fitrix Accounting System

To become familiar with Fitrix Menus and Data Entry Commands

To become familiar with Fitrix User Control Libraries

To become familiar with the Set Up Company menu and options

To become familiar with the Set up Multilevel Tax codes menu and options

To become familiar with Batch Processing

To become familiar with Flexible Document Delivery (FDD) options

To become familiar with the document attachment capabilities

To become familiar with the email alerts functionality

## **Fitrix ERP Software**

Transactions are events that are recorded in an accounting period. Typically, these events involve the transfer of money, product, or services. In Fitrix transactions are referred to as documents.

Data in the Fitrix Accounting System is stored in a relational database. A relational database organizes its data into one or more tables or relations of records.

Reports or the system output includes inquiry reports, customer statements, etc., and ultimately the financial statements.

## ***Fitrix Modules***

Fitrix offers accounting solutions for three business operations; Financial, Distribution, and Manufacturing:

### **Financial**

General Ledger (gl)  
Accounts Receivable (ar)  
Accounts Payable (ap)  
Payroll (py)  
Fixed Assets (fa)  
Multicurrency (mc)

### **Distribution**

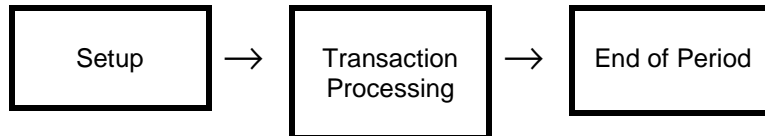
Order Entry (oe)  
Inventory Control (ic,  
Purchasing (pu)  
Replenishment (rl)

### **Manufacturing**

Production Order Processing (sc)  
Bill of Materials(bm)  
Material Resource Planning (rp)  
Standard Routing (rt)  
Labor Processing (lp)  
Production Scheduling (ps)  
Standard Product Costing (pc)  
Actual Costing (ac)

## Phases of the Accounting Process

The cycle of activity within Fitrix Accounting follows a basic pattern that is consistent across all modules. At the most basic level, it consists of the following phases:



These three phases must be performed in sequence. Setup must be complete before any transaction processing can begin. Transactions must be entered and checked against an Edit List in order to be posted. To complete the process all transactions are posted and End of Period processing is run.

### Set Up Accounting

Activities required to set up the accounting system are performed during the Setup phase of Fitrix Accounting. Company Setup procedures must be done before module specific set up.

Company Set Up procedures include entering the name and address of your company, assigning department codes, and establishing ledger account number ranges. You can then enter ledger accounts and designate cash ledger accounts as checking accounts.

Module specific set up activities includes designating default ledger accounts for the module and entering existing open items. Activities performed during module set up include entering account groups, entering customers and vendors, entering beginning balances, etc.

Once the set up processes are completed the next phase, transaction processing, can begin.

### Transaction Processing

Transaction processing is the day-to-day handling of documents. Transaction processing consists of three separate steps that are consistent throughout the Fitrix applications:

**Entry.** A transaction is initiated by entering a document. Documents entered may be updated at any time before posting.

**Edit.** An edit list is printed after documents are entered and before they are posted. This list shows all documents waiting to be posted. If mistakes are found on this report, corrections can be made and another edit list must be printed prior to posting.

**Post.** Posting is the process that posts the document to the General Ledger Activity table. Once a document is posted it cannot be updated. Changes must be made by posting correcting entries.

### End of Period

End of Period activities include posting general ledger activity, posting recurring documents, and printing period end statements and reports, etc.

## Fitrix Menus

The Fitrix Main Menu displays all modules purchased by your company however access to any given module is dependent upon authorization. For instance, if your company has purchased all Fitrix modules, but the Accounts Payable team is only authorized to enter data in two of the modules, only two menu options will be activated. The other eight will appear grayed out.



The Menu options available on the Ring menu are as follows:

Field	Description
<b>File</b>	Allows you to exit the Fitrix system.
<b>View</b>	Offers user preferences to change the way Fitrix screens display. Your choices are Classic, Explorer, and Edit.
<b>Execute</b>	Manage configuration and security settings
<b>Settings</b>	Allows you to change the color scheme or database
<b>Help</b>	Displays Fitrix information

To select an option from a menu, use the mouse to highlight the option, and then left-click to select. You can also use the keyboard to select a menu option by pressing the number or letter associated with the menu option or use the up and down arrow and press enter to select.

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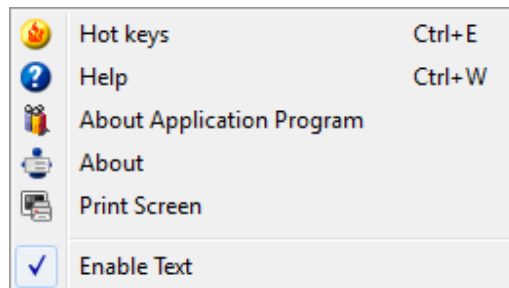
**Note:** When a menu item icon is a file folder, an additional submenu is available.

## Fitrix Data Entry Screen

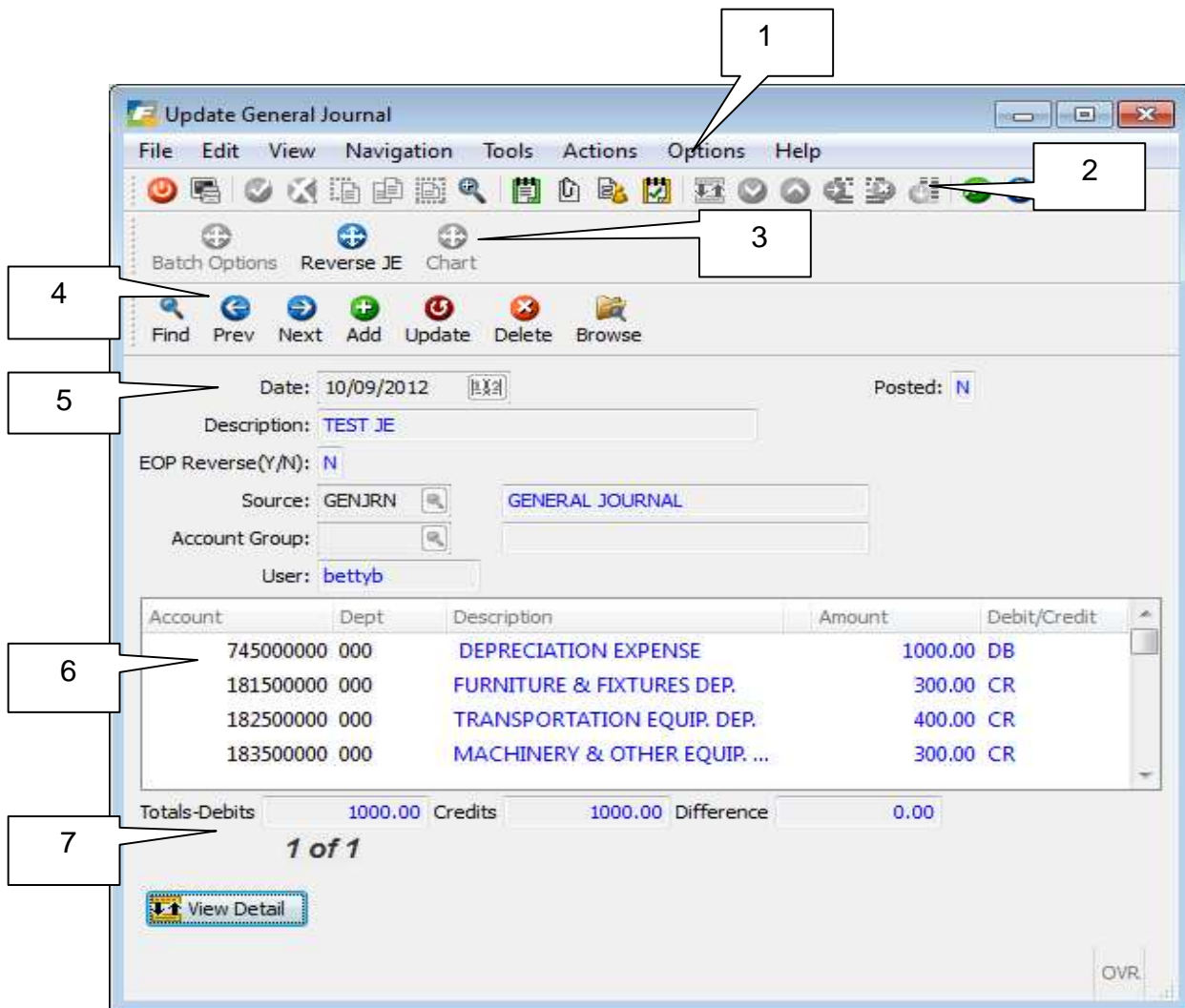
Standard Fitrix Data Entry forms or screens have several sections. To view this screen from main menu, select Financial Management, General Ledger, Ledger Journal, and then Update General Journal.

**Note:** For a more detailed explanation of all the options available on the four toolbars, review the Getting Started With Fitrix User Guide.

**Note:** To enable or disable the text that display beneath each icon on the toolbar, right click on the the toolbar and click on enable text.







Number	Field	Description
1	Menu Toolbar	These options perform routine functions, and are often referred to as the User Control Library functions. The Menu Toolbar is available on every screen.
2	Standard Toolbar	The icons on the standard toolbar perform many of the same functions as the options found on the menu toolbar.
3	Other Tool Bar	The Custom Tool Bar area has buttons that are specific to your company and the current module. Some screens may not have any buttons on the Custom Tool Bar.
4	Action Toolbar	This toolbar contains icons that represent actions such as add, update, and delete.

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Number	Field	Description
5	<b>Header Section</b>	This section is just below the Action toolbar and contains basic or general information about a document.
6	<b>Detail Section</b>	This section contains labeled columns that correspond to information in lines or rows.
7	<b>Totals</b>	This section is a reference section displaying debit and credit totals information.

When entering information on a data entry screen there are often related screens that are accessed using Zoom picker windows from the Standard Toolbar.

Select Exit or press Q to close the data entry screen. The General Ledger Menu displays. Press ESC key to return to the main menu.

### ***Action Toolbar Commands***

Data Entry Commands can be selected from the Action toolbar two ways:

1. Click the command.
2. By typing the first letter of the command name either uppercase or lowercase (ie- a for Add).

To view this screen, select **Financial Management>Accounts Receivable > Receivable Ledger > Update Receivable Document**.

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Here are the fields and descriptions for data entry commands:

Field	Description
<b>Add</b>	Allows you to add any new document.
<b>Update</b>	Allows you to modify an existing document once it has been selected or found.
<b>Delete</b>	Allows you to delete a document if it is not posted.
<b>Find</b>	<p>Use the find command to retrieve one or more records. There are three ways to use the Find command.</p> <ol style="list-style-type: none"> <li>1. <b>To find all records</b> stored for a program, click the OK button (or press ENTER key) without entering any data in the screen.</li> <li>2. <b>To find a particular record</b>, enter a piece of information that is unique to that record (i.e.; customer code, invoice number), and then click OK or press ENTER.</li> <li>3. <b>To find a group of records</b> enter search criteria using wild cards or relational operators (for more information,</li> </ol>

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Field	Description
	review chapter 7 in the Getting Started With Fitrix User Guide.).
<b>Browse</b>	Arranges all found documents into a list displayed to the screen. You can scroll through the documents using the scroll bar or using the various movement icons on the toolbar.
<b>Next</b>	Allows you to view the next document by paging down through the found documents.
<b>Prev</b>	Allows you to view the previous document by paging up through the found documents.

Depending upon the menu option you have selected, your system setup, or system security, all options may not be available. If you select a command that is not available, the system will display a message stating it is not available, and upon pressing enter, you will return to the action toolbar.

Select Quit or press Q and then ESC key three times to return to the main menu.

## Printing and Flexible Document Delivery (FDD)

Flexible Document Delivery (FDD) allows the user to direct report output to printers (host or client), email, or fax. This feature is only available for Fourth Generation customers that are running Fitrix version 5.2 or greater.

The following report programs have been modified to have background print so that forms no longer need to be purchased. These programs also support FDD.

### **Order Entry:**

Order Acknowledgement

Customer Invoice

All Export forms (Proforma Invoice, Packing List, Bill of Lading, Commercial Invoice, Provisional Invoice, and Final Invoice)

**Note:** the picking ticket and packing list report programs are also background print enabled but since these are internal forms they are not FDD enabled.

### **Purchasing:**

Vendor Purchase Order


### **Accounts Receivable:**

Customer Invoice

Customer Statement

Dunning Letters



A new icon  has been added to the Update Customer Information and Update Vendor Information Toolbar and is only accessible when in Update mode.

When you click on this icon in the Update Customer Information program the following screen displays listing all report programs that currently support FDD.

Document	Title	Print	Subject	E-Mail	Address	FAX	Number	Sent By	Failure Notify (for faxes)
ar:o_invc	AR Invoices	<input type="checkbox"/>	AR Invoices	<input checked="" type="checkbox"/>	bwalker@actionauto.com	<input type="checkbox"/>			
ar:o_letter	AR Dunning Letters	<input type="checkbox"/>	AR Dunning Letters	<input checked="" type="checkbox"/>	bwalker@actionauto.com	<input type="checkbox"/>			
ar:o_statmt	AR Statements	<input type="checkbox"/>	AR Statements	<input checked="" type="checkbox"/>	bwalker@actionauto.com	<input type="checkbox"/>	7704323448	Bill Walker	bwalker@actionauto.com
oe:o_billdg	Export - Bill of Lading	<input checked="" type="checkbox"/>	Export - Bill of Lading	<input type="checkbox"/>		<input type="checkbox"/>			
oe:o_cminv	Export - Commercial Invoice	<input checked="" type="checkbox"/>	Export - Commercial Invoice	<input type="checkbox"/>		<input type="checkbox"/>			
oe:o_invc	OE Invoice	<input checked="" type="checkbox"/>	OE Invoice	<input checked="" type="checkbox"/>	bwalker@actionauto.com	<input type="checkbox"/>			
oe:o_invcf	Export - Final Invoice	<input checked="" type="checkbox"/>	Export - Final Invoice	<input type="checkbox"/>		<input type="checkbox"/>			
oe:o_order	Acknowledgements	<input type="checkbox"/>	Acknowledgements	<input checked="" type="checkbox"/>	bwalker@actionauto.com	<input type="checkbox"/>			
oe:o_picker	Pick List	<input checked="" type="checkbox"/>	Pick List	<input type="checkbox"/>		<input type="checkbox"/>			
oe:o_prfinv	Export - Proforma Invoice	<input checked="" type="checkbox"/>	Export - Proforma Invoice	<input type="checkbox"/>		<input type="checkbox"/>			
oe:o_proinv	Export - Provisional Invoice	<input checked="" type="checkbox"/>	Export - Provisional Invoice	<input type="checkbox"/>		<input type="checkbox"/>			
oe:o_quote	Quotation	<input type="checkbox"/>	Quotation	<input checked="" type="checkbox"/>	bwalker@actionauto.com	<input type="checkbox"/>			
oe:o_shipr	Packing Slip	<input checked="" type="checkbox"/>	Packing Slip	<input type="checkbox"/>		<input type="checkbox"/>			
oe:o_shper	Export - Packing List	<input checked="" type="checkbox"/>	Export - Packing List	<input type="checkbox"/>		<input type="checkbox"/>			

After FDD is installed the default setting will be set to Print for all reports. You can then update for each customer as needed. More than one delivery method per report can be selected.

### Field Definitions:

Document – Fitrix program name.

Title- title of the program.

Print- check this check box if the delivery method is to send the report to a printer.

Subject – subject line for your fax cover sheet.

Email- check this check box if the delivery method is to send the report via email.

Address- the email address you wish to send the report to.

FAX - check this check box if the delivery method is to send the report via fax.

Number- the fax number you wish to send the report to. Enter with no dashes and also precede the fax number with any number needed to make an outside call.

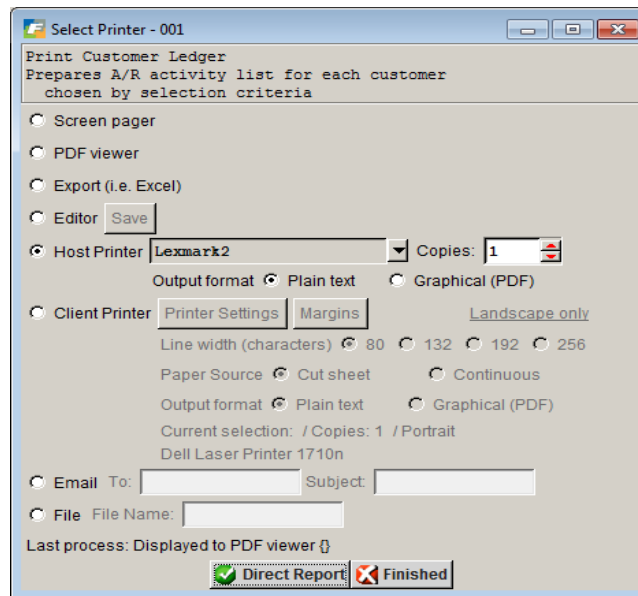
Contact – the name of the person that will print on the fax cover sheet that will receive the fax.

Failure notify – the email address of the employee that should be notified in the event the fax was not sent.

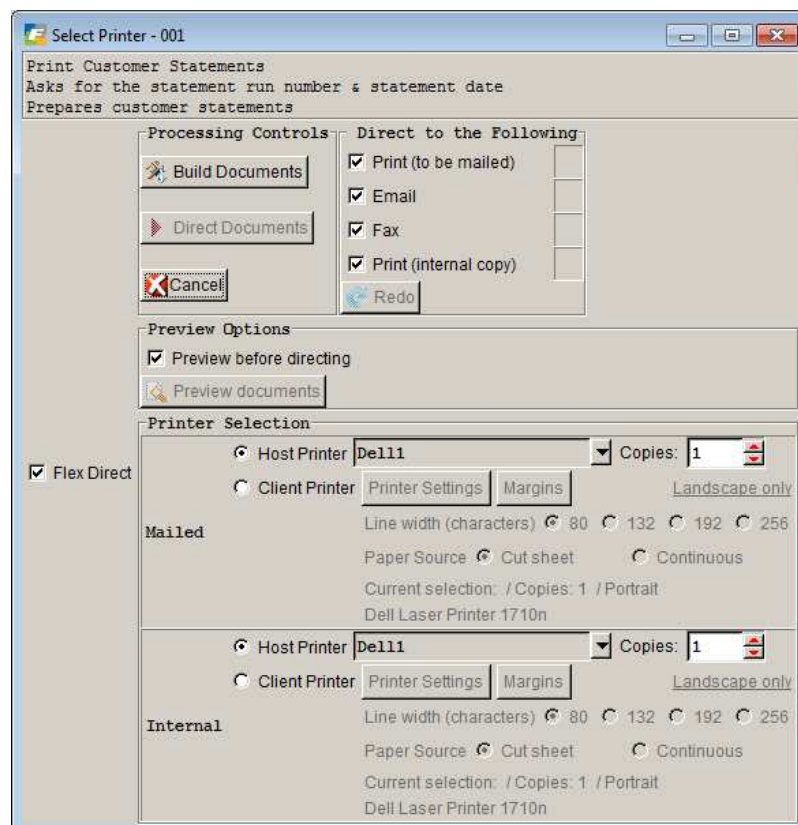
### FDD PRINTER DIALOG BOX:

Report programs that do not support FDD will have this standard printer dialog box:

## Fitrix Manufacturing Course Workbook



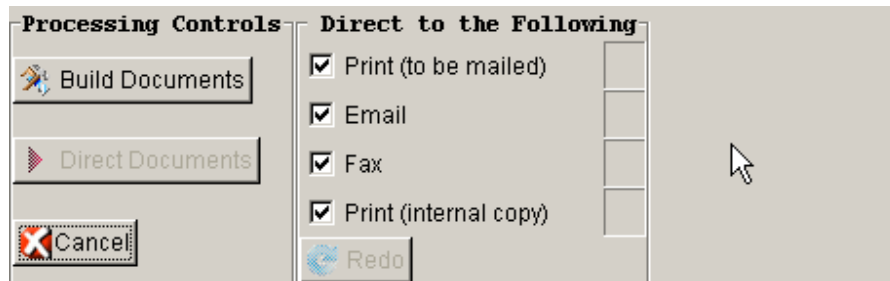
Here is the FDD printer dialog box:



If you do not wish to use the flex direct options simply uncheck the flex direct box and the printer dialog box will disable the FDD options and display all options that are on the non FDD printer dialog box.

The FDD printer dialog box is divided into three sections:

**Processing controls:**



The example above shows that the documents will be processed via print to be mailed, email, fax, and internal print to be filed. These boxes can be unchecked as needed.

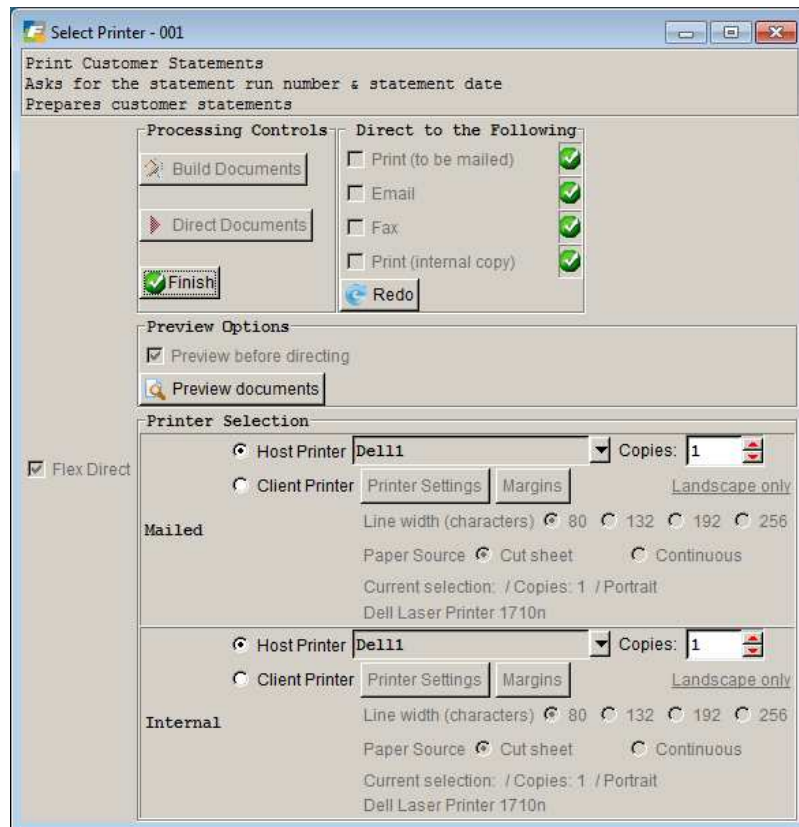
The first step is to click the Build Documents button. If the Preview before directing check box is checked, you will be able to view a PDF of the documents prior to sending/printing them. Please note that if you click the Cancel button before clicking the Direct Documents button you will need to select the reprint option when you process your documents as the Build Documents options sets the print flag to Y at the table level even though you have not printed/sent your documents.

The next step is to click the Direct Documents button. This will send/print the documents. See discussion on Printer Selection section below for directing the documents to your various printers.

If all Direction method check boxes were checked, the printer dialog box will look like this after the documents were printed/sent:



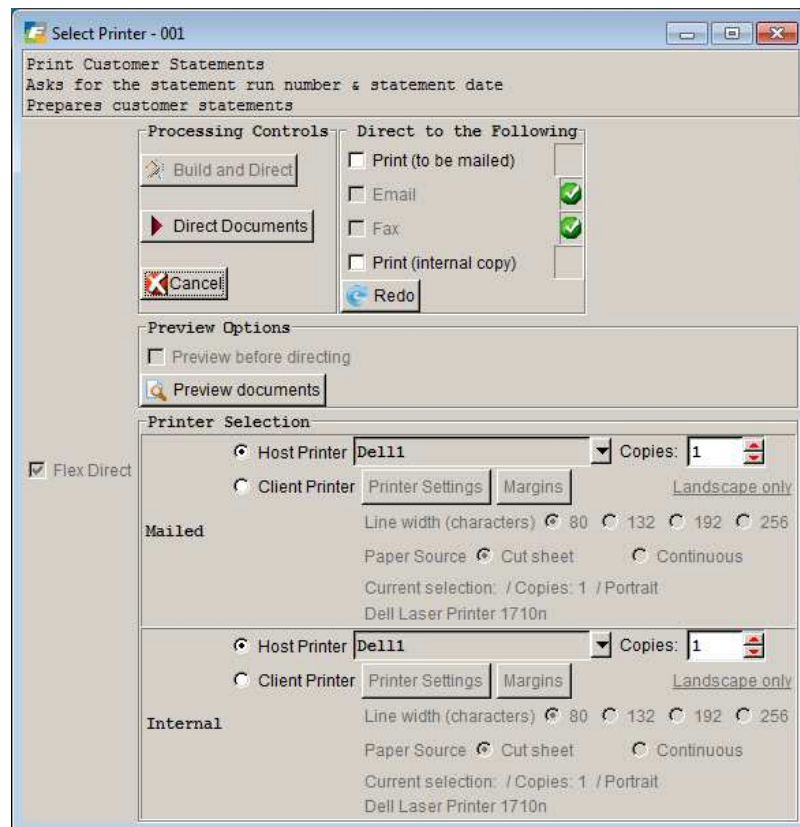
## Fitrix Manufacturing Course Workbook



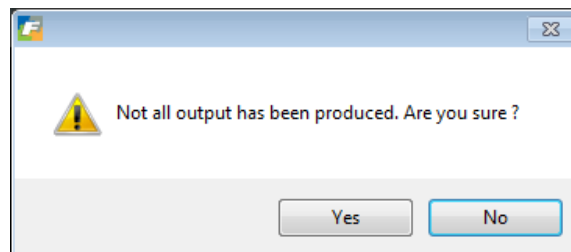
The green check marks indicate the direction methods that were processed. To return to the menu, click the Finish button.

In the event that you want to process the documents again (an example of the need for this would be if the printer ran out of paper or the paper jammed) click the redo button and then check the direction method check box that you wish to process again. Once the direction method check boxes are checked, click the Direct Documents button to reprint/resend your documents.

If you uncheck some of the selection methods (ie- only check email check box) and then process the documents the printer dialog box will have a Cancel button instead of a Finished button

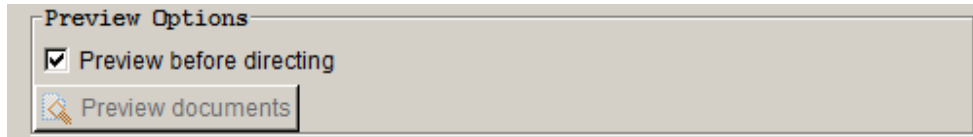


To return to the menu click the Cancel button and you will receive this warning:



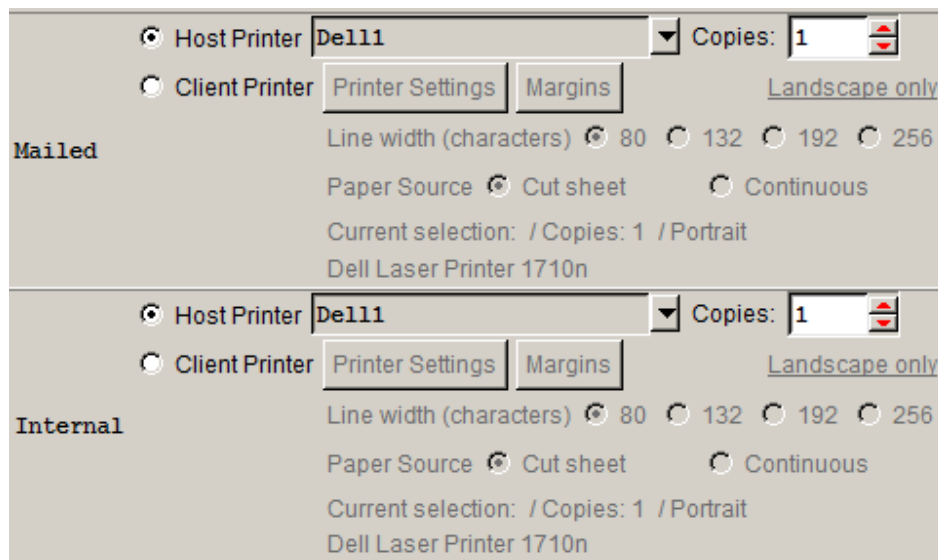
This warning is just to let you know that all delivery methods were not selected. Click Yes if this is correct. Click No if you wish to display the printer dialog box again.

**Preview Options:**



If this check box is checked (and that is the default setting), you will be able to preview a PDF of the documents by clicking the Build Documents button prior to Directing/Processing them. If you do not wish to preview, uncheck this box.

**Printer Selection:**



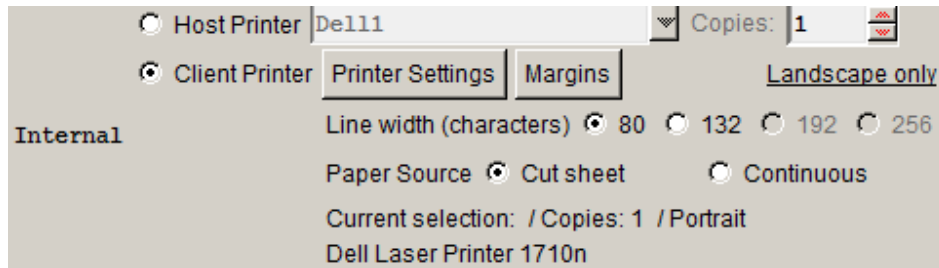
This section of the screen controls printer selection.

Mailed – printer selection will only be accessible if the Print (to be mailed) check box is checked. Select either a network printer or a client printer and the number of copies to print for the documents that will be mailed.

Internal - printer selection will only be accessible if the Print (internal copy) check box is checked. Select either a network printer or a client printer and the number of copies to print for the documents that will be printed for internal purposes.

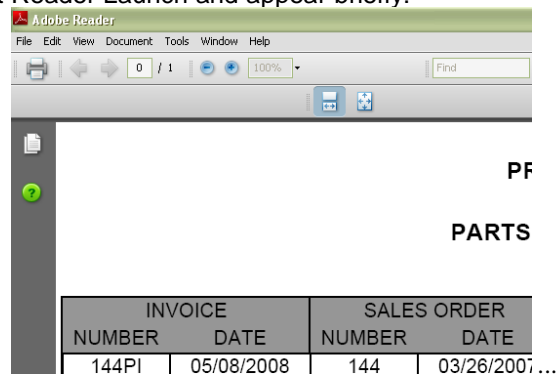
**Note about Client Printers:**

If you change your printer selection to a client printer the printer settings, paper source, and line width radios buttons become active so you can set your setting accordingly.

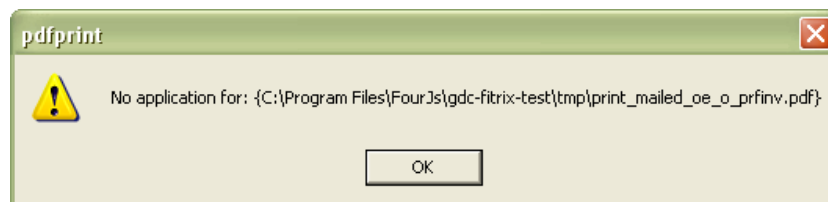


To proceed click the Build Documents button. Since a client printer was selected, Adobe Acrobat will direct copy(s) to the printer.

The user will see Adobe Acrobat Reader Launch and appear briefly:



You may see a message like:



This means that Adobe Acrobat Reader is not installed. This is a free product and may be downloaded and

installed from: <http://www.adobe.com> by clicking on:



## Document Attachment

With the attachment functionality you can attach any type of file to any record in the database. Examples are pictures or schematics of your inventory items, store a PDF of the customer PO with the sales order, recorded phone conversations or emails sent to your customers when dealing with collection issues, attach performance reviews and resumes to your employee records.

### Adding a Document Attachment

In this example we will attach a picture of an inventory item to the item master record.

Find the inventory item you wish to work with:

**Update Inventory Information**

File Edit View Navigation Tools Actions Options Help

Quit Print OK Cancel Cut Copy Paste Zoom Notes Attachments U Fields To Do View Detail Next Page Previous Page Insert Row Delete Row Append Row

Catalog History Turns Cross Sells Mfg-Base Mfg-Plan Commission Alternates

Find Prev Next Add Update Delete Browse

**General**

Item Code: C-DISK Commodity Code:   
Description: HARD DRIVE   
Item Class: COMP COMPUTER EQUIPMENT ☐ Check If This Is A Special Order Item   
Serial/Lot:   
Market Price: N Price Group:   
UPC Code:   
Special Handling Charge:

**Image**

**Units of Measure**

UOM List:   
Stocking Unit: EA   
Selling Unit: EA   
Factor: 1.000000   
Increment: 1.00   
Purchasing Unit: EA   
Factor: 1.000000   
Increment: 1.00

**Accounting**

Inventory: 120000000 INVENTORY   
Cost of Goods: 500000000 PARTS COGS   
Sales: 400000000 PARTS SALES

**Dimensions**

Weight: 0.200 LB   
Volume:

**Price Levels**

Discount Level 1: 25.00   
Discount Level 2: 20.00   
Discount Level 3: 15.00   
Discount Level 4: 10.00   
Discount Level 5: 5.00

**Warehouses**

Warehouse	Location	On Hand	Available	Cost	Price	Vendor
MACON	D1	0.000	0.000	0.0000	220.000	

View Detail

OVR



In update mode click on the Attachments icon on the toolbar. This screen displays:

Filename	Description	Key code	Search keywords
product specs.doc	product specifications	SPEC	
<Click the button>			

Buttons: OK, Cancel, View

OVR



Click on the and find your file.

Filename	Description	Key code	Search keywords
product specs.doc	product specifications	SPEC	
c-disk.jpg	photo	IMAGE	

Buttons: OK, Cancel, View

OVR

Description- optional.

Key code – optional unless it is an image you want to display on a screen then enter IMAGE (case sensitive).

Search keywords – optional.

Click OK and save the change and the image will display.

## Fitrix Manufacturing Course Workbook

**Update Inventory Information**

File Edit View Navigation Tools Actions Options Help

Quit Print OK Cancel Cut Copy Paste Zoom Notes Attachments U Fields To Do View Detail Next Page Previous Page Insert Row Delete Row Append Row

Catalog History Turns Cross Sells Mfg-Base Mfg-Plan Commission Alternates

Find Prev Next Add Update Delete Browse

**General**

Item Code: C-DISK Commodity Code:   
Description: HARD DRIVE   
Item Class: COMP COMPUTER EQUIPMENT ☐ Check If This Is A Special Order Item   
Serial/Lot:   
Market Price: N   
Price Group:   
UPC Code:   
Special Handling Charge:   
**Image**

**Units of Measure**

UOM List:   
Stocking Unit: EA   
Selling Unit: EA   
Factor: 1.000000   
Increment: 1.00   
Purchasing Unit: EA   
Factor: 1.000000   
Increment: 1.00

**Accounting**

Inventory: 120000000 INVENTORY   
Cost of Goods: 500000000 PARTS COGS   
Sales: 400000000 PARTS SALES

**Dimensions**

Weight: 0.200 LB   
Volume:

**Price Levels**

Discount Level 1: 25.00   
Discount Level 2: 20.00   
Discount Level 3: 15.00   
Discount Level 4: 10.00   
Discount Level 5: 5.00

**Warehouses**


Warehouse	Location	On Hand	Available	Cost	Price	Vendor
MACON	D1	0.000	0.000	0.0000	220.000	

[View Detail](#)

OVR

### Viewing a Document Attachment

To view attachments that are not images:

1. Go into update mode, click on the  **Attachments** icon on the toolbar.
2. Place cursor on the row that contains the file of the attachment you want to view and click in the view button on the bottom of the screen shown here.

**Attachments**

File Help

Quit View Delete Row Help Technical status About Application Program About



Filename	Description	Key code	Search keywords
c-disk.jpg	photo	IMAGE	
product specs.doc	product specifications	SPEC	

[OK](#) [Cancel](#) [View](#)

OVR

### **Deleting a Document Attachment**

To delete attachments:

1. Go into update mode, click on the  icon on the toolbar.
2. Place cursor on the row that contains the file of the attachment you want to delete and click on the  icon on the toolbar.



## **User Control Libraries**

User Control Libraries (UCL's) are advanced features which give you control over the Fitrix Accounting system. Included in these libraries are:

- |                                 |                                 |
|---------------------------------|---------------------------------|
| • User Defined Field            | User Defined button (or Ctrl-F) |
| • Freeform Notes (Sticky Notes) | Notes button (or Ctrl-N)        |
| • Personal "To Do" Notes        | To Do button (or Ctrl-T)        |
| • User Defined Help             | Help button (or Ctrl-W)         |
| • User Defined Error Messaging  | Help button (or Ctrl-W)         |

All of these UCL's are available on the Standard Toolbar.

## User - Defined Fields

User Defined Fields Icon

Update Customer Information

File Edit View Navigation Tools Actions Options Help

Quit Print OK Cancel Cut Copy Paste Zoom Notes Attachments U Fields To Do Technical status Help

Ship-To Activity Add Info Bill Info OE Info Ship Notes Credit Notes Credit Ltr Credit Card Order Price Sales Aging Terms Document Delivery Comm Calc

Find Prev Next Add Update Delete Browse Options

Customer Information

Code: 1 Contact: BILL WALKER

Company: ACTION AUTOPARTS Phone: 404 885 4146

Address: 14307 1ST STREET Cell: 404 885 9000

City: ATLANTA FAX: 404 875 1231

State: GA Zip: 30399 Email: billw@actionauto.com E-Mail

Country: US UNITED STATES Web Address: www.actionauto.com Web

Additional Defaults

Salesperson: JC JIM CARSON

Terms: B 2/10 NET 30 DAYS

Pay Method: AR ACCOUNTS RECEIVABLE

Balance: 632947.11 Resale No:

Credit Limit: 50000.00 Resale Expiry:

Credit Hold: Credit Hold Date:

YTD Sales: 660,202 Lifetime Sales: 807,448

Account Type: DISTRIBUTOR

Source: TRADE SHOW

Additional Phone Numbers

SALES	404-345-9876
AP DEPT	404-345-9877
PURCHASING	404-345-9878

Notes 1 of 1 Attachments(4)

OVR

User defined fields allow you to store additional information within a given program without modifying the programs. These fields are only used in data entry screens and are specific to the data entry screen. Up to fifty User-Defined Fields can be defined for every data screen.

To access the User Defined fields screen you must be in a data entry screen and in update mode.

To view the screen above, select **Accounts Receivable > Customer Information > Update Customer Information**. Click **Find**, and then press the **Enter** key to retrieve all records. Click **Update** to enter update mode.

Click the **U Fields** button (or press **Ctrl F**) to display the User defined fields screen.

## Fitrix Manufacturing Course Workbook

Line	Data Field Name	Contents
1	Sales Contact	Bill Brown
2	Sales #	574-297-4937
3		
4		
5		
6		
7		
8		

Table: struistr  
Key: 1

OK Cancel Insert Append Delete Add a User Defined Field

Enter the data into this field. OVR

Line, Data Field Name, and Contents are the three columns that appear in the window:

**Line** indicates the number of the field.

**Data Field Name** is the title of the field being defined.

**Contents** is the column where the document specific data will be entered.

Click on the Add a User Defined Field button to move between field name and contents. Press TAB or use the arrow keys or to move from one line to another. Click the OK button (or press ENTER) to store entry. Click the Cancel button (or press ESC) to cancel.

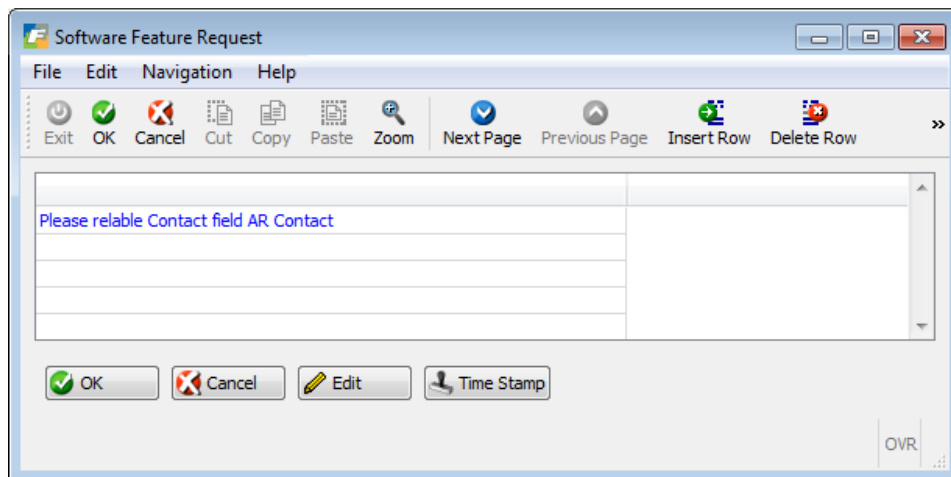
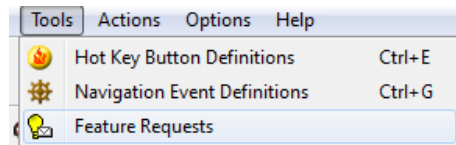
Once a User Defined Field has been created, all users will be prompted to make an optional entry in this field the next time a new record is entered and stored or an existing record is updated.

---

## Feature Request

This option launches a screen program where you can enter any program features you need. This information is then logged in the erlog file so your system administrator can review it and make the requested changes.

To launch this screen, click on the word Tools on the Menus toolbar (top toolbar).

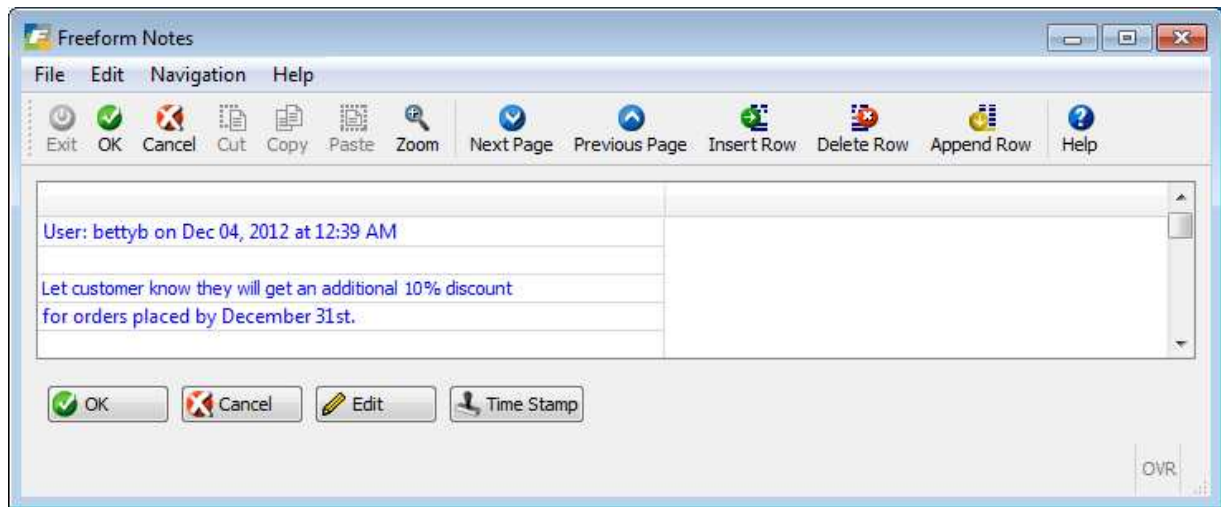


## Freeform Notes

Freeform Notes allow the entry of text to be applied to any document. Up to 99 lines of freeform text can be added to a document. To access Notes you must be in a Data Entry screen and in Update Mode.

Click the  **Notes** button (or press Ctrl-N) to display notes window.

## Fitrix Manufacturing Course Workbook



For any records that have notes attached to them, the word “Notes” will display in the bottom left hand corner of the screen.


By clicking on the Time Stamp button you can also insert the user id, date, and time entered into the note. There is a tool setting available so that notes can be automatically time stamped. Have your system's administrator update this setting:

```
cd $home
vi .bash_profile
Hit I to enter insert
include the following line at the end of the file    export fx_auto_timestamp=1
Esc to exit insert mode and then :x to save and exit
```

Click the OK button (or press ENTER) to store and return to main menu.

### **Personal “To Do” Notes**


These notes function just like freeform notes except they are user specific and notes entered can be accessed from any program in Fitrix.

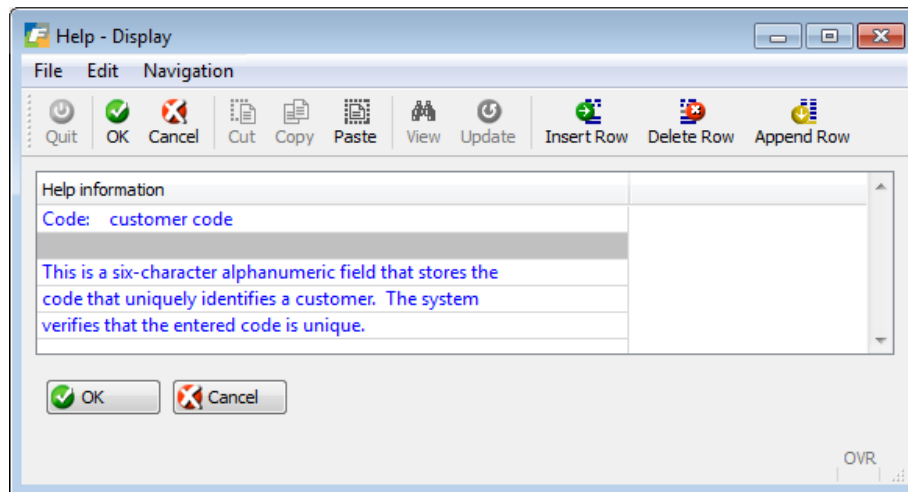
Click on  **To Do** button (or press Ctrl T) at any time you are not in update mode.

---

## User Defined Help

User Defined Help can be created for each field in a data entry screen. This allows you to clarify existing help text or customizes it to be specific to your operation.

Click the  **Help** button (or press Ctrl-W), (U)pdate, and click the OK button (or ENTER) to store when done.

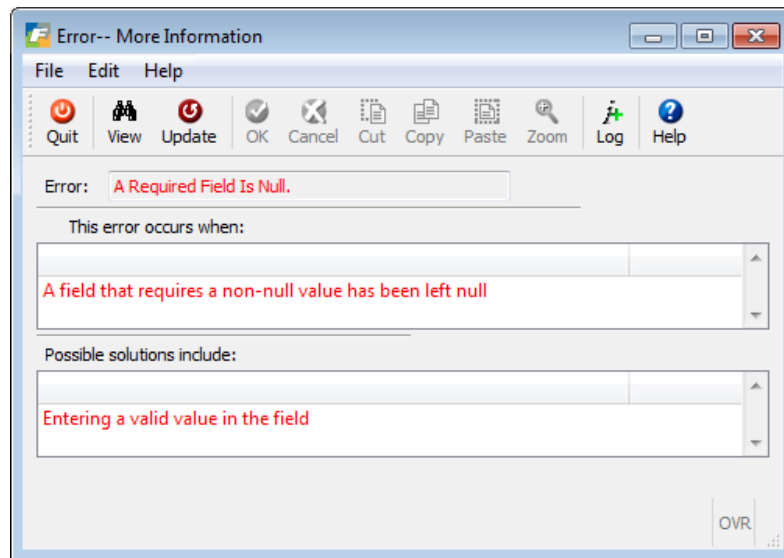


Click on Exit button or press (Q)uit to return to the Customer Information screen.

## User Defined Error Messaging

User Defined Error Messaging is a context sensitive system for displaying user-friendly error messages and instructions on how to deal with those errors. It allows user to see more detail about how an error might have been caused and how it can be corrected. The update command allows for clarification of error help message so that learning can be captured on the system.

To update an error message an error must first occur. To create an error, enter AAA in customer code field, ENTER to store, and "Y" to view error information.



Field	Description
<b>Edit- View</b>	Allows you to scroll through text with arrow keys.
<b>Edit - Update</b>	Used to update error messages.
<b>Help - Technical Status</b>	Displays information about the program where the error is occurring. If you are reporting an error to your technical support, you may be asked for this information.
<b>Log</b>	Allows you to automatically log system information and add comments to the error log. This is also useful information for your technical support.
<b>Quit</b>	Closes the User Defined Error Messages window.

## Query by Example

### ***Wildcards***

Wildcards are special characters used to represent other characters. The wildcards that can be used on a selection criteria screen are listed below. Wildcards may be used *only with character or alphanumeric fields*.

#### **Wildcard Symbol Definition:**

\* Asterisk - The asterisk replaces any group of zero or more characters in a character field.

? Question Mark - The question mark replaces any single character in a character field.

### ***Relational Operators***

Relational operators are symbols used to compare two values. These values can be character, numeric, or date types. A variety of operators are available to help you specify ranges or lists.

When using the first five relational operators (greater than, greater than or equal to, less than, less than or equal to, and not equal to), the relational operator is entered first, followed by the number or alphanumeric character(s).

#### **Relational Operator Definition:**

> Greater Than - Finds all values greater than the specified value.

>= Greater Than or Equal To - Finds all values greater than or equal to the specified value.

< Less Than - Finds all values less than the specified value.

<= Less Than or Equal To - Finds all values less than or equal to the specified value

<> Not Equal To - Finds all values not equal to the specified value.

= Null - Finds records that have a null value in the field. A null value means that the field has no value—it is empty.

!= Not Null- Finds all values that are not null. Selects all records that have *anything* in the field.

: Range - Search for a range of values. Can be used with numeric, character, alphanumeric, and date fields.

| Pipe - The pipe symbol is used to represent "or". On most keyboards, the pipe symbol is found above the backslash "\".



## **Search Criteria Examples**

### **GO TO UPDATE CUSTOMER INFORMATION SCREEN:**

#### **1. Search for all customers that salesperson code TM**

In the salesperson field enter TM and press enter or click OK to accept.

#### **2. Search for all customers that an account balance > \$50,000**

In the balance field enter >50000 and press enter or click OK to accept.

#### **3. Search for all customers that have a credit limit greater than or equal to \$50,000.**

In the credit limit field enter >=50000 and press enter or click OK to accept.

#### **4. Search for all customers that have a name beginning with C.**

In Company field enter C\* and press enter or click OK to accept.

#### **5. Search for all customers that have A in their business name.**

In the Company, enter \*A\* and press enter or click OK to accept. This selects all customers where an A is preceded and followed by one or any number of characters.

#### **6. Search for customer codes with A as the second character.**

In the Company field, enter ?A\* and press enter or click on OK to accept. This selects all customers where A is preceded by exactly one character and followed by none or any number of characters.

#### **7. Search for all customers where salesperson code is either TM or WM.**

In the salesperson field enter TM|WM and press enter or click on OK to accept.

### **GO INTO UPDATE AR CASH RECEIPTS SCREEN (Financial management-2-1-e-b):**

#### **1. Search for all transactions dated from January 1st 2007 through today.**

In that Date field, enter 010107 : today's date and press enter or click on OK to accept. This search selects all transactions between the specified dates, *including* those dated January 1 and today. Remember, when entering dates, any of the following formats are valid: m/d/yy, mm/dd/yy, mmddyy, or mm-dd-yy.

#### **2. Search for all transactions where check number is blank.**

In the check number field enter = and press enter or click OK to accept. The = means you are searching for all transactions where the check number is null.

#### **3. Search for all transactions where check number is not blank.**

In the check number field enter != and press enter or click on OK to accept. The != means you are searching for all transactions where the check number is not null.

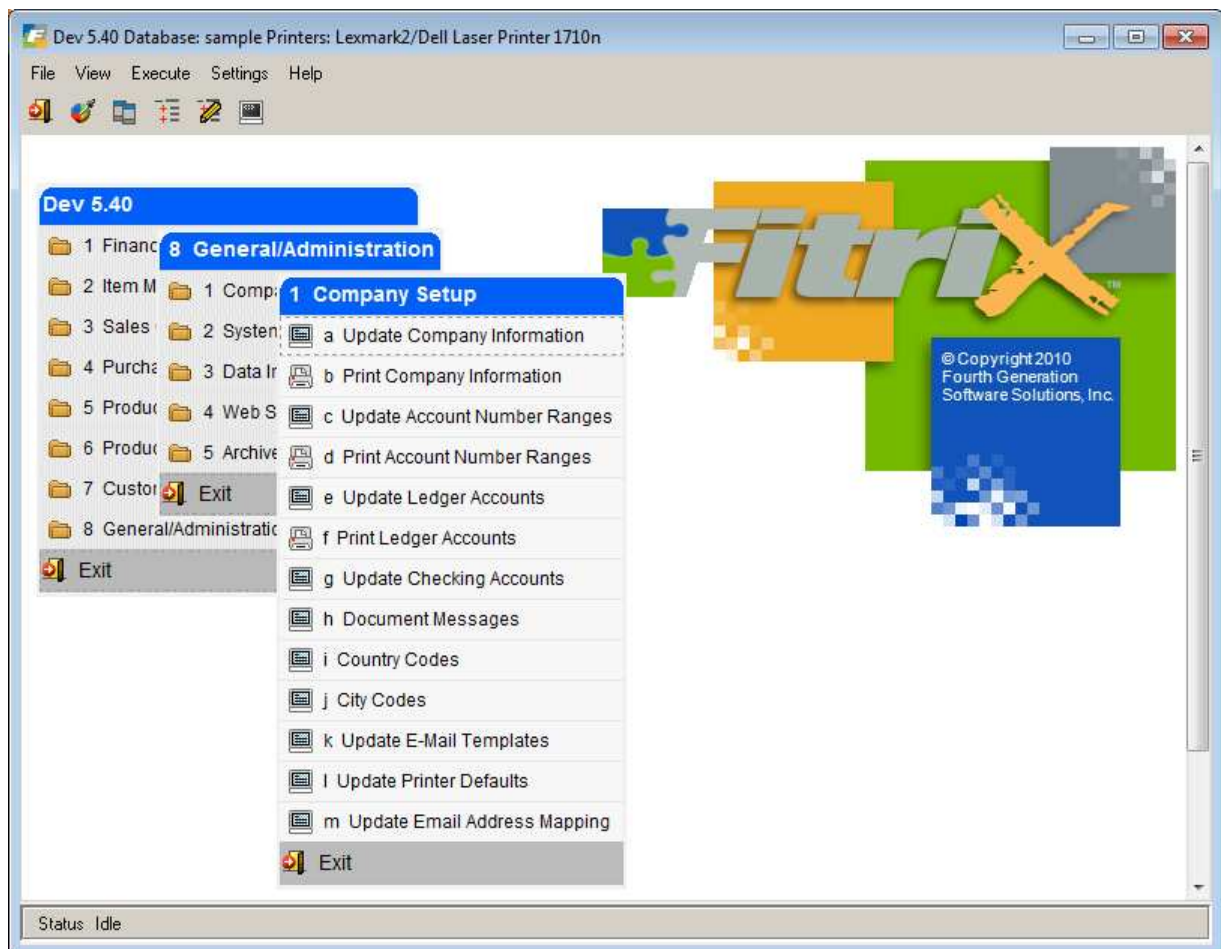
## Company Set Up & Multilevel Tax

A company must be set up in the Fitrix system before any accounting transactions can be entered. Updating and editing company information also occurs in the menu selections described in this chapter.

### Set Up Company

The Setup Company Menu contains the menu options for setting up company information and base files.

To view this screen, select General/Administration from the main menu, and then select Company Setup.



The menu selections are:

- **Update Company Information** - The data entry screen for company information such as company address and department codes.

**Note:** This is also where you set flag for multilevel tax to (Y) if sales tax is charged on your products.

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**Note:** By clicking on the Addl Info, a screen containing additional information, such as telephone number, displays.

**Note:** By clicking on Remit, a screen will display for you to enter your company's remittance address for cash receipts. This remittance address prints on both the Order Entry Invoice and Accounts Receivable invoice.

**Note:** By clicking on Web Services, a screen will display for you to turn on Web Services. Web Services need to be turned on if you are using Federal Express/UPS in Order Entry and want a real time connection to their database to retrieve freight rates and tracking numbers. See the Order Entry User Guide for more information on this interface.

**Note:** By clicking on Credit Card icon, a screen containing information needed to use Credit Card processing displays.

Credit Card Information

File Edit View Tools Help

Credit Card Processing Information

Credit Card ON:

HTML Serial No: 000060107832

ADVANCE Serial No: 999598074878

Server Time Out: 10

Server URL: <https://www.skipjackic.com/scripts/>

Trans. Authorize: evolvcc.dll?AuthorizeAPI

Trans. Status Request: evolvcc.dll?SJAPI\_TransactionStatusRequest

Trans. Change Request: evolvcc.dll?SJAPI\_TransactionChangeStatusRequest

Batch Upload: BatchUpload.dll?BatchUpload01

Batch Status Request: evolvCC.dll?SJAPI\_BATCHFILESTATUSREQUEST

Batch Change Request: evolvCC.dll?SJAPI\_BATCHFILEGETRESPONSEFILE

OK Cancel

Is credit card ON? (Y/N) OVR

**HTML Serial No.-** assigned by Skipjack. The initial serial number assigned by Skipjack is for testing purposes only and will therefore need to be changed when you are ready to go live.

**Advance Serial No.-** assigned by Skipjack. This also is for testing purposes only and will need to be changed when you are ready to go live.

**Server Time Out-** number of seconds before connection to Skipjack will be disconnected due to lack of response.

**Server URL-** assigned by Skipjack

**Trans Authorize-** assigned by Skipjack for authorization

**Trans Status Request** – assigned by Skipjack to get transaction id, authorize additional amounts if items are added to an order already authorized, or to delete an authorized transaction in the event the order is cancelled.

**Trans Change Request**- assigned by Skipjack to get change status due to additional amounts or deletions.

**Batch Upload** – assigned by Skipjack to upload batches for settlement

**Batch Status Request** - assigned by Skip Jack. Used to check batch file status (uploaded, processing, completed).

**Batch Change Request** - assigned by Skipjack. Once the batch status is completed this API is used to read the result of every transaction uploaded in the batch.

To complete set up to process credit cards you must then go to the Skip Jack Website ([www.skpjack.com](http://www.skpjack.com)).

On the Skipjack website, click on Batch Settlement Preferences and set to manual daily so that Skipjack will settle all invoices once a day at a time of day specified by you.

Member Services Extension - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <https://developer.skpjackic.com/scripts/MerchantServices.dll?MerchantServices08> Go Links

Google Search 8 blocked ABC Check SnagIt

[Preferences](#) | [Reports](#) | [Manage Users](#) | [Tutorial](#) | [Help](#)  
[Accounts](#) | [Statement](#) | [Register](#) | [Pending](#) | [Exit](#)

## BATCH SETTLEMENT PREFERENCES

Configure the batch settlement preferences for this merchant account. Click [here](#) to see help on the individual fields.

HTML Serial Number: 000484765840

Current Setting		New Setting	
Type:	Manual		
Frequency:	None		
Batch Close Time (HH:MM):	00:01		
Batch Process Time (HH:MM):	01:02		
Advanced Options:	None		

Submit

[E-mail Support](#)  
[Security Information](#)

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You will also need to:

**Enable blind credits** - Click "Edit Account" button and enable "Allow Blind Credits." option. This is so all outstanding credits automatically settle at the end of the day.

**Enable batch processing**- have Skipjack enable this when you set up your merchant account.

## **Fitrix Manufacturing Course Workbook**

**Turn on send email to customer-** Click "Edit Account" button and enable "Send E-mail Response to Customer" option. Also customize email message to reflect your company's information. This is optional. Do not turn this on if you do not want your customer to receive an email each time an invoice is authorized or an invoice is settled.

**Note:** By clicking on Web Services icon, you can turn on web services if you are using the Federal Express/UPS interfaces in order entry.

**Print Company Information** - Provides output options to the screen or printer.

**Update Account Number Ranges** - This data entry screen that allows you to define the starting account number for a type of account. You must define your ranges before creating your chart of accounts.

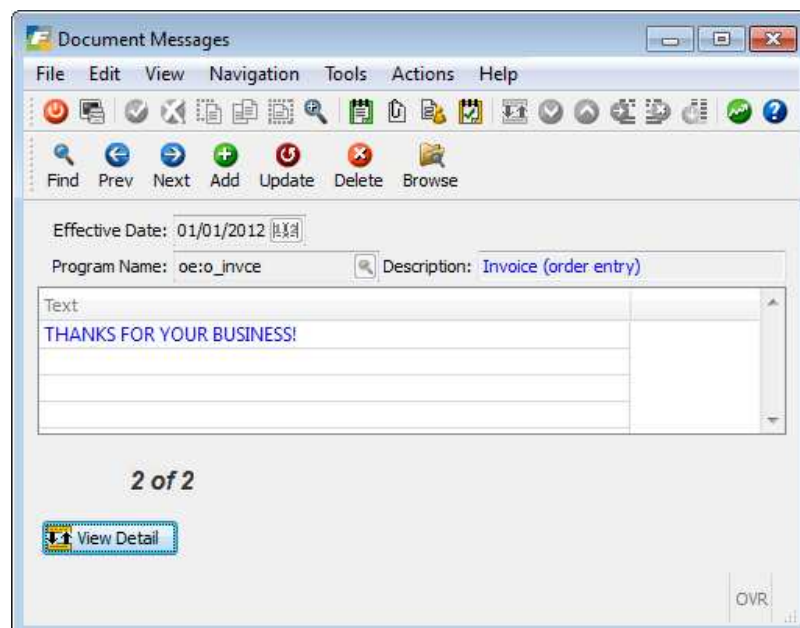
**Print Account Number Ranges** - Provides output options for the Account Number Ranges.

**Update Ledger Accounts** - This data entry screen that allows you to enter the Company Chart of Accounts.

**Print Ledger Accounts** - Provides output options for the Chart of Accounts.

**Update Checking Accounts** - Defines your checking accounts GL account numbers. All checking accounts that you want to reconcile using the Reconcile checking Accounts program in Accounts Payable must be set up here.

**Document Messages** - This program enables you to enter messages on various forms.



1. Go into Add mode.
2. Enter the effective beginning date for the message.
3. Enter the program name. Zoom is available and the following programs have been modified so that the message entered here will print:

Name	Description
oe:o_order	Order Acknowledgement
oe:o_picker	Picking Ticket
oe:o_shipr	Packing Slip
oe:o_invce	Invoice (order entry)
oe:o_prfinv	Proforma Invoice (export)
oe:o_shper	Packing List (export)
oe:o_billdg	Bill Of Lading (export)
oe:o_cminv	Commercial Invoice (export)
oe:o_proinv	Provisional Invoice (export)
oe:o_incf	Final Invoice (export)
pu:o_order	Purchase Order
ar:o_invce	Invoice(accounts receivable)
ar:o_stmt	Statement of account

4. Enter the detail section of the screen to enter your message.
5. Click OK or press Enter to store.

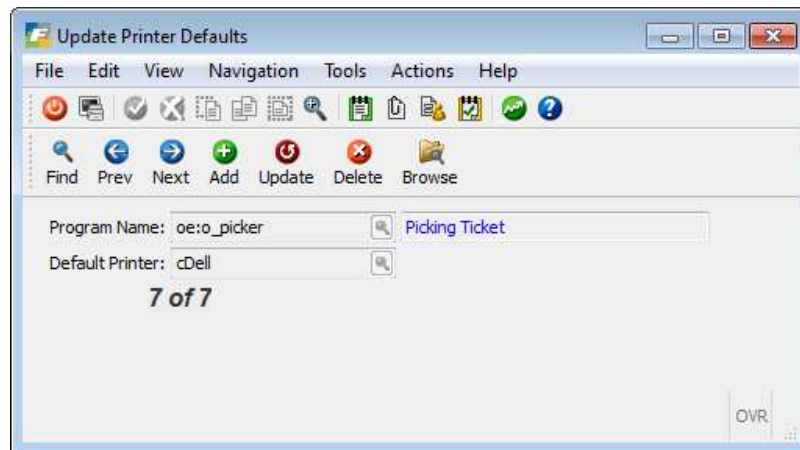
**Country Codes** - this program comes preloaded with countries around. When setting up customer, ship-tos, vendors, and pay-tos the country code is validated against the countries found here.



**City Codes** – this program comes preloaded with cities around the world. The data stored in the city code table is used to validate the shipment destination entered on the Order Entry summary screen.

**Update Printer Defaults** – this program is used to set up default printers for outbound customer and vendor forms if not defined at the program level.

## ***Fitrix Manufacturing Course Workbook***



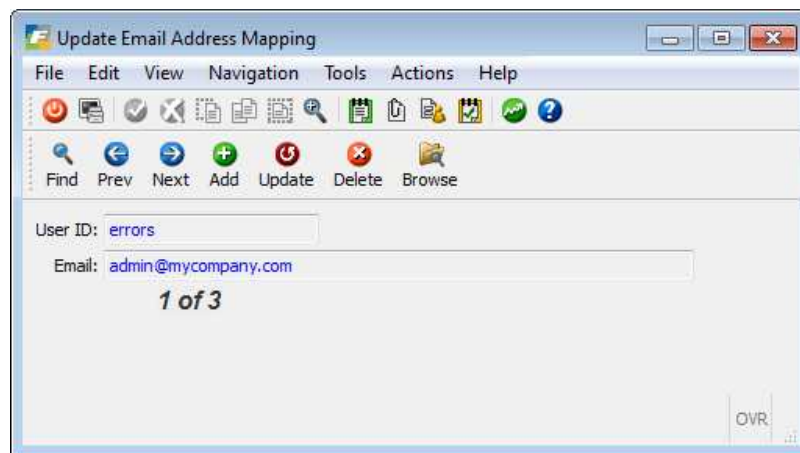
Click **Exit** to close the **Setup Company** menu.

## ***Email Templates and Alerts***

**Update Email Address Mapping (menu path 8-1-m):**

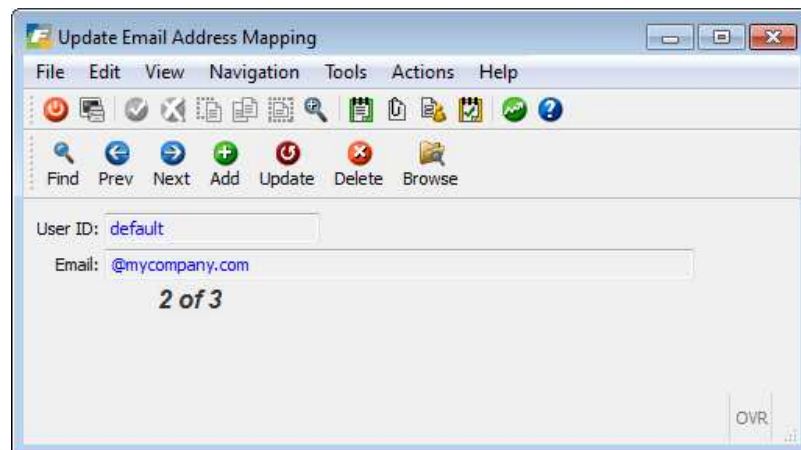
There are 2 default values necessary to ensure proper email routing:

Errors- this email address will receive rejection and error notifications.

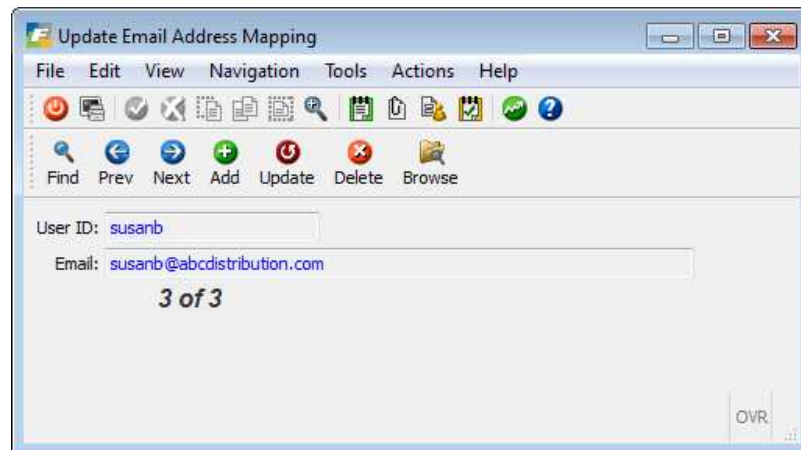


Default - this is used when the users email addresses (without the @domain) are the same as the Linux login ID. It will be appended to the user ID to form the email address ([myuserid@mycompany.com](mailto:myuserid@mycompany.com)), and used as the reply-to address in outbound email.





This screen is also used for mapping the actual email address to the user's Linux login ID. This is needed when the Linux ID does not match the user's email address name. This email address is used as the "Reply-to" address in outbound email.



#### Update Email Templates (menu path 8-1-k):

Any templates that may be needed will need to be coordinated with a programmer as there is some programming involved to modify the program to call the alert function, to select who the recipient is if the alert is sent outside of your organization (i.e.-the email address in the customer master table) and to then extract the specific data needed using the special wildcard characters (ie- &) below.



Update E-Mail Templates

File Edit View Navigation Tools Actions Options Help

Reply-To Reports Recipients Cc Recipients Bcc Recipients

Find Prev Next Add Update Delete Browse

Event Code:

Description:

Active:

Type:  Priority:

Message Subject:

Seq	Text
1	This order is temporarily on hold because it needs management approval.
2	It will be necessary for a manager from your organization to contact us
3	before sales order # &order_no will be released from hold.

3 of 7

[View Detail](#)

OVR

**Event Code** – a unique identifier for this email alert. The event code is used within the program code to trigger the email alert.

**Description** - a freeform description of the email alert.

**Active** - set to Y if this event is Active, set to N if it is not used.

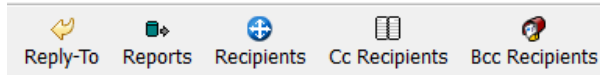
**Type** - currently, EMAIL is the only valid type.

**Priority** - This is used to set the priority level of the email. 1 is the highest and 5 is the lowest. Priority 1 is used for Urgent emails. In most email systems it causes the email to be highlighted in some way, such as an exclamation point ! . Priority 3 is standard email priority. Priority 5 is low priority. In most email systems it causes the email to be denoted with a low priority mark ↓ .

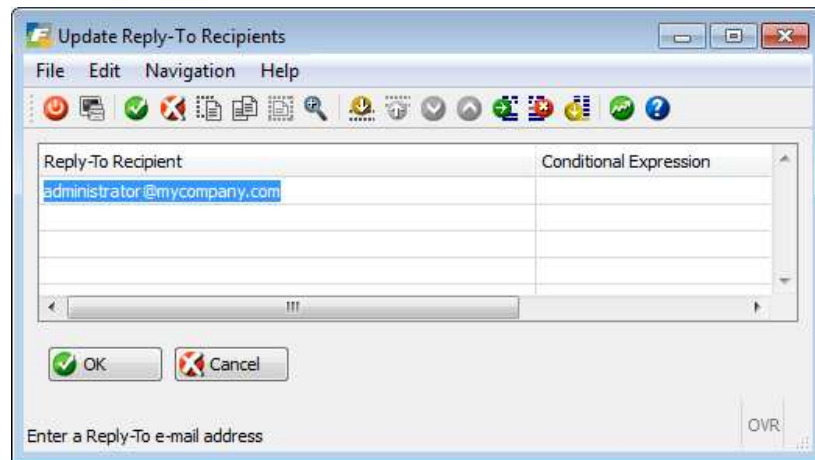
**Message Subject**- this will be inserted into the subject of the email. Wildcards may be used to place dynamic values into the subject. These must be coordinated with a programmer.

**Text** - This is the body of the email. Wildcards may be used here also, and must be coordinated with a programmer.

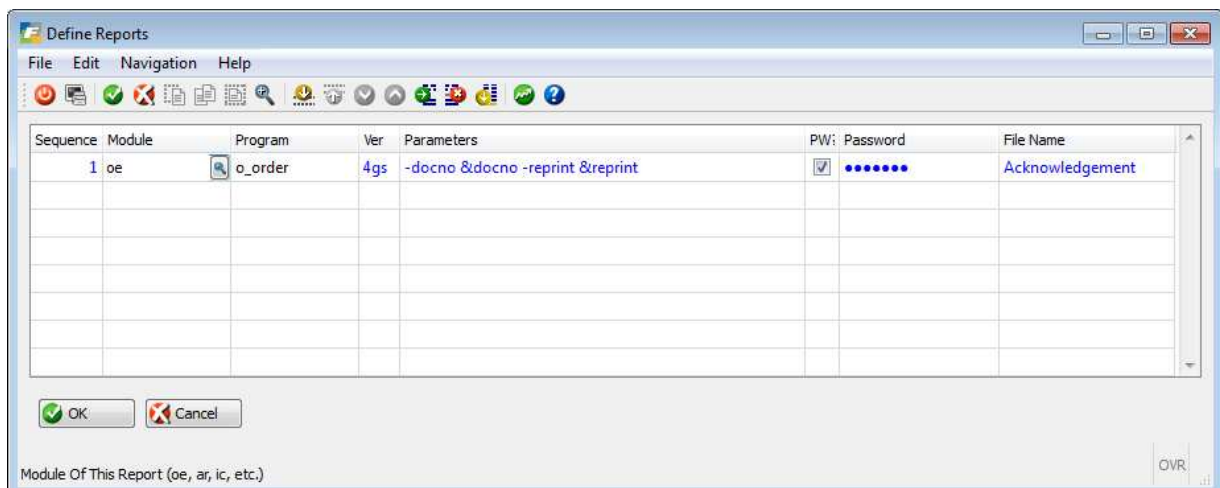
After creating and saving the email alert record, choose “Update” and use these toolbar buttons to set additional parameters:



**Reply To** - If a default email address is to be used when the recipient clicks “Reply”, enter the email address here. It can be left blank. Conditional Expression is reserved for future use.



**Reports** – You can run a system report and attach it to the email as a PDF. Enter the module, program name, and version. The parameters must be coordinated with a programmer. These enable you to retrieve specific records in the report. The PDF may be password protected by checking the PW box and entering a password. A file name must be assigned to the report.



## ***Fitrix Manufacturing Course Workbook***

Recipients, Cc Recipients, and Bcc Recipients – Enter the email address of recipients, Cc Recipients and Bcc Recipients that will receive this email each time the alert is triggered. Additional dynamically determined recipients may be added within the program code with the help of a programmer. The conditional expression field is reserved for future use and can therefore be left blank for now.

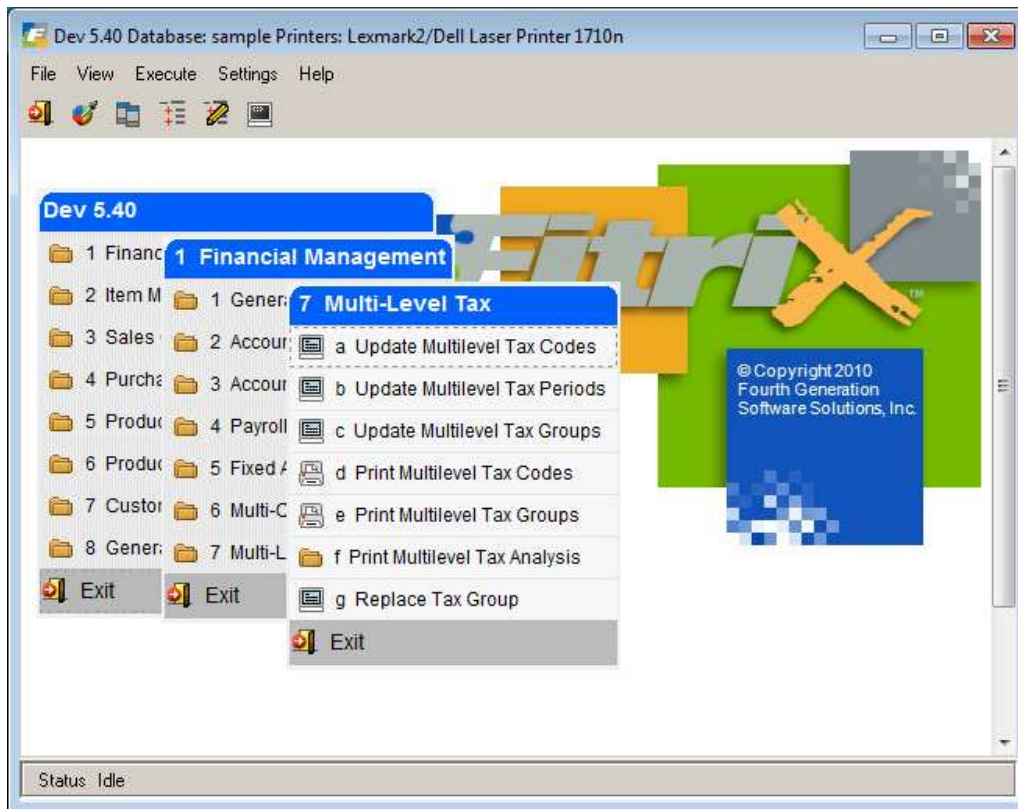
Recipient	Conditional Expression

OK Cancel

Enter and e-mail address OVR

## Multilevel Sales Tax

For multilevel tax recording and reporting purposes, there are three entry screens and three reporting options. To view this screen from main menu select Financial Management and then select Multilevel Tax.



The menu selections are:

- **Update Multilevel Tax Code** - A specific code that identifies a percentage for taxation.
- **Update Multilevel Tax Group** - A grouping of one or more tax codes that comprise a specific tax situation. For example, if a sales tax is comprised of a county and city tax, you would first set up a tax code for county tax, a tax code for city tax, and then set up a tax group that will be comprised of both tax codes. The cumulative should be set to (N) if tax is to be calculated on goods amount only and set to (Y) if tax is to be calculated on goods amount plus any tax amount for a tax that displays on a previous line.
- **Update Multilevel Tax Period** - A calendar period defined for calculating tax amounts for reporting purposes.
- **Print Multilevel Tax Codes** - Provides output options for the information defined for a tax code.
- **Print Multilevel Tax Group** - Prints with a breakdown of the Tax Codes the group is comprised of.

## Fitrix Manufacturing Course Workbook

- **Print Multilevel Tax Analysis** - Prints a summary or Detail Analysis of tax amounts for Accounts Payable or Accounts Receivable for a specified time period.

### Tax Codes

To view all of the Multilevel Tax Codes in the system:

Step	Action
1	Choose option <b>(a) Update Multilevel Tax Codes</b> . The Multilevel Tax Code data entry screen displays
2	Click the <b>Find</b> button
3	Press the <b>Enter</b> key. All multilevel tax code records are retrieved.
4	Click the <b>Nxt</b> or <b>Prv</b> buttons to navigate to the record you wish to view.
5	Update the record, and then click OK.
6	Press <b>Quit</b> to return to the Multilevel Tax menu.

Tax codes are defined for each tax rate in Update Multilevel Tax Code:

The screenshot shows the 'Update Multilevel Tax Codes' window with the following fields and values:

- Multilevel Tax Code: **ATLTAX**
- Multilevel Tax Rate: **7.600**
- Description: **CITY OF ATLANTA TAX**
- Country: **USA**
- Province / State: **GA**
- Department: **000**
- Include Tax With Asset/Expense: **N**
- A/R Tax Account: **210000000** (ACCRUED SALES TAX)
- A/R Discount Tax Account: **210000000** (ACCRUED SALES TAX)
- A/P Tax Account: **638500000** (SALES TAX EXPENSE)
- A/P Discount Tax Account: **638500000** (SALES TAX EXPENSE)

At the bottom, it indicates **3 of 16** records and an **OVR** button.

Field	Description
<b>Multilevel Tax Code:</b>	User defined code unique for a specific tax rate.
<b>Multilevel Tax Rate:</b>	Tax rate entered as a percentage.
<b>Description:</b>	User defined description for tax code and rate.
<b>Department:</b>	Allows you to identify a specific department code for this tax to be posted to. If a department code is not entered, the tax will post to the department specified at the time the transaction is entered.
<b>Include Tax with Asset/Expense:</b>	If you want to include the tax amount with the cost of an asset or expense in the purchasing module enter (Y) in this field. This allows you to post the "fully landed" cost of an inventory or asset item. If you do not want to include the tax with the cost of an asset or expense, or if you do not have the purchasing module installed enter (N).
<b>A/R Tax Account::</b>	Enter the appropriate accounts receivable account number to which the tax will post. This field is required.
<b>A/R Discount Tax Account:</b>	Enter the appropriate amount of the discount subject to taxation for the accounts receivable account. If the Company Defaults Multilevel Tax field is set to "Y" and the Update Receivable Defaults Calculate Tax on Cash Discounts field is set to "Y", the account entered here is the account that multilevel tax discounts are posted to.
<b>A/P Tax Account::</b>	This is the ledger account used by Update Payable Documents and Update Non-A/P Checks for this tax code. If documents are entered with this tax code, the tax amounts are posted to this ledger account. This field is required.
<b>A/P Discount Tax Account:</b>	Enter the appropriate amount of the discount subject to taxation for the accounts payable account. If the Company Defaults Multilevel Tax field is set to "Y" and the Update Payable Defaults Calculate Tax on Cash Discounts field is set to "Y", the account entered here is the account that multilevel tax discounts are posted to. This field is required even if the A/R Discount Tax Account is set to "N".

## Tax Periods

Tax periods entered with the update Multilevel Tax Periods option enable you to run the Multilevel Tax Analysis reports for the precise periods that you want. You can use the periods defined here in the selection criteria screens when tax analysis reports are run.

Step	Action
1	Choose option <b>(b) Update Multilevel Tax Periods</b> . The Multilevel Tax Code data entry screen displays
2	Click the <b>Update</b> button.  <i>Note:</i> Since there can only be one record in this file, only the update option on the menu can be used. The Add, Delete, Find, and Browse commands have been disabled.
3	<b>Update</b> the Tax Periods as required, and then click OK or press Enter.
4	Click Exit or press Quit to return to the Multilevel Tax menu.

Update Multilevel Tax Periods

File Edit View Navigation Tools Actions Help

Find Prev Next Add Update Delete Browse

Company Name: ABC DISTRIBUTION

Period	Period Year	Start Date	End Date
01	2012	01/01/2012	01/31/2012
02	2012	02/01/2012	02/29/2012
03	2012	03/01/2012	03/31/2012
04	2012	04/01/2012	04/30/2012
05	2012	05/01/2012	05/31/2012
06	2012	06/01/2012	06/30/2012
07	2012	07/01/2012	07/31/2012
08	2012	08/01/2012	08/31/2012
09	2012	09/01/2012	09/30/2012
10	2012	10/01/2012	10/31/2012
11	2012	11/01/2012	11/30/2012
12	2012	12/01/2012	12/31/2012

1 of 1

OK Cancel

Enter the two digit period number. OVR

## Tax Group

Multilevel Tax Groups allow you to track multiple level of tax for a given document. To use multilevel tax groups you must define a Y in the Multilevel Tax Group Codes field on the Company Information form.

Step	Action
1	Choose option <b>(c) Update Multilevel Tax Groups</b> The Multilevel Tax Code data entry screen displays
2	Click the <b>Find</b> button
3	Press the <b>Enter</b> key. All multilevel tax groups are retrieved.
4	Click the <b>Nxt</b> or <b>Prv</b> buttons to navigate to the record you wish to view.
5	Update the record, and then click OK.
6	Click Exit or press <b>Quit</b> to return to the Multilevel Tax menu.

Update Multilevel Tax Groups

File Edit View Navigation Tools Actions Help

Find Prev Next Add Update Delete Browse

Multilevel Tax Group Code:

Description:

Tax Cd	Description	Rate	Cumulative
DE01	DEKALB COUNTY	4.000	N
DE02	DEKALB HOMESTEAD	1.000	N
DE03	DEKALB MARTA	1.000	N
DE04	DEKALB EDUCATIONAL	1.000	N

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OVR



Field	Description
<b>Multilevel Tax Group Code:</b>	A unique User defined code identifying a tax group
<b>Description:</b>	Tax Group Description.
<b>Tax Code:</b>	Allows you to define at least one code for a Tax Group. You can have up to four tax codes.
<b>Description:</b>	System generated, based upon the tax code defined.
<b>Rate:</b>	System generated, based upon the tax code defined.
<b>Cumulative:</b>	Allows you to define "N" if the tax amount should be calculated on the net amount only or "Y" if the tax amount should be calculated on the cost of goods plus the amount of tax on those goods.

Click Exit or press Quit to return to the Multilevel Tax Menu.

## Replace Tax Group

This program is used to replace the tax group code in all tables with a new tax group code.

Replace Tax Group

File Edit View Navigation Tools Actions Help

+

Add

Existing Tax Group:

New Tax Group:

**(New Document)(Deleted)**

OVR

## Batch Control

NOTE: Batch control is covered in greater detail in the *Getting Started with Fitrix* User Guide.

Batch control is an optional feature that allows different users to independently enter separate batches in the same application at the same time. For example, before entering invoices in Accounts Receivable, user #1 will create a batch and a batch ID# will be generated. All data entry, edit list, invoice printing, and posting for user #1 will be done within this batch. When user #2 enters invoices in Accounts Receivable, all of these transactions will be entered in a batch created by user #2. These transactions will post separately from those entered by user #1.

Batch control has been added to the following Fitrix modules:

<u>Module</u>	<u>Application</u>	<u>Batch Type</u>
Accounts Receivable	Update Receivable Documents	AR
	Update Cash Receipts	CR
Accounts Payable	Update Payable Documents	AP
	Update Checks	CD
General Ledger	Update General Journal	GJ
Order Entry	Update Invoices	OE
Purchasing	Update Receipts	PR
	Update A/P Invoices	PU
Inventory	Update Inventory Adjustments	IC

The mechanics of batch control are identical in each application.

## Activating Batch Controls

TO ACTIVATE BATCH CONTROL (INITIAL SET UP):

Step	Action
1	Select the Set up menu for each module and then select the update defaults menu.
2	Select update from the menu and move cursor to batch field.
3	From the <b>Batch</b> field, change flag to <b>Y</b> to activate batch control.

Step	Action
4	<p>From the <b>Require Approval To Post</b> field choose <b>Y</b> or <b>N</b>.</p> <ul style="list-style-type: none"><li>• If flag is set to <b>Y</b>, user will be allowed to enter transactions and perform other procedures but will not be allowed to post the batch until it has been approved for posting.</li><li>• If approval is not necessary, the flag should be set to <b>N</b>.</li></ul> <p><i>Note:</i> Once a batch has been approved for posting, the user can make no changes to the batch.</p>
5	<p>From the <b>Approval Code</b> field, enter the approval code needed to approve batches for posting.</p> <p><i>Note:</i> The Code entered will not be visible on the screen.</p> <p><i>Note:</i> If at a later date this code needs to be changed, original code will be needed to access this field.</p>
6	<p>Finish updating, and then click OK.</p>
7	<p>Click Exit or Press Quit to return to the menu.</p>

**Update Receivable Defaults**

File Edit View Navigation Tools Actions Options Help

Aging

Find Prev Next Add Update Delete Browse

Terms Code:

Take Discount on Misc: ☐ Freight: ☐ Tax: ☐

Multilevel Tax

Miscellaneous Tax Group:  Invoice Default Tax Group:

Freight Tax Group:  Enter Goods Amounts as Gross: ☐

Finance Charge Tax Group:  Calculate Tax on Cash Discounts: ☐

Account Numbers

A/R:  Sales:  Misc.:  Tax:

F.C.:  Freight:  Cash:  Disc:  Write Off:

Aging Information

Age On: ☒ (Check - Due Date, Uncheck - Invoice Date)

Miscellaneous

Is A/R Setup Complete?: ☒ Batch - Invoices?: ☐ **Batch Control Fields**

Receipts?: ☒ Finance Charges: ☒

Require Approval to post?: ☐ Approval Code:  Bank Deposit ID:

Auto Assign Customer: ☒ Next Customer Number:

Auto-Assign Ship-To: ☒ Next Ship-To Number:

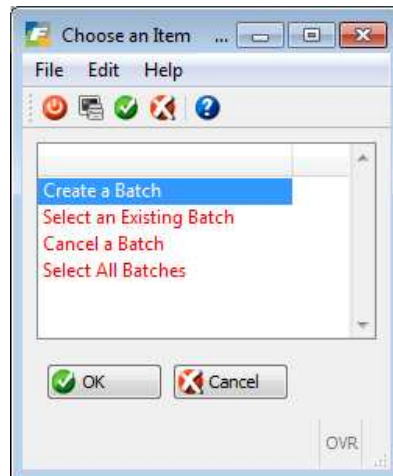
1 of 1

Enter default code for standard terms (Zoom)

OVR

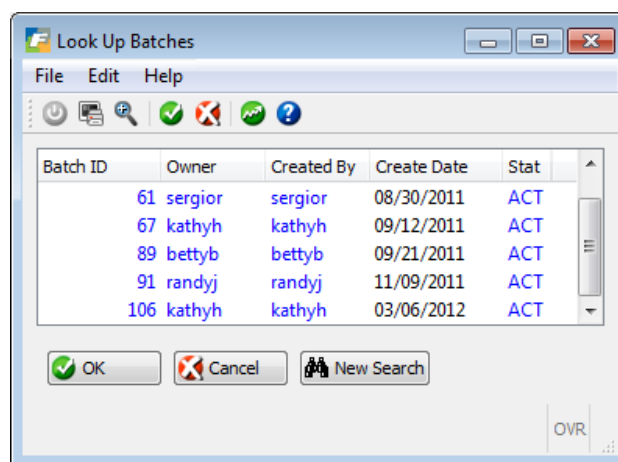
## Transaction Processing (using batches)

From a data entry screen that supports batches, click on the batch icon. The following picker window displays:



**Create a Batch-** This option will create a new batch. A batch must be created prior to entry of transactions. All transactions a user enters will go into this batch until the batch is posted or the user creates another new batch.

**Select An Existing Batch-** This is a zoom window that will display all active batches for the current batch type (batch type= AR, CD, GJ, etc.).



The various batch stages are:

ACT	Active batch
APR	Approved
CAN	Canceled batch
PST	Posted batch

First a prompt displays, "View Your Batches Only?" If Y is entered, only batches owned by current user will display and the user can select any batch from this list. If "N" is entered, user will be prompted for the approval code. All batches will be displayed regardless of owner and user can select any batch from this list.

**Cancel A Batch** - This option will cancel the current batch the user is working in. Only batches that don't contain transactions can be canceled (batch must be empty).

**Select All Batches** - This option is a manager level function and the approval code is required to access this option. This option allows manager to view and edit all transactions in all active batches simultaneously. Batches can also be posted simultaneously without prior individual batch approval. Selecting a batch through Select An Existing Batch option will remove manager from All Batches mode.

## Batch Approval

A Batch can be approved from the Administration menu or from within the application using the Batch Maintenance screen.

### Administration Menu:

There is a menu option at the end of each Administration menu within each module. All batches regardless of module type can be reviewed and approved from the Administration menu.

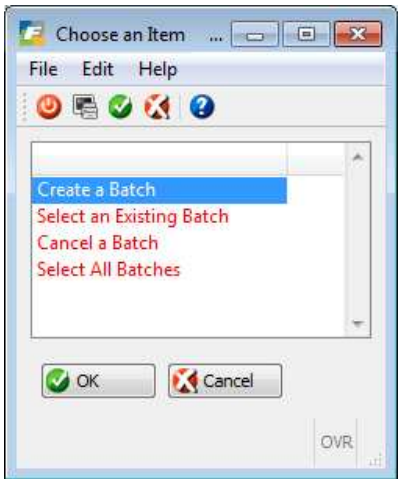
### Batch Maintenance (within Module):

When using the menu option to approve batches, users can only access and approve batches that have the batch type of the module (i.e.- AR, CD, GJ, etc.).

The screenshot shows a software window titled "Update Batch for Invoicing". It has a menu bar with "File", "Edit", "View", "Navigation", "Tools", "Actions", "Options", and "Help". Below the menu is a toolbar with various icons. A "Batch Options" section contains icons for "Find", "Prev", "Next", "Add", "Update", "Delete", and "Browse". The main area displays batch information in a form-like layout:

Batch ID:	106	Batch Type:	AR	A/R INVOICE ENTRY
Owner:	kathyh	Status:	ACT	Active
Create Date:	03/06/2012	Time:	13:41:13	
By:	kathyh			
Approve Date:		Time:		
By:				
Post Date:		Time:		
By:				
Post Sequence Number:		0		
Total Transactions Posted:		0		

At the bottom left, it says "6 of 6". At the bottom right, there is a button labeled "OVR".

Step	Action
1	Choose option <b>Batch Maintenance</b> . From AR, AP, GL, or CD menus. The Batch Maintenance data entry screen displays.
2	Click the <b>Find</b> button
3	Press the <b>Esc</b> key. All batch control records are retrieved.
4	Click the <b>Nxt</b> or <b>Prv</b> buttons to navigate to the record you wish to view.
5	Select <b>Options</b> from the Action Menu, and then select batch from the action sub-menu.
6	<p>The following picker window displays:</p>  <p><i>Note:</i> If batch displayed on screen is approved (status = APR), picker window will not have an Approve option. It will have an Unapproved option instead.</p>
7	<p>Click the <b>Approve a Batch</b> option, and then click <b>OK</b>.</p> <p><i>Note:</i> You can also unapprove or re-assign ownership of a batch using this procedure:</p> <ul style="list-style-type: none"> <li>• <b>Approve Current Batch</b> - Batch is now approved for posting and no changes can be made to the batch.</li> <li>• <b>Unapprove Current Batch</b> - this option is used to “unapproved” a batch previously approved in error. When a batch is unapproved, it can once again be accessed. (This option displays on the picker window in place of Approve Current Batch option if the batch has been previously approved)</li> <li>• <b>Re- Assign Owner Of Current Batch</b> - This function is used to re-assign an active batch to a different user.</li> </ul>
8	The <b>Status</b> updates to <b>APR</b> . Click <b>Exit</b> or press <b>Quit</b> to return to the menu.





## **Learning Fitrix Review**

Multilevel Tax, Administration, Setup Company, Return to Main Menu are menu options which appear on all Fitrix Accounting Menus and contain programs or information which are consistently used throughout the different modules.

Included in the base files for all accounting modules is the Set Up Company option which allows you to set up information that is shared and used consistently throughout the Fitrix Accounting System. Included in these base files are Company Information, Chart of Accounts, and Checking Account Numbers.

Update Ledger Accounts is where the Chart of Accounts is entered for any Fitrix Business Module.

Setting up Multilevel tax consists of defining Tax Codes, Tax Groups, and Tax Periods.

Multilevel tax analysis reporting can be summary or detail form for a defined Tax Period for either Accounts Receivable or Accounts Payable.

Batch processing allows different users to independently enter and post separate batches in the same applications at the same time.

## **Lab Exercise a: Commands**

### **Data Entry Commands**

Objective: To become familiar with the screen action commands.

1. Open the Accounts Payable main menu. From the Main Menu, choose Financial Management and then choose selection 3. You may type "3" or click on it to select it.
2. From the Accounts Payable main menu choose #3 Vendor Information. This will bring up all menu items used to develop and maintain the vendor codes.
3. From this menu selection choose "a" to select Update Vendor Information.
4. This will bring up a data entry screen, which allows you to add or update items related to this Vendor. There are many screen sections.
  - The Menu Standard Toolbar at the top of the screen.
  - The Standard Toolbar is below it menu toolbar.
  - The Other toolbar is below the Standard toolbar.
  - The Action toolbar is below the Other toolbar.
  - The body of the document itself, which is the portion of the screen you will enter data into.
5. Choose Find and let the cursor drop to the first field in the document (Vendor field). We are going to find all possible vendors, so we will not define any selection criteria in the screen display.
6. Click the OK button or press ENTER and the system will display all vendors in the database. It displays the vendor information one page at a time, so information for an individual vendor will be displayed on the current screen.
7. Choose (N)ext and the screen will display the information for the next vendor.
8. Choose (P) and the screen will display the information for the previous vendor.
9. Choose (B)rowse and the system displays a summary line of all the documents that were found. This allows you to view the items in a list and quickly allows you to identify the document you want. A menu displays, and the "action" functions will apply only to the "browse" screen. Try the "action" functions while in the browse screen.

## ***Fitrix Manufacturing Course Workbook***

10. Click OK to return to the original data entry screen.
11. Choose (F) and click the "Contact" field or press the TAB key twice to position the cursor in the "Contact" field. Rather than select all the vendors as we did previously, we will narrow our selection to a specific range of vendors by using relational operators to define selection criteria. With the cursor positioned on the "contact," enter "J\*" and press ENTER. By using the selection of J\* we have narrowed our range of selection to just those vendors whose contact person's name begin with "J".

Other relational operators which can be used to define selection criteria include:

- \* asterisk; stands for any group of characters
- ? question mark; stands for any single character
- > greater than; all values greater than the value entered
- < less than; all values less than the value entered
- >= greater than or equal to; all values greater than or equal to the value entered
- <= less than or equal to; all values less than or equal to the value entered
- <> or !=; not equal to the value entered
- = finds a null ( empty) values
- != means not equal to

12. (D)delete allows you to delete the document that is currently being displayed. There are exceptions to this. For example posted document cannot be deleted.

#### ZOOM Command

Objective: To become familiar with Zoom Commands: Zoom and Auto zoom.

1. Return to the main menu and then go to Accounts Payable (1) for Payable Ledger, (a) for Update Payables Documents.
2. Choose (A)dd and position the cursor at the Vendor field. Notice the magnifying glass in the Vendor Code field. This allows the user to zoom to a list of vendors.
3. Click the Zoom button (or press CTRL- Z). Click the Search button.
4. Select the desired vendor by moving the cursor to the line with arrow keys and click the OK button (or press ENTER).
5. Click the Cancel button (or press ESC) to exit from this document.
7. Click exit to return to the Payable Ledger menu.
8. Select Update Payable Documents again.
9. Choose (a)dd and position cursor on vendor field.
10. Enter "1\*" and ENTER to display all the vendors whose code begins with 1.
11. Press ESC to return to the Vendor field without selecting a vendor code.

## ***Fitrix Manufacturing Course Workbook***

12. Now enter "1\*" in the vendor field and press TAB to auto zoom to the display of all vendor codes beginning with 1.

Note that the difference between using the zoom picker window with a selection screen and an auto zoom is the time required displaying the windows and entering selection criteria. Auto zoom allows you to shortcut those steps, if a portion of the data is known.

13. Click the Cancel button (or press ESC).

14. Return to the main menu.

## **Lab Exercise b: Company Set Up**

Objective: The purpose of this lab is to show the user how to set up the company that is going to be used for accounting and distribution applications.

### **Company Information**

1. Choose General/Administrative from Main Menu.
2. Choose Setup Company
3. Choose (a) from Setup Company menu.
4. Choose Update from action toolbar.
5. Change 'Address1' to "1234 Main Street", press TAB. Press Ctrl TAB or click on the Detail button to move to the detail part of the screen. Position your cursor below the last department/description entry.
6. Add in department 400 with a description of 'Southern Distribution Center'.
7. Click the OK (or press ENTER) to save.
8. Click Exit or press (Q) to return to the Setup Company menu.

### **Print Company Information**

1. Choose (b) Print Company Information.
2. Redirect to the screen. The company control record now prints to the screen.
3. Press (Q) and click Finished button to return to the menu.

### **Update Account Number Ranges**

1. Choose (c) to 'Update Account Number Ranges'. These are the actual ledger categories that will be used for transaction processing and reporting. The ranges are 9 digits and their descriptions are 15 characters. You can use any numbers you desire, but the categories must be in ascending order and these cannot be changed once processing starts.

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2. Click Exit or press (Q) to go back to the menu.

### **Print Account Number Ranges**

1. Select (d) 'Print Account Number Ranges' to print a report identifying the account number ranges. Redirect to the screen. Press (Q) and click Finished button to return to the menu.

### **Update Ledger Accounts**

1. Choose (e) to 'Update Ledger Accounts'. The account number is user defined.
2. Choose Find and press (ENTER) to find all account numbers. The 'Account Number' must fall within the range of Account Number ranges.
3. The 'type' is system-generated based on the account number and its placement relative to the 'Account Number Ranges'. The 'description' is user generated and is the NAME for that account. The 'subtotal group' provides a heading, under which the account will print, for financial reporting.
4. Press (Q) to return to menu.

### **Print Ledger Account**

1. Choose (f) to 'Print Ledger Account' this will allow you to print a report of ledger accounts. Redirect to the screen. Press (Q) and click Finished button to return to the menu.

### **Update Checking Account**

1. Choose (g) to 'Update Checking Accounts'.
2. Do Find and ENTER to find all checking accounts on file. These records need to be set up so that checks can be printed from A/P. If the checking account does not exist, then no checks can be printed out.
3. Click Exit or press (Q) and then the ESC key twice to go back to the main menu.

### **Document Messages**

1. Choose (h) to select 'Document Messages'.
2. Do Find to view the various document messages.

3. Enter a new one.



## **Lab Exercise c: Setup Multilevel Tax**

Objective: To set up the Multilevel Tax codes used for calculating taxes on items that are purchased and sold.

### **Tax Codes**

1. Select Update Multilevel Tax Codes from the Financial Management and Multilevel Tax Menus.
2. Find all the existing tax codes supplied with database. Notice the "NOTAX" Code that is set up.

The "NOTAX" or null tax code must be defined for customers that are not taxed.

3. Begin by defining three new tax codes for the Southern Distribution Center (department 400). (Press ESC after each one to store.)

TEXTAX	6.5%	Texas State Tax	No do not include
TRVCO	1%	Travis County Tax	No do not include
ASTCTY	1%	Austin City Tax	No do not include

All three new tax codes have the following General Ledger Accounts:

A/R Tax Account and A/R Discount Tax Account = 210000000

A/P Tax Account and A/P Discount Tax Account = 638500000

4. Press enter or click OK to store.
5. Click Exit or press (Q) to return to the menu.

### **Tax Periods**

1. Select Update Multilevel Tax Periods.
2. Go into update and make sure periods for the current year are set up.
3. Press (ENTER) to store.
4. Click Exit or press (Q) to return to the menu.

## **Tax Groups**

1. Select Update Multilevel Tax Groups from the Multilevel Tax Menu.
2. Choose Find and ESC to find all the existing Tax Groups defined.
3. Add the following Tax Group:  
  
    TRVCO for Travis County Tax Reports  
  
    Tax Codes:  
    TRVCO (non-cumulative tax rates)  
  
    ASTCTY (non-cumulative tax rates)
4. Click OK button (or press ENTER) to store tax code entered and (Q) to return to the menu.
5. Select Print Multilevel Tax Groups and redirect to the screen.
6. Press (Q), click Finished button, and then ESC key until you are back at the main menu.

## **Learning Fitrix Summary**

The following points of training were covered in this Chapter. If you feel that you have not mastered all objectives, go back and review those sections.

- Fitrix Accounting System Overview
- Fitrix Menus and Data Entry Commands Overview
- User Control Libraries access buttons and keyboard shortcuts
- Set Up Company menu and options
- Flexible Document Delivery
- Document Attachments
- Email Alerts
- Set up Multilevel Tax codes
- Introduction to Batch Processing

## **Chapter 2 – Bill of Material**

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## **Learning Objectives**

To learn the type of information that is maintained in Bill of Material

To learn the steps involved in setting up Bill of Material.

To learn the tasks that are performed in Bill of Material and the steps involved in completing them.

To learn the data entry screens where bill of material information is maintained.

To learn how to use the parent-level and component-level inquiries and reports.

To learn how to use the Item Availability inquiry to determine material requirements for a proposed item

## **Bill of Material Overview**

### **What type of Information is maintained in Bill of Material?**

The Bill of Material module maintains information about the component item make-up of manufactured items. It retains information including:

An ordered list of component items that are used to make a parent item

The component quantity required to make one unit of a parent item

The starting and ending dates for which a component is to be used

The method by which a component is to be issued from inventory when it is used

### **What tasks or Activities are performed in Bill of Material?**

One or more bills of material are defined for each manufactured item which consumes other items (components) as part of its manufacture.

A default bill of material is identified in the Inventory Information Master and in each item/warehouse where the item will be manufactured.

### **The major tasks completed in Bill of Material:**

Items used in Bill of Material, both components and parent items, are first defined in the Inventory Information master, on the Inventory Control module.

Additional manufacturing-related information is also maintained for each component and parent item in the Inventory Information Master and in the Inventory Control module

### **The major tasks completed in Bill of Material:**

Additional reference tables are maintained

Bills of Material are maintained

Component Usages are analyzed, when determining if a component should be replaced or substituted

Item availability can be analyzed, when determining if the required materials are available to manufacture an item

### **What Relation does Bill of Material have to Other Fitrix Modules?**

Bill of Material is most closely related to Inventory Control, Production Order Processing and Material Planning.

**Inventory Control** provides the items used by bills of material to define the relationships between parent items and their components.

**Production Order Processing** uses bills of material when creating production orders, to manufacture a parent item from its components.

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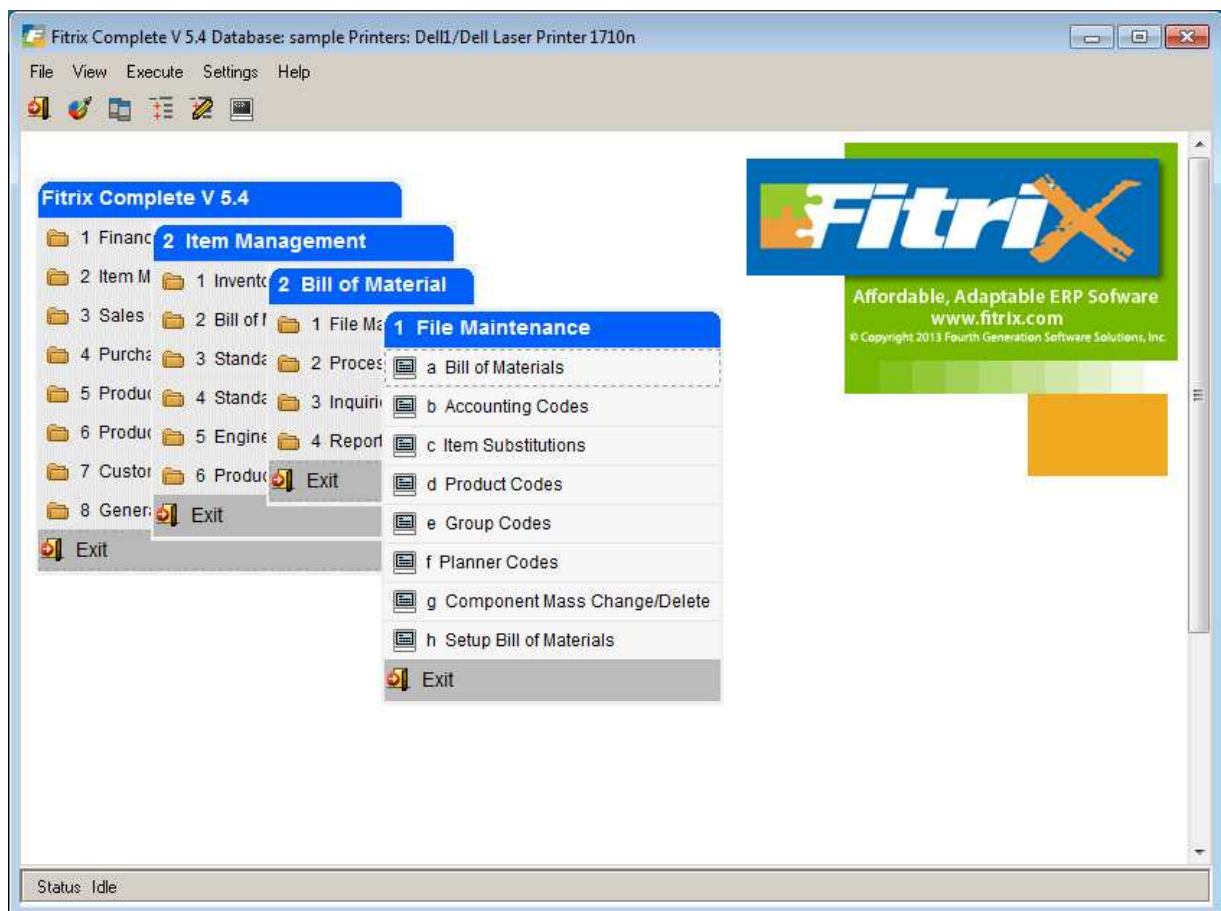
**Material Planning** uses bills of material when planning component requirement production and purchases from parent item demand.

## Bill of Material Set Up

Steps to set up the Bill of Material module include the following options from the File Maintenance submenu:

- Setup Bill of Material
- Accounting Codes
- Item Substitutions
- Product Codes
- Group Codes
- Planner Codes

The options on this menu allow you to setup the initial Bill of Material default settings, and the reference files used in other sections of the Bill of Material module.

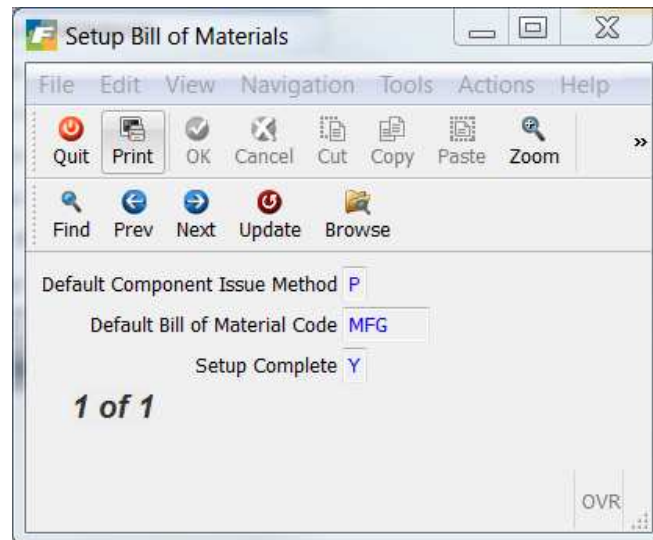




## **Setup Bill of Materials**

Use this option to set up the default values used by other programs.

To view this screen select option h from the File Maintenance menu.



The data in the Setup Bill of Material file is unique to each database (i.e. company). The file contains only one record and therefore, the commands on the command prompt, with the exception of Update and Quit, have been disabled.

When you enter items and bills of material, the system automatically fills in default values to some of the information fields, from values entered on this screen. By automatically filling the field with default data, the system saves the user from retyping the same information for each new item or bill.

The user can overwrite default values when the transaction is entered by typing over the default.

Both the sample database and the standard database of the Bill of Material module come with data already entered into the default fields. You should modify this data to fit your company's application.

Below is a description of each field in the Bill of Material Defaults section:

Field	Description
Default Component Issue Method	<p>Each component in a bill of material has a Component Issue Method. It controls how the component is to be issued from inventory when it is used on a Production Order. This value defines the default issue method to be displayed whenever a new component is added to a parent item. The possible values are:</p> <ul style="list-style-type: none"><li>• C – Issue via the Component Issue program. This method is used for orders requiring a longer lead time to produce. It allows components to be issued when they are physically used, giving a more accurate view of work in process.</li><li>• P – Issue via the Production Receipt program. This method is used when orders have a shorter lead time to produce. It allows components to be issued from the same screen which records receipt of the parent item into inventory.</li><li>• O – Issue via the Operation Complete program. This method is used when components need to be issued relative to the completion of a production order routing step.</li><li>• N – Do not issue from inventory. Components can be identified on a bill of material, for reference purposes, that are not to be issued from inventory.</li></ul>
Default Bill of Material Code	<p>A parent item can have more than one bill of material, and each bill must have a unique bill of material code. When a new bill is entered for a parent item, this default value will automatically display. NOTE: the code is not validated against any master file. It is only checked to make sure it is unique for the parent item.</p>
Setup Complete	<p>Set this value to Y when you are ready to begin using bills of material.</p>

## **Accounting Codes**

You use this option to set up and maintain the Accounting Codes file.

To view this screen, select option b from the File Maintenance menu.

The screenshot shows a software window titled "Accounting Codes". It has a menu bar with "File", "Edit", "View", "Navigation", "Tools", "Actions", and "Help". Below the menu bar is a toolbar with icons for "Quit", "Print", "OK", "Cancel", "Cut", "Copy", "Paste", "Zoom", "Notes", "Attachments", "U Fields", "To Do", "Technical status", and "Help". A second row of icons includes "Find", "Prev", "Next", "Add", "Update", "Delete", and "Browse". The main area contains the following fields:

- Accounting Code:
- Account Type:
- Description:
- Account Number:
- Date Added:
- Date Last Changed:

Below these fields, it says "1 of 6". In the bottom right corner, there is a small box labeled "OVR" with a grid icon.

Each entry represents a combination of an Accounting Code and Type used to cross-reference to an account number to be posted to for costs related to manufacturing transactions. Each production order needs an accounting code to determine how transactions for the order are to be posted to the General Ledger module.

The Accounting Code screen contains the following fields:

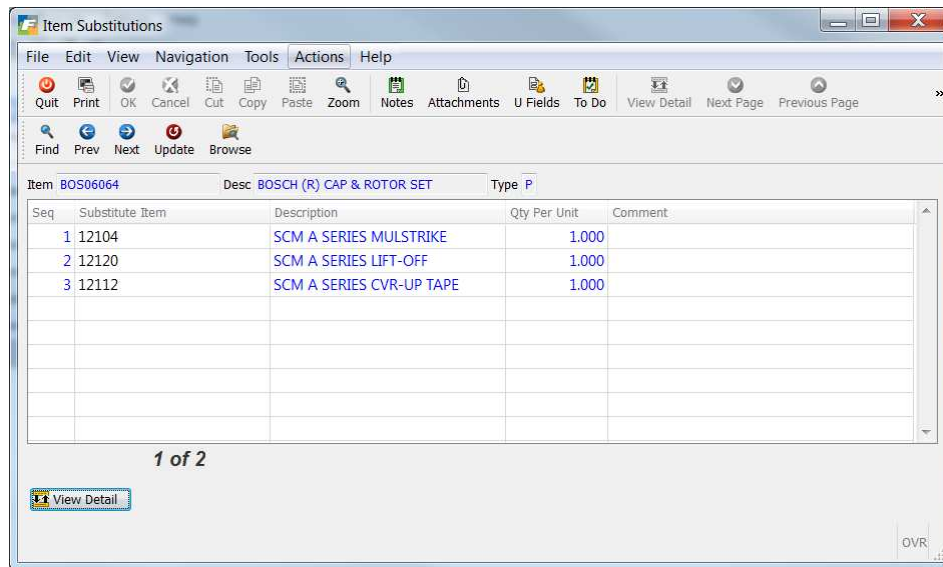
Field	Description
Accounting Code	This is a unique 13-character alphanumeric code that identifies the particular accounting code.
Account Type	One of the following values: <ul style="list-style-type: none"><li>• STK – used when stock component items are issued to a production order via Component Issue</li><li>• NON – used when non-stock component items are issued to a production order via Component Issue</li><li>• WIP RECEIPT – used when the end item on a production order is received via Production Receipt</li><li>• LABOR – used when run labor is posted to a routing step on a production order.</li><li>• SETUP – used when setup labor is posted to a routing step on a production order</li><li>• OVERHEAD – used when overhead costs are posted to a routing step on a production order</li><li>• OUTSIDE PROCESS – used when units are reported complete on an outside process routing step on a production order</li></ul>
Description	The description of the Accounting Code/Type combination.
Account Number	The G/L account number for which production transactions are to be posted.
Dated Added	Maintained by the program.
Date Last Changed	Maintained by the program.

## ***Item Substitutions***

Use this menu option to set up and maintain one or more substitute items which can be used to replace a component, on a production order.

Select option c to see the following screen:

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### Item Substitutions Header

The following fields can be entered:

Field	Description
Item	The item for which substitutes are to be entered
Desc:	The item's description. This field is for reference only
Type:	P=purchased, M=manufactured. This field is for reference only.

### Item Substitutions Detail

Enter one or more substituting items.

Field	Description
Seq	The sort sequence for the substitute item. During Production Order entry, if the 'Substitutes' window is requested, substitutes will display in order by this sequence.
Substitute Item	The item code of the substituting item
Description	The substitute item's description. This field is for reference only.
Qty Per Unit:	The quantity relationship of this item to the item it is replacing. For example, if the original item has a stocking unit of measure of 'feet' and the substituting item is stocked in 'inches', the qty per unit would be 12.
Comment	Enter free form text for any special instructions relating to how the substitute should be used.

## Product Codes

Use this option to set up and maintain the Product Code information. Items can be assigned to Product Codes for Inquiry and Reporting purposes. Items are assigned to Product codes in the 'Update Inventory Information' option, via the 'Mfg-Base' button.

To view this screen, select **(option d)**.

The screenshot shows a window titled "Product Codes". It has a menu bar with "File", "Edit", "View", "Navigation", "Tools", "Actions", and "Help". Below the menu is a toolbar with icons for "Quit", "Print", "OK", "Cancel", "Cut", "Copy", "Paste", "Zoom", "Find", "Prev", "Next", "Add", "Update", "Delete", and "Browse". The main area contains the following fields:

- Product Code: **WND**
- Description: **WINDOWS**
- Date Added: **02/29/2012**
- Date Last Changed: **02/29/2012**

Below these fields, it says "1 of 1". In the bottom right corner, there is a small box labeled "OVR".

The following fields can be entered:

Field	Description
Product Code	Enter a unique 3-character product code
Description	The product code description
Date Added	Maintained by program
Date Last Changed	Maintained by program

## **Group Codes**

Use this option to set up and maintain the Group Code information. Items can be assigned to Group Codes for Inquiry and Reporting purposes. Items are assigned to Group Codes in the 'Update Inventory Information' option, via the 'Mfg-Base' button.

To view this screen, select **(option e)**.

The following fields can be entered:

Field	Description
Group Code	Enter a unique 3-character group code
Description	The group code description
Date Added	Maintained by program
Date Last Changed	Maintained by program

## Planner Codes

Use this option to set up and maintain the Planner Code information. Items can be assigned to Planner Codes for Inquiry and Reporting purposes. Items are assigned to Planner Codes in the 'Update Inventory Information' option, via the 'Mfg-Base' button.

To view this screen, select **(option f)**.

The screenshot shows a software window titled "Planner Codes". It has a menu bar with "File", "Edit", "View", "Navigation", "Tools", "Actions", and "Help". Below the menu bar is a toolbar with icons for "Quit", "Print", "OK", "Cancel", "Cut", "Copy", "Paste", "Zoom", "Notes", and "Attachments". A second row of icons includes "Find", "Prev", "Next", "Add", "Update", "Delete", and "Browse". The main area contains the following fields:

- Planner Code: JDH
- Description: JOHN HOLMES
- Manufacture/Purchase: M
- Date Added: 02/29/2012
- Date Last Changed: 02/29/2012

At the bottom left of the main area, it says "1 of 1". In the bottom right corner, there is a small "OVR" button.

The following fields can be entered:

Field	Description
Planner Code	Enter a unique 5-character planning code. The code could represent a specific product line, type of inventory, or individual person.
Description	The planner code description
Manufacture/Purchase	P=purchased, M=manufactured
Date Added	Maintained by program
Date Last Changed	Maintained by program



## Component Mass Change/Delete

Through this menu option, you can change or delete component usages in multiple bills of material simultaneously..


To view this screen, select **(option g)**.

### Component Mass Change/Delete - Header

Use the 'Find' option to select the component item to be replaced. Then select update to decide which parent items should be affected.

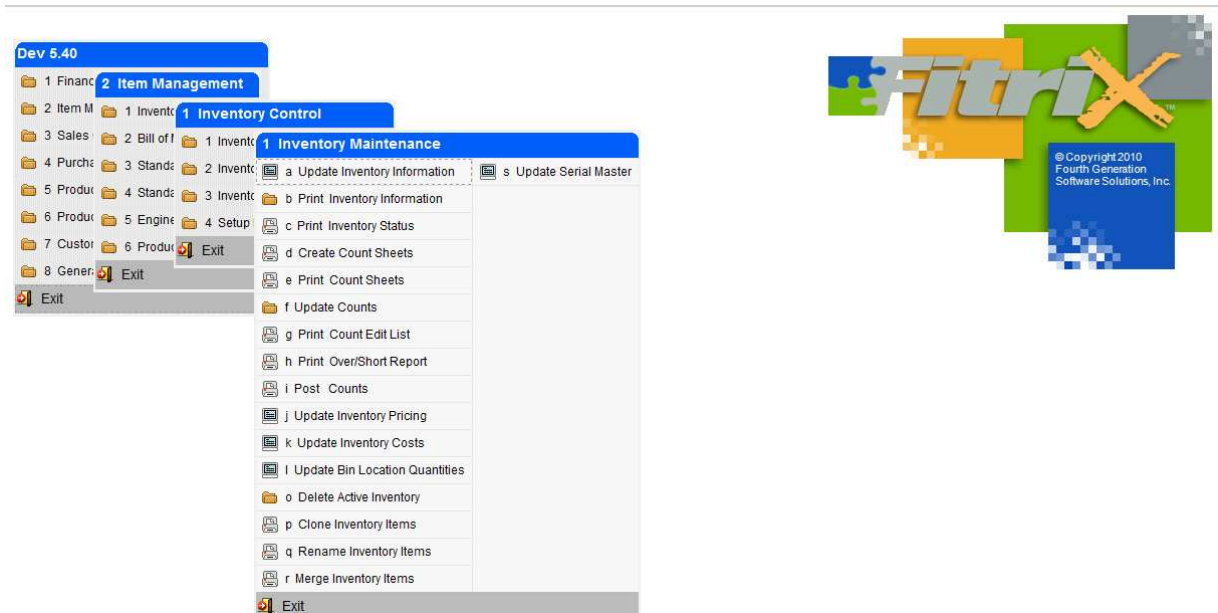
Field	Description
Component Item	The component item for which mass change/delete is to be performed
Description	The component item's description
Type:	P=purchased, M=manufactured
Action	Replace=replace component item with 'Replace With' item Delete=delete component from selected parent items
Replace With	If Action is 'Replace', the replacing component item

### Component Mass Change/Delete - Detail

The Parent Items are listed on the bottom section of the screen. Each item will be checked by default. If there are specific parents you ignore for a change or delete, click the  Detail button, and uncheck the parents to be ignored.

## Setting up Items

The Bill of Material programs assume that parent and component items have already been set up in the Inventory Master. This step is performed in the Inventory Control module, accessed from Item Management on the Fitrix Main Menu. When you select Inventory Maintenance (**option 1**) from the Inventory Control menu the following menu displays:



## Update Inventory Information

This selection takes you into the Maintain Inventory Item Screen. You can select items to view current inventory information, add new inventory items, delete old and inactive inventory items, or browse through the Inventory file.

Choose **(option a)** to view the following screen.

## Maintain Inventory Item Header

After you select Update Inventory Information, the system returns the Maintain Inventory Item Screen. You use this screen to enter, update, or display basic information about an inventory item.

The header section of the Maintain Inventory Item screen contains the following fields:

Field	Description
Item Code:	Inventory Item Code. This is a required field that stores a unique item code set up to identify each item in inventory. You can enter an item code up to 20 characters. Zoom is available to select from existing item codes.

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Field	Description
Commodity Code:	This field is freeform where you can enter any code (up to 20 characters). It is designed for those businesses that use codes set forth by the Federal government to classify and identify all types of commodities, but its function is simply reference and classification.
Description:	Item Description. There are two lines (up to 30 characters each) for the description. These fields are free form, so you can enter any information you need.
Item Class:	Item Classification. You can enter a code in this field, up to three characters, used to categorize an inventory item. All items to which you assign the same code are in the same class. You must have defined the code in the Item Class file, which is maintained via Update Item Classifications ( <b>option 4-d</b> ). Zoom is available allowing you to select a valid Item Classification.
Special Order Item:	<p>When entering sales orders, the user needs to be aware of when the item is a special order item so they can advise their customer of this and the fact that it is not carried and will be backordered.</p> <p>If this field is checked:</p> <ol style="list-style-type: none"> <li>When user enters a sales order they get this message: <p style="text-align: center;">“This is a special order item that will be backordered. Continue Y/N?”</p> </li> <li>When user enters a vendor purchase order they get this message: <p style="text-align: center;">“This is a special order item. Continue Y/N?”</p> </li> <li>The inventory replenishment programs will ignore these special order items since <p style="text-align: center;">the items are not ordered on a regular basis.</p> </li> </ol>
Price Group:	<p>Price Group Code. You can enter a code so that the system groups this item with other items that have the same price group code. On a customer order, the system combines the quantities of items that have the same price group, which helps achieve volume quotas for price breaks.</p> <p>For example, you give a 3% discount if 1,000 or more widgets are ordered. Customer orders 600 blue widgets and 400 red widgets. If they both have the same price group, the customer will receive the 3% discount.</p>
Market Price:	<p>In this field, enter Y or N depending on whether or not the item's price is subject to change based on the market value.</p> <p>If set to Y, you can change the price right up to the point of invoicing.</p> <p>If set to N, price may not be changed in the Update Invoice program.</p>
UPC Code	Enter UPC Code.

Field	Description
Special Handling Charge	This is the special handling fee that will be added to the sales order for this item. The total amount charged will be this fee multiplied by the quantity ordered
UOM List:	If a UOM List code is entered, the Stocking Unit, Selling Unit and Purchasing Units must be defined for the UOM List. In addition, the Sell Unit must have a Type of Sell or Both for both sell and purchase and the Purchase Unit must have a Type of Purchase or Both. If a UOM List code is entered, the related Factor and Increment fields are skipped. The Factor field is looked up using UOM List code. The Increment fields are left blank.
Stocking Unit:	Stock unit of stock keeping unit (sku). Enter a two-character abbreviation for the unit in which you stock the item (EA for each, BX for boxes, PT for pallets, etc.) <b>Weight</b> – Inventory item weight. You can enter the weight of 1 sku of this item up to 99999.999. You can also specify weight unit (unmarked field). <b>Volume</b> – Volume of Inventory Item. You can enter the volume of one sku of this item up to 99999.99. <b>Selling Unit</b> – Enter a two-character designation for the unit of measure in which you sell this item (EA, CS, BX, etc.) <i>Note:</i> For serialized items, all the conversion factors are 1, which is the default.
Conversion Factor:	Sell conversion factor. You can enter the decimal conversion factor that converts stock units to sell units. For example, if you stock an item in eaches and sell the item in cases and there are 6 stocking units per case, the sell conversion factor is 6. When you sell 1 case inventory on hand will be decreased by 6. <i>Note:</i> The system is capable of calculating the decimal equivalents of reciprocals such as 1/6. Enter a –6 in the Conversion factor and the system will calculate .166667, enter –2 to get .500000, just as an example.
Purchasing Unit	Purchase unit of measure. Enter the two-character designation for the unit of measure in which you purchase this item (CS, TN, PT).
Conversion Factor:	Purchase conversion factor. This is the numeric conversion factor that converts the purchase units to stock units. For example, if you purchase by the case, stock individually, and the quantity per case is 24, the conversion factor will be 24. When you receive one case, inventory on hand will be increased by 24.
Inventory Acct:	Inventory account number. The Inventory account is where the system posts financial transactions involving inventory items. The field is required and it defaults to the Inventory Account number set up in Inventory Defaults.
Cost of Goods Acct.:	Cost of goods account number. The Cost of Goods account is the where the system posts the amounts of costs for inventory purchased. This field is required and it defaults to the Cost of Goods Account number set up in Inventory Defaults.
Sales Acct.:	The Sales account is where the system posts sales of inventory items. This field is required and it defaults to the Sales Account number set up in Inventory Defaults.
Sell Unit Increment:	For items that you must sell in increments of 2 or more, use this field to set your incremental quantity. The Update Customer Order program has been modified so that the item quantity entered must be in line with this value.
Purchase Unit Increment	For items that you must purchase in increments of 2 or more, use this field to set your incremental quantity. The Update Purchase Order program has been modified so that the item quantity entered must be in line with this value.
Extended Description	Enter up to a 256 character extended description for the item.

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Field	Description
Price Levels	Use these levels to determine the price to charge your customer if you do not have prices set up in the special price file (See Order Entry chapter). You then enter this discount level in the customer master. Using the example above any customer that has a discount level of 1 will be charged 25% off list for this item.
Warehouse	The warehouse in which the item is received and stored.
Location	The bin location in the warehouse where the item is stored.
Vendor	Primary vendor code that item is purchased from. Information purposes only.
Qty on Hand	The amount currently on hand
Available	The amount currently available (on hand quantity less quantity committed to open sales orders and production work orders).
Costs	Average, Purchase, and Standard costs per stocking unit.
Price	List price per unit. Please note that this should be the list price based on stocking unit not selling unit. For example, you stock in eaches, sell in cases, and they are 6 eaches in a case. The list price per each is \$60 and when you sell a case the list price will be multiplied by the sell conversion factor of 6 to come up with a case price of \$320 (\$60 x 6 eaches).

### ***Modify Warehouse Detail***

From the detail section of the screen click on the Whse Dtl icon. When you select this option, the system returns the Item Warehouse Detail screen where you enter detail information about an inventory item.

The information on this screen pertains to a single warehouse. You can have multiple warehouses, and therefore, multiple sets of this information for each inventory item. **All quantities, costs and prices entered are entered in stock units.**

The top section contains

Field	Description
Item:	This is the item code .
Warehouse:	The current warehouse displays. You can zoom from this field to select a different distribution warehouse..

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The next section holds Cost and Price Information. This section shows the cost detail for a given item at the warehouse level. All quantities and costs are in stock units.

Field	Description
Purchase Cost:	Enter or update the standard purchase cost of one stock unit. If your customer pricing is based on a markup from cost, it is this cost that will be used.
Last Cost:	This cost is recorded automatically during receiving/purchasing.
Qty:	Last quantity received
Average Cost:	You can enter an average cost for items you have on hand when you initially set up an item in a warehouse. After set up is complete the system will automatically calculate the average cost based on purchases/receipts.
Last Date:	This field stores the date this item was last received into inventory. It is automatically maintained by the system.
Standard Cost	Enter the standard cost if you are using Standard Costing. See the <i>Standard Cost User Guide</i> for more information on standard cost tracking and analysis.
Price:	List price. This is the price your customer will be charged unless you have set up special pricing for them.
Sold Date:	This field represents the date of the most recent shipment of this item. It is automatically maintained by the system.

The next section is Location and Count Information.

Field	Description
Primary and Secondary Locations:	<p>The primary bin location entered should be the bin location this item is typically picked from for outbound shipments. The secondary bin location should be the bulk location of the item. Entry of these values is optional.</p> <p>Please note that if the location controlled value for the warehouse is N you will not be able to enter primary and secondary bin locations but you will be able to enter a static location. Conversely if the location controlled value for the warehouse is Y you will be able to enter a primary and secondary bin location but not a static location.</p>
Location Aisle:	Aisle (up to four characters), Row (up to three characters), Bin (up to three characters). These are three separate fields that hold the alphanumeric references for the physical location of the item in this particular warehouse.
Row:	Row the inventory item is located in.
Bin:	The shelf/floor location of the inventory.
Count Cycle Code:	Leave null if you always count all items at the same time. You can enter a code for an item so that the system will group it with other items that have the same code. It groups them when you create count sheets and you use count cycle codes to select items to go on a count sheet. Count cycle codes can be any single character (A-Z, 0-9). You can accept the default cycle count code you set up in the Defaults file.
Last Count:	The system maintains this field and updates it when a count including this item is posted.



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Field	Description
On Hand:	You cannot change the On Hand quantity in this field during normal date entry; you can only change the quantity during inventory set up. After that, it can only be changed by receiving, shipping, transferring, or adjusting this inventory item.

The Vendor Information section contains the following fields:

Field	Description
Vendor:	You can enter the code for the primary vendor from whom you purchase a particular item. If the Accounts Payable module is installed you should have vendor codes set up in the Accounts Payable Vendor file. Other vendors you purchase this item from can be set up in the Item Catalog program along with this one.
Vendor Item:	This field is to reference the vendor's item code if it is different than yours. You can enter a code of up to fifteen characters.  <i>Note:</i> This information is also maintained in the vendor item catalog program in the Purchasing Module. If a vendor item is entered it will print along side your item code on your vendor purchase orders.

The last section of the Warehouse Detail screen is labeled Selling Information, which pertains to Order Entry. All these fields have defaults that should be set up in the Inventory Defaults file:

Field	Description
Minimum Sell Qty:	You can enter this number up to seven digits, which indicates the minimum quantity (in stock units) that a customer must purchase on a single order line.
Allow Backorder:	Enter Y or N as to whether you allow this item to be backordered or not.
Taxable:	Controls taxation of the item. Enter Y or N.
Subject to Terms Disc.:	Another Y or N field entry is required here based on your choice.  Enter Y if you want this item to be included in the calculation of terms discount.  Enter N if it should not be.
Subject to Trade Disc.:	The same as above applies here.
Req Profit %:	The lowest percentage of profit allowed. This affects the Order Entry module. If the price entered is below this required profit percent, the user will be notified during order entry.
Commission Code:	Type of Commission. Enter a commission code that applies to the item.

## Modify Reorder Detail

Click on Reorder Detail icon.

Use this option to add, update or view information pertaining to reorder and system information. The top portion of the screen contains the item code, item description, warehouse code, and warehouse description that appear on most of the screens available on the Warehouse Detail Zoom men. You cannot modify this information.

The screenshot shows a software window titled "Reorder Information". It has a menu bar with "File", "Edit", "View", "Tools", and "Help". Below the menu bar is a toolbar with various icons. The window is divided into two main sections. The top section, "Item Warehouse Detail", contains fields for "Item:" (C-MON), "Warehouse:" (MIAMI), "24" MONITOR", and "MIAMI WHSE". The bottom section, "Reorder and System Information", contains several fields: "Obsolete?:" (N), "Seasonal:" (checkbox), "ABC Class:" (checkbox), "Last Activity Date:" (11/05/2012), "On Hand:" (259.00), "Reorder Quantity:" (empty), "Reorder Point:" (empty), "Safety Stock:" (empty), "Safety Factor:" (empty), "Out of Stock Date:" (empty), "Average Lead Time:" (17.50), "Last Lead Time:" (35), "Next to Last Lead Time:" (0), "Freeze Flag:" (checkbox), "Freeze Date:" (empty), and "Freeze Expiration Date:" (empty). There is an "OK" button with a green checkmark icon in the bottom left corner and an "OVR" button in the bottom right corner.

Item Warehouse Detail	
Item:	C-MON
Warehouse:	MIAMI
	24" MONITOR
	MIAMI WHSE

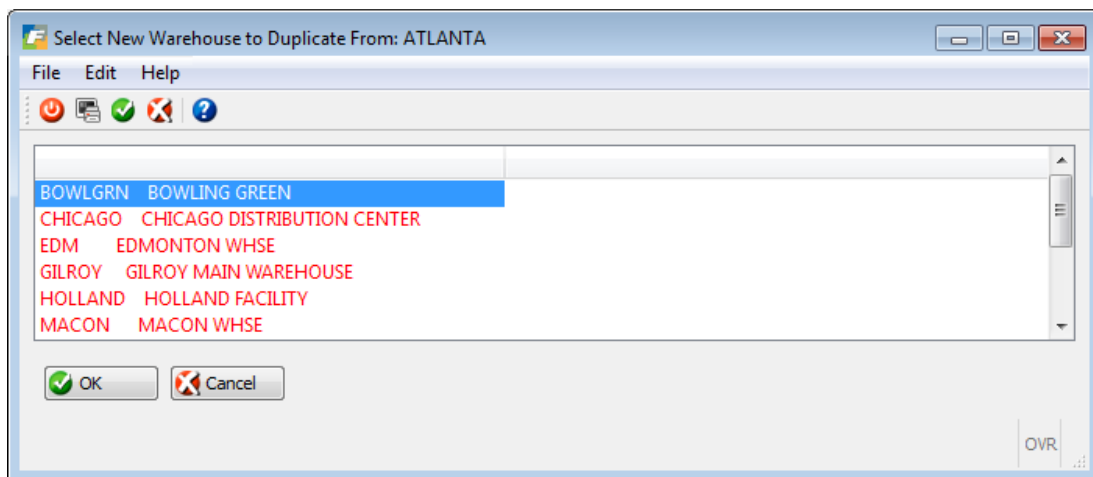
Reorder and System Information	
Obsolete?:	N
Seasonal:	<input type="checkbox"/>
ABC Class:	<input type="checkbox"/>
Last Activity Date:	11/05/2012
On Hand:	259.00
Reorder Quantity:	
Reorder Point:	
Safety Stock:	
Safety Factor:	
Out of Stock Date:	
Average Lead Time:	17.50
Last Lead Time:	35
Next to Last Lead Time:	0
Freeze Flag:	<input type="checkbox"/>
Freeze Date:	
Freeze Expiration Date:	

Field	Description
Obsolete?	Enter Y if the item is obsolete or N if it is not. If marked Y, purchase orders cannot be entered for the item.
Seasonal	This field is currently a reference only field.
ABC Class	ABC Classification. You can enter the class this item based on the ABC classifications set up in the Inventory Control Defaults file. <i>Note:</i> This value is only used if the Replenishment Module is installed.
Last Activity Date	The system maintains this transaction date for the inventory item (non-entry).
On Hand	Item Quantity on Hand (non-entry).
Reorder Qty	Enter the quantity of the item (in stock units) you want to reorder when inventory drops to the reorder point. The amount you reorder is usually based on usage rate, lead-time, and safety allowance. You must calculate the reorder point manually. If the replenishment module is in use, the reorder point will be calculated for you automatically and stored in the Replenishment Data table.
Reorder Point	Enter the quantity (in stock units) at which the system flags the item for reorder. Items appear on the Reorder Advice report when the quantity on hand reaches or drops below this point. If the replenishment module is in use, the reorder point will be calculated for you automatically and stored in the Replenishment Data table.
Safety Stock	Enter the safety stock level (in stock units). Safety stock is the quantity below which you do not want inventory to fall for a particular item. This safety stock is your "pad" against variations in usage rates and lead times that might otherwise cause you to run out of an item. <b>Note: This value is only used if the replenishment module is installed.</b>
Safety Factor	This is a percentage of the total order that is added to the order and will be the safety stock. It is calculated based on usage. <b>Note: This value is only used if the replenishment module is installed.</b>
Out of Stock Date	This is the date that the item ran out.
Average Lead-Time	The system calculates the average lead-time once you begin purchasing inventory. It is calculated as the average of the past two lead time performances. The system calculates lead times based on the request date (or the PO date if no request date) and subtracts that from the receive date.
Last Lead-Time	This field is automatically updated by the system and holds the last lead-time, in days.
Next to Last Lead-Time	This field is automatically updated by the system and records the next to last lead-time.
Freeze Flag	Reserved for future use with the replenishment module.
Freeze Date	Reserved for future use with the replenishment module.
Freeze Expiration Date	Reserved for future use with the replenishment module.

## ***Copy Warehouse to Another***

Click on the Copy Whse icon.

This option allows you to copy information about this inventory item from an existing warehouse, and set the item up in another warehouse with all the same warehouse detail information. The only exception is the quantity on hand field which must be entered. The screen will list any warehouse codes that do not have this item code.



## ***View Usage History***

Click on the Usage History icon.

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The screenshot shows the 'View Purchase/Sales History' window. The 'Transaction History' section displays the following information:

- Item: C-MON (24" MONITOR)
- Warehouse: MIAMI (MIAMI WHSE)
- Total sold last 12 months: 0.00
- Average sold per month: 0.00
- Last sold date: 07/04/2012

Month	Year	\$ Cost	\$ Sales	Cost Qty	Sales Qty
11	2012	1176.320	0.000	15.000	0.000
7	2012	132.400	0.000	2.000	0.000
3	2011	12923.400	319.980	202.000	2.000
12	2010	0.000	0.000	0.000	0.000
11	2010	0.000	159.990	0.000	1.000
10	2010	1500.000	0.000	20.000	0.000

(Ctrl-z) to View Transaction Detail

OK Cancel

OVR

The top portion of this screen has the item code and warehouse code. Inventory items can have year, cost, sales, and quantity. You can zoom to see the detail that makes up the totals on the screen pictured above.

The screenshot shows the 'View Purchase/Sales History' window with a detailed transaction record. The table below shows the transaction details:

Document	Date	OJ	Type	Who	Business Name	Qty	Stats	Unit Cost	Unit Price
697	11/05/2012	PR	PU	123457	CHAMPION INC	15.00	Y	78.42	

OK Cancel

OVR

## View Item Status

Click on the status icon.

The Item Status screen allows you to view the status of an item in multiple warehouses, whereas the Maintain Inventory Item screen stores limited status information about an item only for one warehouse.

The 'View Item Availability' window displays the following information:

- Item Code: C-MON
- Unit: EA
- Factor: 1.000000

Warehouse	On Hand	Committed	On BKO	Available	On Req	On PO/Transfer
MIAMI	259.000	19.000	0.000	240.00	0.000	10.000

Buttons: Cancel, Detail

Bottom right: OVR

You can zoom in further to see the details that make up the various quantities.

The detail window shows the following options:

- List Commit Orders
- List BKO Orders
- List PO's/Transfers

Buttons: OK, Cancel

Bottom right: OVR

## Serial/Lot Numbers

Click on the Serial/Lot icon.

If an item is either serial or lot number controlled you will use this screen to set up the serial or lot number during Inventory Set Up. Once inventory is set up, this information is view only.

PO No	Rec Doc	Recpt Date	Bin Location	Lot Number	Expiry Date	Serial Number	Recvd Qty	Cost	On Hand
811	697	11/05/2012	A1			FG4557	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4558	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4559	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4560	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4561	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4562	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4563	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4564	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4565	1.00	78.4210	1.000
811	697	11/05/2012	A1			FG4566	1.00	78.4210	1.000

## Variable Commission Rates

Click on the Commission Rates icon. You can use this screen program to set up variable commission percentages based on sales price rather than one flat rate on the warehouse detail screen discussed above. If the item is sold below the lowest begin price no commission is earned. If sold above the highest end price the commission percent is the same as the highest percent. These commission levels can also be overridden at the individual customer level using the Update Customer Information screen.

Begin Price	End Price	Commission %
85.0000	100.0000	5.00
100.0001	125.0000	7.00
125.0001	140.0000	9.00
140.0001	170.0000	12.00
170.0001	200.0000	15.00

## ***Alternate Items***

Click on the Alternate Items icon to set up alternate or substitute items for your item. This screen program can also be accessed from the Setup Inventory menu as discussed above.

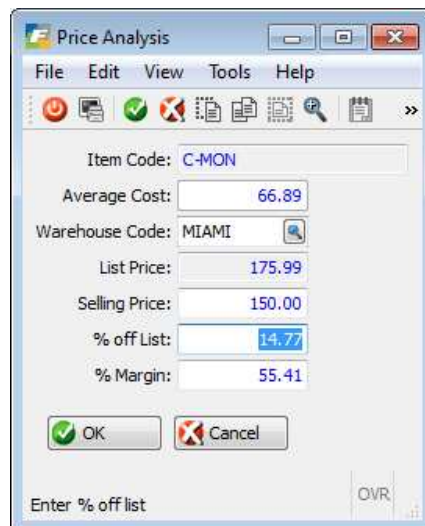
## ***Cross Sells***

Click on the Cross Sells icon to set up cross sell items for your item. This screen program can also be accessed from the Setup Inventory menu as discussed above.

## ***Price Analysis***

Click on the Price Analysis icon.

This screen program can be used determine sales price based on a % discount off list and what the profit margin will be. You can also enter a sales price and the % off list and profit margin will be calculated for you.



The image shows a 'Price Analysis' dialog box with a menu bar (File, Edit, View, Tools, Help) and a toolbar. The main area contains the following fields and values:

Field	Value
Item Code:	C-MON
Average Cost:	66.89
Warehouse Code:	MIAMI
List Price:	175.99
Selling Price:	150.00
% off List:	14.77
% Margin:	55.41

At the bottom, there are 'OK' and 'Cancel' buttons. Below the buttons, the text 'Enter % off list' is visible on the left, and 'OVR' is visible on the right.




## Maintaining Items

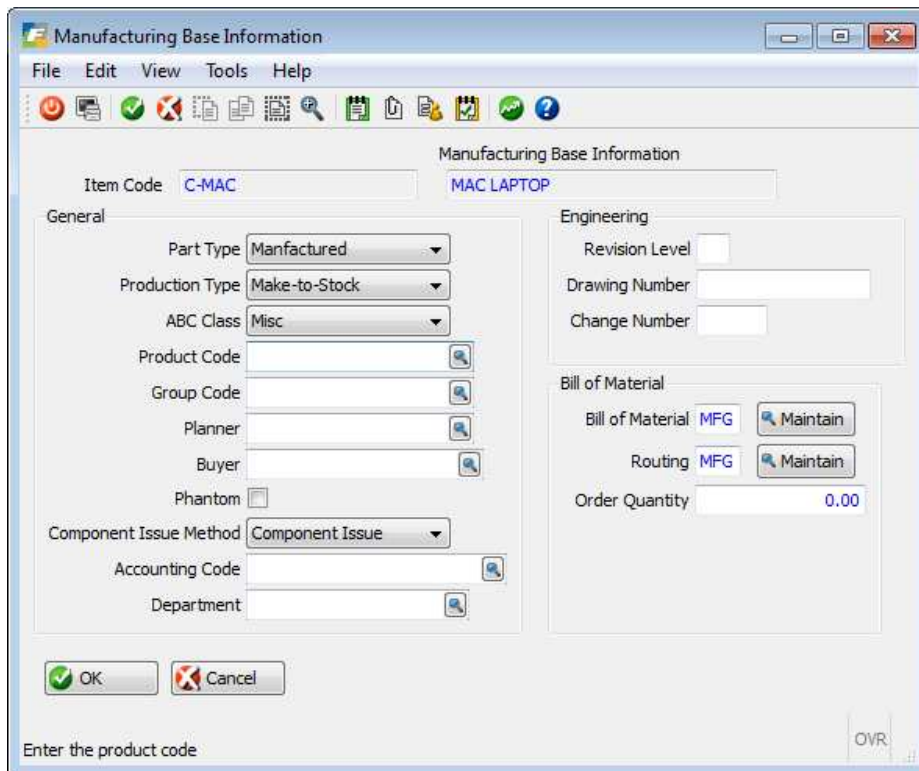
Bills of Material consist of multiple items and their relationships to each other in a production environment. A bill of material defines the items (components) and their respective quantities required to produce another item (parents).

### Maintaining Item Manufacturing Information

Items are defined in the Inventory Control module, in Inventory Maintenance/Update Inventory Information.

To access the manufacturing-related fields for component and/or parent items, update an item in

Inventory Control/Inventory Maintenance/Update Inventory Information, then select the  button. The following window displays:



The screenshot shows the 'Manufacturing Base Information' window. It has a menu bar (File, Edit, View, Tools, Help) and a toolbar with various icons. The window is divided into several sections:

- Item Code:** C-MAC (with a dropdown arrow) and MAC LAPTOP (with a dropdown arrow).
- General:**
  - Part Type: Manufactured (dropdown)
  - Production Type: Make-to-Stock (dropdown)
  - ABC Class: Misc (dropdown)
  - Product Code: (text field with a search icon)
  - Group Code: (text field with a search icon)
  - Planner: (text field with a search icon)
  - Buyer: (text field with a search icon)
  - Phantom: ☐
  - Component Issue Method: Component Issue (dropdown)
  - Accounting Code: (text field with a search icon)
  - Department: (text field with a search icon)
- Engineering:**
  - Revision Level: (text field)
  - Drawing Number: (text field)
  - Change Number: (text field)
- Bill of Material:**
  - Bill of Material: MFG (text) and Maintain (button)
  - Routing: MFG (text) and Maintain (button)
  - Order Quantity: 0.00 (text field)

At the bottom, there are OK and Cancel buttons. A status bar at the very bottom says 'Enter the product code' and 'OVR'.

## ***Fitrix Manufacturing Course Workbook***

The following fields are available:

Field	Description
Item Code:	Inventory Item Code
Description:	Item Description
Part Type	<p>Manufactured or Purchased. This determines how the Planning applications are to plan for either production or purchase of an item. In addition, if a manufactured part is placed on a purchase order to buy, or if a purchased item is entered on a work order to be produced, warning messages will be displayed.</p> <p>Parent items are manufactured and component items are purchased.</p>
Production Type	Valid values are Assemble to Order or Make to Stock
ABC Class	An optional classification to be used in reports. It rates an item in comparison to other items as an extension of its cost x usage.
Product Code	You may optionally assign this item to a pre-defined Product Code. Reports in other modules allow you to select items within specific product codes
Group Code	You may optionally assign this item to a pre-defined Group Code. Reports in other modules allow you to select items within specific group codes
Planner	You may optionally assign this item to pre-defined Planners. Reports in other modules allow you to select items within specific planner codes
Buyer	You may optionally assign this item to pre-defined Buyers. Reports in other modules allow you to select items within specific buyer codes
Phantom:	<p>Phantoms are a convenience for defining a collection of components which are used together in multiple parent items. The components can be defined once under a 'Phantom parent item' and then this item is entered as a component in the parent items that use the collection. A phantom is typically never directly produced or stocked in inventory. You may, however, decide to stock phantom items. In this case, whenever a parent item has a phantom in its bill of material, a production order for the parent will test inventory availability for the phantom before 'exploding' its components. Whatever inventory is available is used directly; any shortages will trigger an explosion to the component items in the collection.</p>
Component Issue Method	<p>For items which are to be used as components in a bill of material, choose one of the following values:</p> <ul style="list-style-type: none"> <li>• Component Issue – Issue this item via the Component Issue transaction in the Production Order Processing module</li> <li>• Production Receipt – Issue this item via the Production Receipt transaction in the Production Order Processing module. These components will be issued at the same time the parent item is being received to inventory. This is often referred to as 'back flushing'.</li> <li>• Operation Complete – Issue this item via the Operation Completion transaction in the Production Order Processing module.</li> <li>• Not Issued – this item is never issued to a production order. Non-production materials such as drawings, containers, and tooling are used in this way.</li> </ul>
Accounting Code	Select from the list of predefined accounting codes
Department	Select from the list of predefined departments



Field	Description
Engineering Revision Level	Enter an optional value to indicate the current revision level for the item. This is useful where items with extensive and/or frequent configuration changes must be managed.
Engineering Drawing Number	Enter an optional drawing number that could be cross-referenced to a physical drawing or electronic document
Engineering Change Number	In cases where Revision Levels are used, this can further reference an engineering department change number that advanced the item to its current revision level.
Bill of Material	Enter the identifier for the default bill of material for the item. Items are allowed to have more than one bill of material (for example: engineering, production, and service), and each bill has its own unique identifier. This value indicates the default bill of material identifier to be used when entering production orders and performing material planning.
Routing	Enter the identifier for the default routing for the item. Items are allowed to have more than one routing (for example: engineering, production, and service), and each routing has its own unique identifier. This value indicates the default routing identifier to be used when entering production orders and performing material planning.
Order Quantity	Enter an optional default standard ordering quantity for the item, whenever it is produced or purchased.

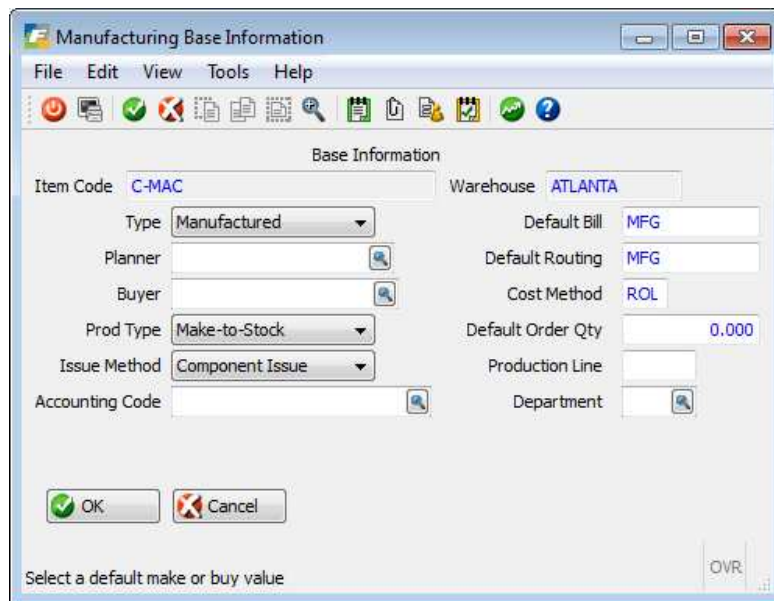
## Maintain Inventory Item Detail

Additional information about the inventory item is stored at the warehouse level and the use of warehouse allows you to have multiple sets of this information for a single item, depending on the warehouse in which it is used.

## Maintaining Item/Warehouse Manufacturing Information

From the detail section of the Update Inventory Information window, you can access manufacturing information that is specific to an item in an individual warehouse.

To access the manufacturing-related fields, select the  Detail button, move the cursor to the  Mfg/Warehouse Base button. The following window will display.



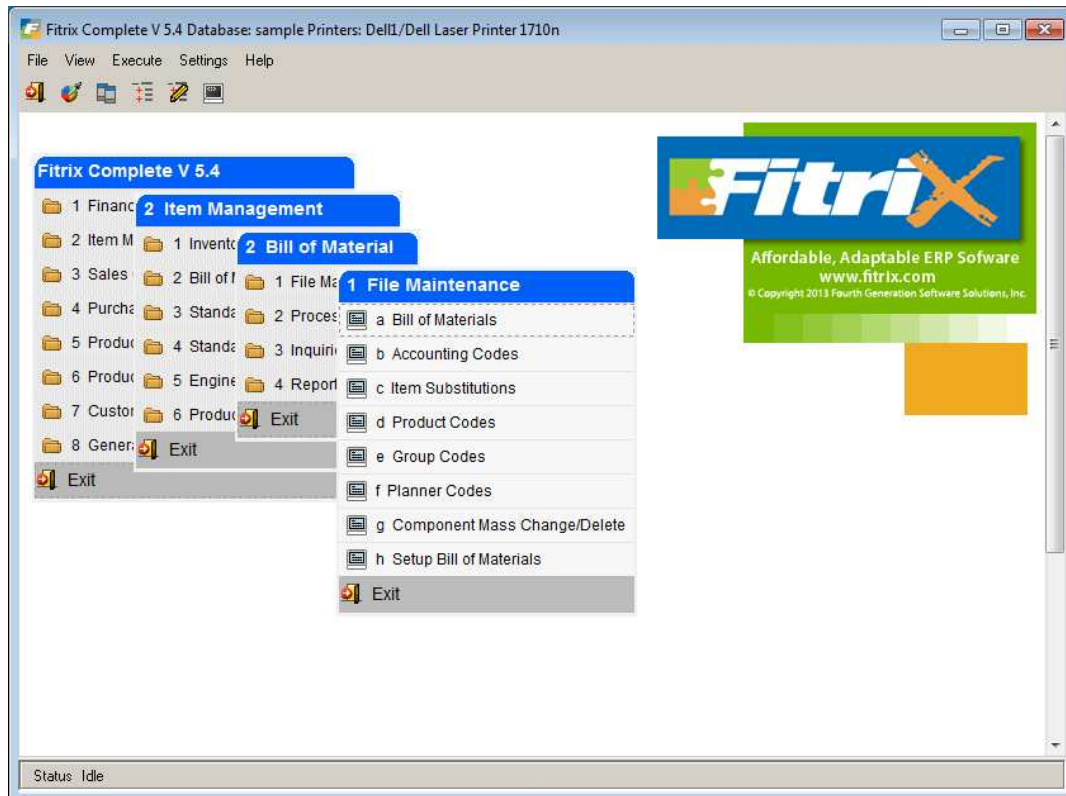
Many of the fields in this window are the same as the Mfg-Base window described above. These values at the Item/Warehouse level allow you to override characteristics or behavior of an item depending on the warehouse in which it exists. For example an item might be produced in one facility (warehouse) and consumed in another facility, within the same enterprise. In this case, the item can have a Type of Manufactured in one warehouse, and Purchased in another.

Field	Description
Item Code:	Inventory Item Code
Warehouse	Warehouse Identifier
Type	Manufactured or Purchased. This determines how the Planning applications are to plan for either production or purchase of an item. In addition, if a manufactured part is placed on a purchase order to buy, or if a purchased item is entered as an item to be produced, warning messages will be displayed.
Planner	You may optionally assign this item to pre-defined Planners. Reports in other modules allow you to select items within specific planner codes
Buyer	You may optionally assign this item to pre-defined Buyers. Reports in other modules allow you to select items within specific buyer codes
Prod Type	Assemble to Order or Make to Stock

Field	Description
Issue Method	<p>For items which are to be used as components in a bill of material, one of the following values:</p> <ul style="list-style-type: none"><li>• Component Issue – Issue this item via the Component Issue transaction in the Production Order Processing module</li><li>• Production Receipt – Issue this item via the Production Receipt transaction in the Production Order Processing module. These components will be issued at the same time the parent item is being received to inventory. This is often referred to as 'back flushing'.</li><li>• Operation Complete – Issue this item via the Operation Completion transaction in the Production Order Processing module.</li><li>• Not Issued – this item is never issued to a production order. Non-production materials such as drawings, containers, and tooling are used in this way.</li></ul>
Accounting Code	Select from a list of valid codes
Default Bill	Enter the identifier for the default bill of material for the item. Items are allowed to have more than one bill of material (for example: engineering, production, and service), and each bill has its own unique identifier. This value indicates the default bill of material identifier to be used when entering production orders and performing material planning.
Default Routing	Enter the identifier for the default routing for the item. Items are allowed to have more than one routing (for example: engineering, production, and service), and each routing has its own unique identifier. This value indicates the default routing identifier to be used when entering production orders and performing material planning.
Cost Method	Select from a list of valid codes
Default Order Quantity	Enter an option default standard ordering quantity for the item, whenever it is produced or purchased.
Production Line	This field is reserved for future use
Department	Select from a list of departments

## Maintaining Bills of Material

Bills of Material are maintained from the File Maintenance menu.



## Bill of Material Maintenance

Use menu option 'a' from the File Maintenance menu to work with bills of material.

When you select the option, the following screen displays:

Bill of Materials

File Edit View Navigation Tools Actions Options Help

Quit Print OK Cancel Cut Copy Paste Zoom Notes Attachments U Fields To Do View Detail Next Page Previous Page

Add Summary Copy Bill Routing Detail Notes

Find Prev Next Add Update Delete Browse

Item Code 10000 Desc PERSONAL COMPUTER Type P U/M EA

Bill of Material MFG Revision Level Eng Change

Sequence	Component	Rv Lvl	Description	Quantity per Unit	U/M	Op Used
0001	C-DISK		HARD DRIVE	1.0000000	EA	
0002	C-KEY		KEYBOARD	1.0000000	EA	
0003	C-MOUSE		MOUSE	1.0000000	EA	
0004	C-USB	002	USB FLASH DRIVE	2.0000000	EA	
0005	C-USBCA		USB CABLE	1.0000000	EA	
0006	C-MON		24" MONITOR	1.0000000	EA	

1 of 1

View Detail

OVR

### Bill of Materials - Header

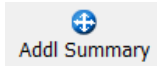
Field	Description
Item Code	The parent item
Desc:	The parent item's description
Type:	P=purchased, M=manufactured
Bill of Material	The unique identifier for this bill of material, for this parent item. A parent item can have more than one bill of material
Revision Level	The optional current engineering revision level for the bill of material
Eng Change	The optional change number which activated the current revision level

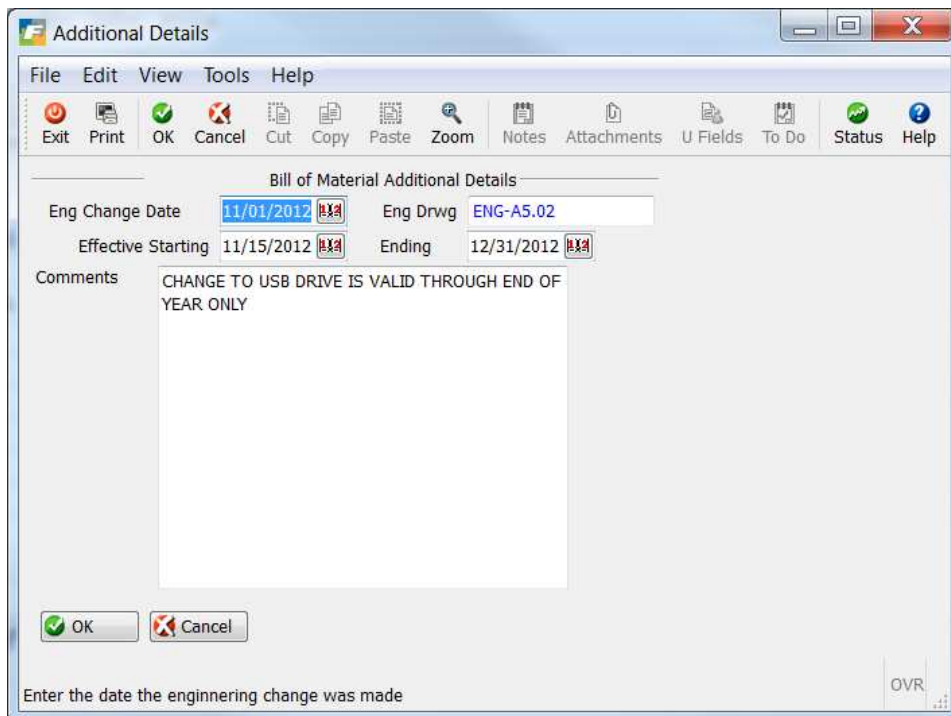
### Bill of Materials - Detail

Enter one or more component items. The combination of the sequence and component item must be unique within the bill. This implies that the same component item can be entered more than once, as long as the sequence is different. This can be useful when a specific component is used throughout the bill, but would be more clearly defined by showing specific points of use (for example, nuts and bolts)

Field	Description
Sequence	The sort and display sequence for the component item. The sequence can be up to 10 characters, and allows for characters and numbers
Component Item	The component item code
Rv Lvl	The component item's revision level from the Inventory Master is automatically displayed
Desc:	The component item's description
Qty Per Unit:	The quantity of the component item required to product one unit of the parent item. This numeric value can have up to 7 digits to the left, and 7 digits to the right, of the decimal point.
Op Used	Enter an optional routing step from the Standard Routing where this component item is used. This field would not be used if Standard Routings are not being used also. Production Scrap transactions in the Production Order Processing module use this field to determine which components were consumed when a parent items is scrapped.

## Additional Summary

To display the summary window from the Bill of Material Header section, select the  button. The following window is displayed:



**Additional Details**

File Edit View Tools Help

Exit Print OK Cancel Cut Copy Paste Zoom Notes Attachments U Fields To Do Status Help

Bill of Material Additional Details

Eng Change Date 11/01/2012 Eng Drwg ENG-A5.02

Effective Starting 11/15/2012 Ending 12/31/2012

Comments  
CHANGE TO USB DRIVE IS VALID THROUGH END OF YEAR ONLY

OK Cancel

Enter the date the engineering change was made


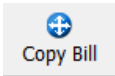
OVR

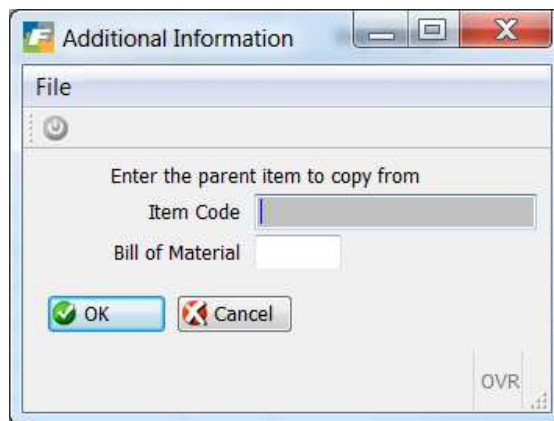


You can enter in the following fields:

Field	Description
Eng Change Date	Enter an optional date of last Engineering Change
Eng Drwg	Enter an optional drawing number
Effective Starting	This field is reserved for future use
Effective Ending	This field is reserved for future use
Comments	Enter optional comment text


## **Copy Bill**

To copy an existing bill of material to a new bill, select the  button, enter the new Item Code and Bill of Material, then select the  button. The following window displays:




Enter the Item Code and Bill of Material to copy from, and click OK.

## **Routing**

To activate the Routing Maintenance programs for the current item, select the  button. See the Standard Routing module for more information regarding this program.

## **Detail**

To display the details window from the Bill of Material Detail section, move the cursor to the desired component, and select the  button. The following window is displayed:

You can enter into the following fields:

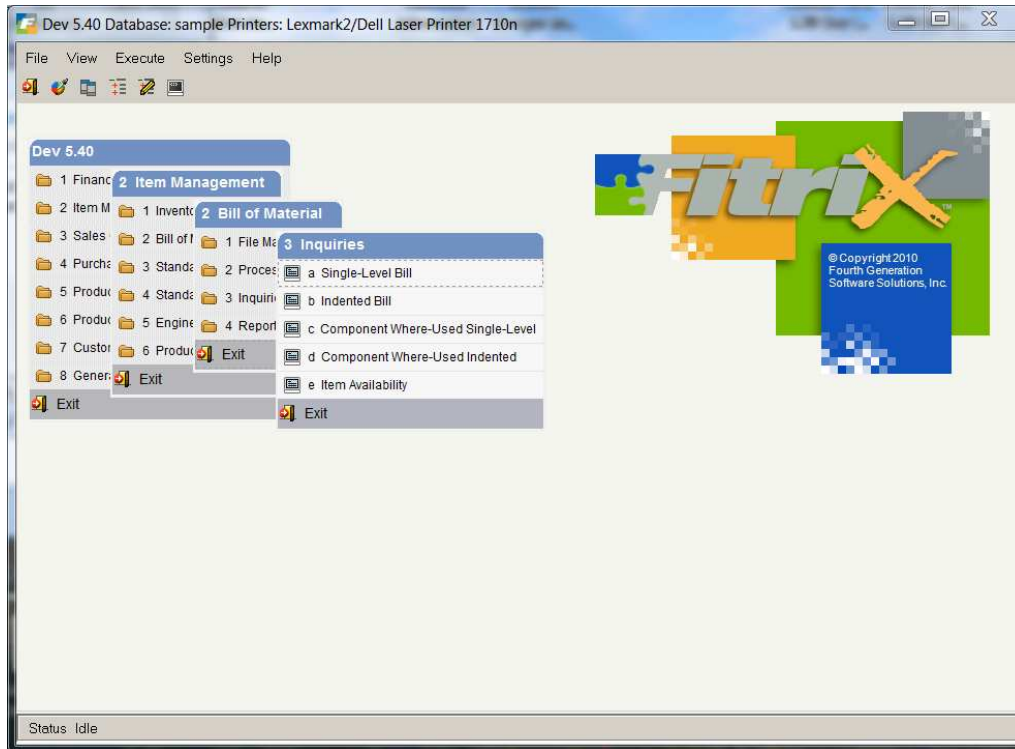
Field	Description
Component Sequence	The component's sequence in the bill of material
Component Item	The component item code
Operation Where-Used	The optional routing step in the standard routing where this component is used.
Quantity Per Unit	The quantity of the component item required to produce one unit of the parent item. This numeric value can have up to 7 digits to the left and 7 digits to the right of the decimal point.
Start Offset Days	The number of days after the start of production for the parent item that the component is needed. If no value is entered, production and planning assume that the component is needed at the time the order starts production. This value can be used to defer the component requirement to a day more consistent with when it is actually needed, usually for longer lead time parent items.
Effective Starting	The starting date for the component to be used. If no date is entered, this component will always be used
Effective Ending	The ending date for this component to be used. If no date is entered, this component will always be used.
Parent Eng Change	The parent item's engineering change which added this component to the bill of material.

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Field	Description
Supply to Vendor	This field is reserved for future use
Shrinkage Factor	If the component usage has a predictable amount of loss, enter a decimal value indicating the loss. For example a value of .10 would indicate, if a quantity per unit of 1 was entered, the actual value consumed would be $1/(1 - 0.10)$ , or 1.1111
Issue Method	One of the following values: <ul style="list-style-type: none"><li>• C - Component Issue – Issue this item via the Component Issue transaction in the Transaction Processing submenu</li><li>• P - Production Receipt – Issue this item via the Production Receipt transaction in the Transaction Processing submenu. These components will be issued at the same time the parent items is being received to inventory. This is often referred to as 'back-flushing'.</li><li>• O - Operation Complete – this option is reserved for future use.</li><li>• N- Not Issued – this item is never issued to a production order. Non-production materials such as drawings, containers, and tooling are used in this way.</li><li>• V- reserved for future use to handle components issued to vendors for outside processes.</li></ul>
Issue Type	This field is reserved for future use
Print on Packet	Y = print this component on the Production Packet document N = do not print this component on the document
User Field 1,2 3	Enter any optional additional data for this component.  NOTE: Any information entered in these fields will automatically be copied to the same used fields on a production order component.

## Inquiries

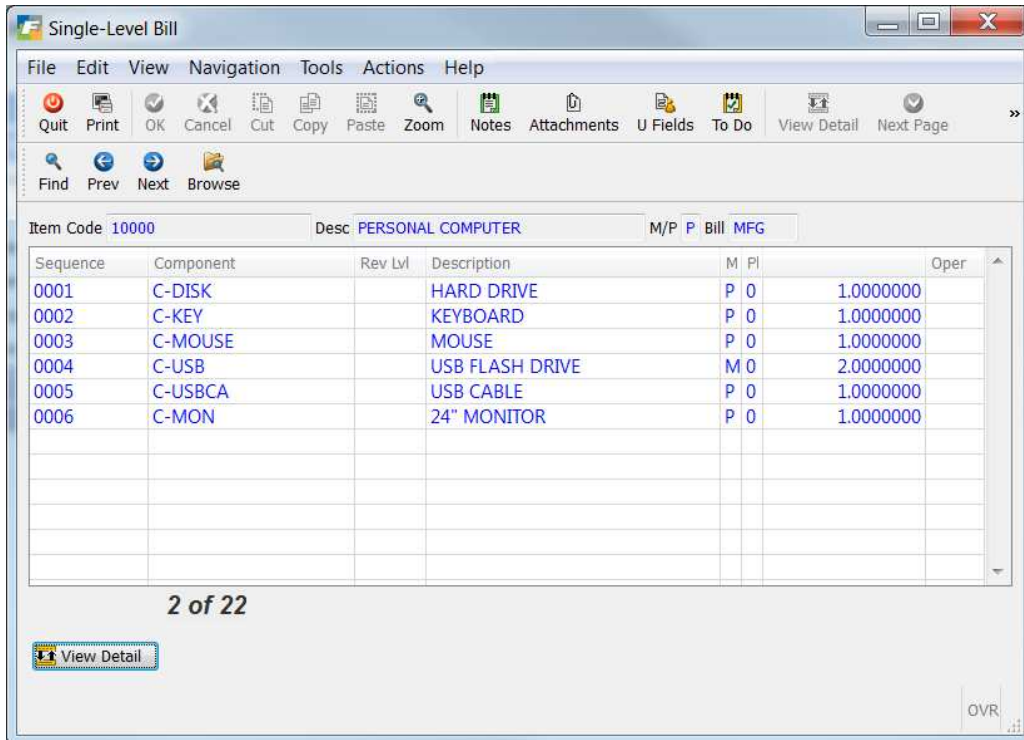
The options on the Inquiries allows you to view bills of material by parent or by component, in multiple formats



## **Single-Level Bill**

Use this option to review the immediate components list for a parent item.

Select option a from the Inquiries menu. The following window displays:



The screenshot shows a software window titled "Single-Level Bill". It has a menu bar with File, Edit, View, Navigation, Tools, Actions, and Help. Below the menu bar is a toolbar with icons for Quit, Print, OK, Cancel, Cut, Copy, Paste, Zoom, Notes, Attachments, U Fields, To Do, View Detail, and Next Page. Below the toolbar is a search bar with fields for Item Code (10000), Desc (PERSONAL COMPUTER), M/P, P, Bill, and MFG. Below the search bar is a table with the following columns: Sequence, Component, Rev Lvl, Description, M, Pl, and Oper. The table contains six rows of data:

Sequence	Component	Rev Lvl	Description	M	Pl	Oper
0001	C-DISK		HARD DRIVE	P	0	1.0000000
0002	C-KEY		KEYBOARD	P	0	1.0000000
0003	C-MOUSE		MOUSE	P	0	1.0000000
0004	C-USB		USB FLASH DRIVE	M	0	2.0000000
0005	C-USBCA		USB CABLE	P	0	1.0000000
0006	C-MON		24" MONITOR	P	0	1.0000000

Below the table, it says "2 of 22". At the bottom left, there is a "View Detail" button. At the bottom right, there is an "OVR" button.

The fields displayed have already been defined earlier in the workbook

## Indented Bill

Use this option to review a multi-level bill of material for a parent item.

Select option b from the Inquiries menu. The following window displays:

Level	Bill	Sequence	Component	Rev Lvl	Description	M/F	Phr	Quantity Per Unit	User 1	User 2
1	MFG	0001	C-DISK		HARD DRIVE	P	0	1.0000000		
1	MFG	0002	C-KEY		KEYBOARD	P	0	1.0000000		
1	MFG	0003	C-MOUSE		MOUSE	P	0	1.0000000		
1	MFG	0004	C-USB	002	USB FLASH DRIVE	M	0	2.0000000		
.2	MFG	1	12104		SCM A SERIES MULSTRIKE	P	0	2.0000000		
..3	MFG	0001	12112		SCM A SERIES CVR-UP TAPE	P	0	2.0000000		
.2	MFG	2	12120		SCM A SERIES LIFT-OFF	M	0	2.0000000		
..3	MFG	0001	12195		SCM A SERIES NYLON	P	0	2.0000000		
1	MFG	0005	C-USBCA		USB CABLE	P	0	1.0000000		
1	MFG	0006	C-MON		24" MONITOR	P	0	1.0000000		

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View Detail

OVR

The 'Level' column indicates the current level relative to the parent item. For each component that has its own bill of material, the level is incremented and indented, showing the components. The other fields displayed have already been defined earlier in the workbook

## Component Where-Used Single Level

Use this option to review the immediate parents list for a component item.

Select option c from the Inquiries menu. The following window displays:

The screenshot shows a software window titled "Component Where-Used Single-Level". It has a menu bar with File, Edit, View, Navigation, Tools, Actions, and Help. Below the menu is a toolbar with icons for Quit, Print, OK, Cancel, Cut, Copy, Paste, Zoom, Notes, Attachments, U Fields, To Do, View Detail, and Next Page. There are also navigation buttons: Find, Prev, Next, and Browse. The main area contains a form with the following fields:

- Item Code: C-USB
- Description: USB FLASH DRIVE
- M/P: M
- Bill: MFG

Below these fields is a table titled "Parent Items". The table has the following columns: Sequence, Parent, Rev Lvl, Description, M/P, Phr, Quantity per Unit, and Oper. The table contains two rows of data:

Sequence	Parent	Rev Lvl	Description	M/P	Phr	Quantity per Unit	Oper
0004	10000		PERSONAL COMPUTER	P	0	2.0000000	
0004	C-MAC		MAC LAPTOP	M	0	2.0000000	

Below the table, it says "705 of 736". There is a "View Detail" button and an "OVR" button in the bottom right corner.

The fields displayed have already been defined earlier in the workbook

## Component Where-Used Indented

Use this option to review an inverted multi-level bill of material for a component item.

Select option d from the Inquiries menu. The following window displays:

The screenshot shows a software window titled "Component Where-Used Indented". It has a menu bar (File, Edit, View, Navigation, Tools, Actions, Options, Help) and a toolbar with icons for Quit, Print, OK, Cancel, Cut, Copy, Paste, Zoom, Notes, Attachments, U Fields, To Do, View Detail, and Next Page. Below the toolbar is a "Details" section with icons for Find, Prev, Next, Details, and Browse. The main area displays a table for Item Code 12120, Description SCM A SERIES LIFT-OFF, M/P M Bill MFG. The table has columns: Level, Bill, Sequence, Parent, Description, M/F, and Quantity per Unit. The data shows three levels: Level 1 (MFG, Sequence 2, Parent C-USB, Description USB FLASH DRIVE, M/F M, Quantity 1.0000000), Level 2 (MFG, Sequence 0004, Parent 10000, Description PERSONAL COMPUTER, M/F P, Quantity 2.0000000), and Level 2 (MFG, Sequence 0004, Parent C-MAC, Description MAC LAPTOP, M/F M, Quantity 2.0000000). Below the table, it says "1 of 1" and there is a "View Detail" button. In the bottom right corner, there is an "OVR" button.

Level	Bill	Sequence	Parent	Description	M/F	Quantity per Unit
1	MFG	2	C-USB	USB FLASH DRIVE	M	1.0000000
.2	MFG	0004	10000	PERSONAL COMPUTER	P	2.0000000
.2	MFG	0004	C-MAC	MAC LAPTOP	M	2.0000000

The 'Level' column indicates the current level relative to the component item. For each component that has its own list of parent items, the level is incremented and indented, showing the parent items. The other fields displayed have already been defined earlier in the workbook



### Item Availability Inquiry

Use this menu option (option 3-e) to simulate the ability to satisfy a requirement for a manufactured item, for a given warehouse, quantity, and due date. You must select Find and enter an item number and select OK, or select OK to see all items with allocations.

**Item Availability**

File Edit View Navigation Tools Actions Options Help

Add Detail   Receipts   Requisitions   Production   Prod Alloc   Sales Alloc

Find Prev Next Quantity Browse

---

Item: C-MAC   MAC LAPTOP   Warehouse: ATLANTA   U/M: EA   Fixed LT: 5.000  
 Need Qty: 100.000   Need Date: 02/21/2013   Effective Date: 02/21/2013   I/S: S   Variable LT: 0.000  
 On Hand: 20.000   Make Quantity: 81.000   Include Phantom?: N   Review LT: 0.000  
 Available: 19.000   Available Date:   Short Only?: Y

Level	Component	Description	On Hand	Allocated	On PO's	Available	Required	Tt	U/A	Shortage(*)/Recommendation
1	C-USB	USB FLASH DRIVE	.000	.000	.000	.000	162.000	M	EA *	Create new orders/requisitions

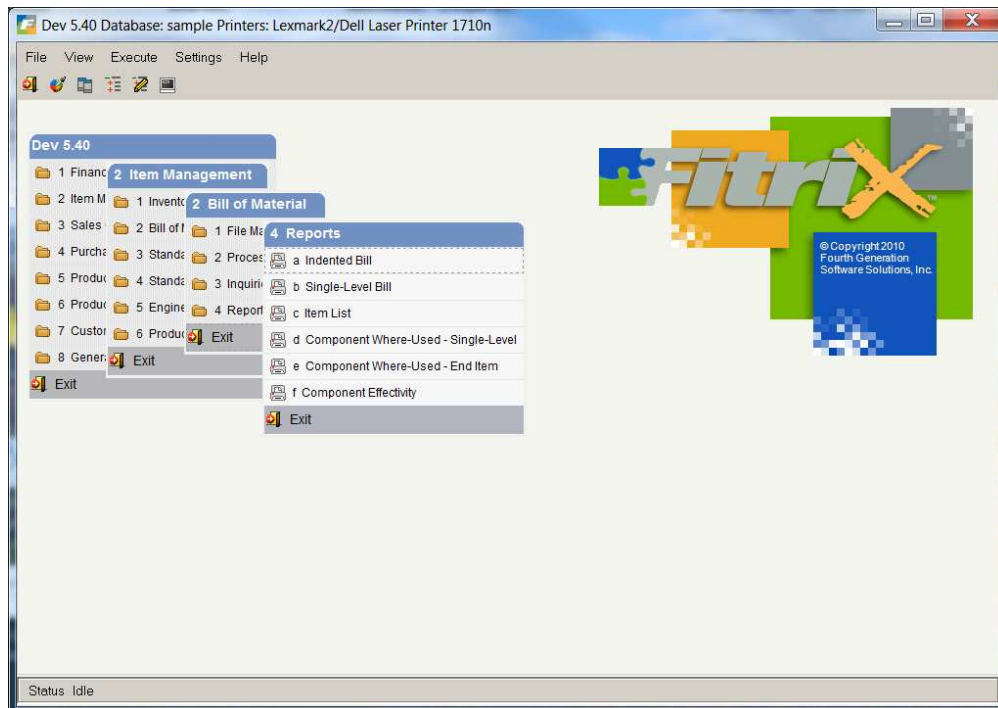
**1 of 8**

OK Cancel Header

OVR

## Reports

The options on the Reports menu allow you to view and print bills of material by parent or by component, in multiple formats:



### ***Indented Bill***

This report prints a single-level list of components for selected parent items, similar to the Single-Level Inquiry already described

### ***Single-Level Bill***

This report prints a single-level list of components for selected parent items, similar to the Single-Level Inquiry already described

### ***Component Where-Used - Single-Level***

This report prints a single level list of parents for selected component items, similar to the Component Where-Used Single-Level Inquiry already described

### ***Component Where-Used – End Item***

This report prints a list of top-level items which use the selected component items. It provides a quick view of all top-level items (usually saleable items) that could be affected by a change in a component.

## ***Component Effectivity***

This report prints a list of components where effectivity dates have been entered. It provides a view into components which may be about to go out of use, or start being used.

## **Section Summary**

Bill of Material maintains information about items, both produced and purchased, and their relationships in a production environment.

Setting up Bill of Material includes:

Defining Accounting Codes

Defining Product, Group and Planner Codes

Completing the Bill of Material Setup option and setting the Setup Complete flag to "Y".

The main tasks which are performed in Bill of Material include:

Maintaining Item Manufacturing Information, and Item/Warehouse Manufacturing Information

Maintaining Bills of Material

Performing Component Mass Change/Delete

There are two main data entry screens for maintaining item information: the manufacturing base window, (from the main information window), and the warehouse manufacturing base window (from the warehouse detail window).

There are two menu options for maintaining bills of material: the bill of material maintenance option (to add, create and copy bills of material), and the component mass change/delete option (to perform mass maintenance on commonly used components)

## Lab Exercise a: Bill of Material Set up Tasks

In this lab you will be setting up bill of material defaults and reference files and adding to the Database.

### Set up Default accounting codes (option b on File Maintenance menu):

#### 1. Set up new accounting codes:

Accounting Code	Type	Description	Account Number
DEFAULT	MATERIAL	Component Issue to Work in Process	Select an account from the assets section of the chart of accounts. You may choose to setup a new group of account numbers to represent work in process.
DEFAULT	WIP RECEIPT	Production Receipt from Work in Process	Select an account from the assets section of the chart of accounts. You may choose to setup a new group of account numbers to represent work in process.

### Define Group Codes, Product Codes, Planner Codes:

Decide if you want to use any of the above reference tables for later reporting or inquiries. If you do, enter one or two codes for each of the reference fields you want to use. You will later assign these to the items in the Inventory Information table.

## Lab Exercise b: Inventory Maintenance

This exercise will set up an item to be manufactured, and multiple component items to be used to assemble/fabricate the manufactured item. We will produce a simple fixed-window assembly as a standard product, and assume we will use:

- Metal framing material
- Glass panes
- Rubber stripping as insulation
- Latches to lock the window
- Nuts and Bolts

### Update Inventory Items (option a on the Inventory Maintenance menu):

#### 1. Item Code: create an item to be assembled - WINASSY

Enter the new item with:

Description: Window assembly – 24 by 36 inches.

Assign the item to a classification already set-up.

It is not a serialized item

The item type is Manufactured

It is not a phantom

The stocking unit, selling unit and the purchasing unit is each. The GL Inventory should be assigned for inventory Cost of Goods Sold, and Sales.

This item will be in the main stocking warehouse.

The standard order quantity is 1

#### 2. Item Code: create the components to be consumed

Item	Description	Stock UOM
WOFRAME	ENCLOSURE FRAME	IN - Inches
WOGLOSS	GLASS	SQ – Square Inches
WORUBBER	RUBBER INSULATION	IN – INCHES
WOLATCH	WINDOW LATCH	EA – Each
WOHDWRE	WINDOW HARDWARE	EA – Each
BOLTS	MISC BOLTS	EA – Each
NUTS	MISC NUTS	EA – Each

These items should be the component parts to be assembled or fabricated to complete an assembly.

Assign the item to a classification already set-up.

They are not serialized items

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The item types are Purchased

Make all items, except WOHDWRE, non-phantoms. WOHDWRE will be a phantom.

The stocking unit, selling unit and the purchasing units are each for non-fabricated and non-cut pieces. Cut or fabricated items should be set up with units that reflect how they are measured (for example, inches, feet, centimeters). The GL Inventory should be assigned for inventory Cost of Goods Sold, and Sales.

These items will be in the warehouse you identify as your main stocking warehouse.

The standard order quantity is 1.

## Lab Exercise c: Bill of Material Maintenance and Inquiry

### Enter Bill of Material Information

1. Enter a new bill of material for the WINASSY item code to be assembled. Use a Bill of Material code of 'MFG'.

Component Seq	Component Item	Qty Per unit	Issue Method
0001	WOFRAME	120	IN - Inches
0002	WOGLOSS	864	SQ – Square Inches
0003	WORUBBER	122	IN – INCHES
0004	WOLATCH	1	EA – Each
0005	WOHDWRE	1	EA – Each

2. Enter a bill of material for the component item WOHDWRE as well.

Component Seq	Component Item	Qty Per unit	Issue Method
0005A	BOLTS	10	EA – Each
0005B	NUTS	10	EA – Each

### Review Bill of Material with Single Level and Indented Inquiries

### Review the Component Where-Used Inquiries





## **Chapter 3 – Standard Routing**

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## **Learning Objectives**

To learn the type of information that is maintained in Standard Routing

To learn the steps involved in setting up Standard Routing.

To learn the tasks that are performed in Standard Routing and the steps involved in completing them.

To learn the data entry screens where bill of material information is maintained.

To learn how to use the parent-level and component-level inquiries and reports.

To learn how to use the Item Availability inquiry to determine material requirements for a proposed item

## Standard Routing Overview

### What type of Information is maintained in Standard Routing?

The Standard Routing module maintains information about the operations required to manufacture an item, and the resources needed to perform the operations. It retains information including:

An ordered list of routing steps that are performed to produce a parent item

The time required to make one unit of a parent item

The resources to be used when performing a routing step. These can include people, teams, machines, work centers and departments.

### What tasks or Activities are performed in Standard Routing?

One or more routings are defined for each manufactured item which requires that distinct operations be defined to produce.

A default routing is identified in the Inventory Information Master, and in each item/warehouse where the item will be manufactured.

### The major setup tasks completed in Standard Routing:

Resources used in Standard Routings, are first defined in the Standard Routing File Maintenance menu. Additional manufacturing-related information is also maintained for each component and parent item, in the Inventory Information Master, in the Inventory Control module

### The major tasks completed in Standard Routing:

Routings are maintained

Routing and Operation Usages are analyzed, when determining if a standard operation should be replaced or substituted

### What Relation does Standard Routing have to Other Fitrix Modules?

Standard Routing is most closely related to Production Order Processing, where routings are copied into Production Orders as they are created. It also interfaces with Production Scheduling and Capacity Planning.

**Production Order Processing** receives a copy of the standard routing when creating production orders, to schedule the needed resources and track the progress of an order.

**Production Scheduling** uses routings on production orders to determine capacity versus load on company resources, for open production orders.

**Capacity Planning** uses standard routing when planning resource requirements from open and planned production orders.

## **Standard Routing Implementation Checklist**

The following steps are recommended in order to implement the Standard Routing application.

**1. Setup Standard Routing (Required)**

Enter the following: Default Routing Step Type

- L = Labor-based
- M = Machine-based

This code will be the default when routing steps are added to an item. If a routing step is labor-based, the open labor hours are used for scheduling. If a routing step is machine based, the open machine hours are used for scheduling.

**2. Work Center Maintenance (Required)**

Enter one or more work centers. Work centers can be treated as subsets of departments. Scheduling and capacity analysis can be performed by work center. Work centers also carry standard rates for labor and overhead costs.

**3. Machine Maintenance (Optional)**

Enter one or more machines. Machines can be treated as subsets of work centers. Scheduling and capacity analysis can be performed by machine.

**4. Department Maintenance (Optional)**

Enter one or more departments. Departments in Standard Routing are not directly related to G/L Departments in Fitrix. Standard Routing departments support scheduling and capacity analysis at a departmental level.

**5. Team Maintenance (Optional)**

Enter one or more teams. Teams are typically collections of workers performing a task or group of tasks together. Scheduling and capacity analysis can be performed by team.

**6. Operation Maintenance (Optional)**

Enter one or more standard operations. Operations are frequently performed processes (i.e. the same work center, machine, setup hours, run hours) which can be established once, then 'pulled into' routing steps for an item, during Routing Maintenance.

**7. Routing Maintenance (Required)**

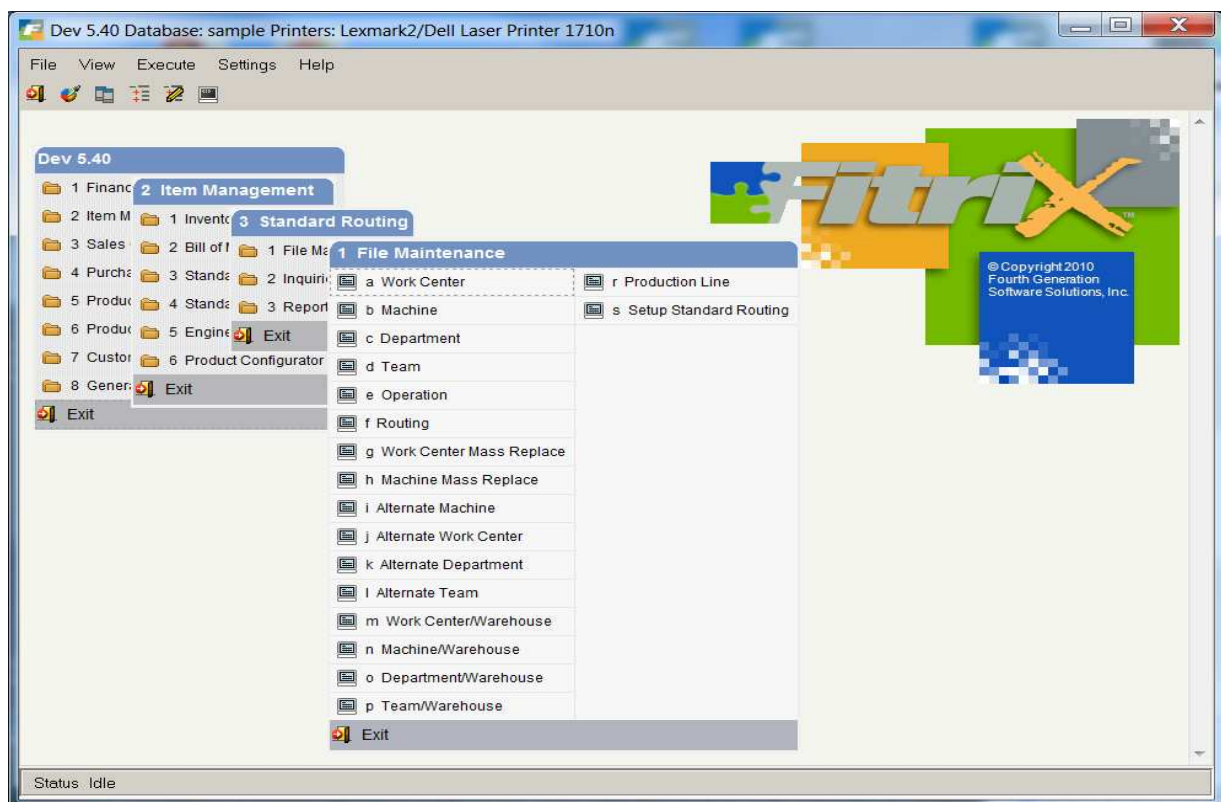
Enter one or more routing steps for each item for which a standard routing is needed.

## Standard Routing Set Up

Steps to set up the Standard Routing module include the following options from the File Maintenance submenu:

- Setup Standard Routing
- Work Center Maintenance
- Machine Maintenance
- Department Maintenance
- Team Maintenance
- Operation Maintenance
- Alternate Machine Maintenance
- Alternate Work Center Maintenance
- Alternate Department Maintenance
- Alternate Team Maintenance
- Work Center/Warehouse Maintenance
- Machine/Warehouse Maintenance
- Department/Warehouse Maintenance
- Team/Warehouse Maintenance
- Production Line

The options on this menu allow you to setup the initial Standard Routing default settings, and the reference files used in other sections of the Standard Routing module.



## **Setup Standard Routing**

Use this option to set up the default values used by other programs.

To view this screen select option 's' from the File Maintenance menu.



The data in the Setup Standard Routing file is unique to each database (i.e. company). The file contains only one record and therefore, the commands on the command prompt, with the exception of Update and Quit, have been disabled.

When you enter routing steps, the system automatically fills in default values to some of the information fields, from values entered on this screen. By automatically filling the field with default data, the system saves the user from retyping the same information for each new routing.

The user can overwrite default values when the transaction is entered by typing over the default.

Both the sample database and the standard database of the Standard Routing module come with data already entered into the default fields. You should modify this data to fit your company's application.

Below is a description of each field in the Bill of Material Defaults section:

Field	Description
Default Routing Step Type	<p>Each step in s routing has a Type. It controls how the resources used at the step are to be scheduled:</p> <ul style="list-style-type: none"><li>• Labor-Based – resources should be scheduled based on the labor hours required to complete the operation. Each step allows the user to enter the required labor hours and/or machine hours to complete.</li><li>• Machine-Based - resources should be scheduled based on the machine hours required to complete the operation. Each step allows the user to enter the required labor hours and/or machine hours to complete.</li></ul>
Default Routing Code	<p>A manufactured item can have more than one standard routing, and each routing must have a unique routing code. When a new routing is entered for an item, this default value will automatically display. NOTE: the code is not validated against any master file. It is only checked to make sure it is unique for the item.</p>
Setup Complete	<p>Set this value to Y when you are ready to begin using the other standard routing options</p>



## Work Center

You use this option to set up and maintain entries in the Work Center file. Work centers are used to:

- Define a resource with capacity available to do production work.
- Define hourly standard rates for labor and overhead, to assign cost elements to the manufacture of an item.

To view this screen, select option a from the File Maintenance menu.

The Work Center screen contains the following fields:

Field	Description
Work Center	This is a unique 4-character alphanumeric code that is used to identify the work center.
Status	One of the following values: <ul style="list-style-type: none"> <li>• Active – used when stock component items are issued to a production order via Component Issue</li> <li>• Inactive – used when non-stock component items are issued to a production order via Component Issue</li> </ul>

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Field	Description
Description	The description of the Work Center.
Department	If you want this work center to also be associated with a production department, select or enter one here.
Type	This field is reserved for future use
Number of Machines	If this Work Center is a collection of machines with the same characteristics, enter the number of machines in the work center.
Number of Workers	If this Work Center is a collection of workers, enter the number of workers in the work center.
Rough-Cut Resource	This field is reserved for future use
Rough-Cut Conversion	This field is reserved for future use
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this work center is available for work
Standard Queue Hours	This field is reserved for future use
Average Queue Hours	This field is reserved for future use
Labor Rate	The standard rate per hour for direct labor. This rate is used when calculating a standard cost for an item using this work center in one or more routing steps.
OverheadRate	The standard rate per hour for indirect costs. This rate is used when calculating a standard cost for an item using this work center in one or more routing steps.
Add Date	The date the row was added to the database
Change Date	The date the row was last changed in the database
Last Activity Date	This field is reserved for future use

## Machine

You use this option to set up and maintain entries in the Machine file. Machine entries are used to define a machine within a production facility with capacity available to do production work.

Select option b to see the following screen:

The Machine screen contains the following fields:

Field	Description
Machine	This is a unique 4-character alphanumeric code that is used to identify the machine.
Status	One of the following values: <ul style="list-style-type: none"> <li>Active – used when stock component items are issued to a production order via Component Issue</li> <li>Inactive – used when non-stock component items are issued to a production order via Component Issue</li> </ul>
Description	The description of the machine.

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Field	Description
Work Center	If you want this machine to also be associated with a work center, select or enter one here.
Department	If you want this machine to also be associated with a production department, select or enter one here.
Acquired Date	The date this machine was placed into operation
Vendor	The vendor from which this machine was acquired
Purchase Order	The vendor's purchase order
Cost Amount	The purchase cost of the machine
Minimum Service Interval	The minimum number of working days allowed between minor service for this machine
Major Service Interval	The number of working days allowed between major service for this machine
Expected Life in Years	The number of years of useful life
Total Hours Used	This field is reserved for future use
YTD Hours Used	This field is reserved for future use
Cumulative Maintenance Cost	The total cost expended to service the machine
Last Maintenance Type	This field is reserved for future use
Standard Queue Hours	This field is reserved for future use
Average Queue Hours	This field is reserved for future use
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this machine is available for work
Rough-Cut Resource	This field is reserved for future use
Rough-Cut Conversion	This field is reserved for future use
Last Repair Date	Date of the last repair
Last Activity Date	This field is reserved for future use
Add Date	The date the row was added to the database
Change Date	The date the row was last changed in the database

## Department

You use this option to set up and maintain entries in the Production Department file. Departments:

- Are used to define a high-level resource within a production facility with capacity available to do production work. Work centers are often consolidated into departments, to provide a hierarchical structure to manage and analyze production capacities.
- Should not be confused with GL departments. The two types of departments are unrelated.

To view this screen, select option 'c' from the File Maintenance menu.

Department: **EXT** Status: **Active**

Description: **EXTERIOR**

Capacity in Hours/Day

Shift	Hours/Day
Shift 1	8.00
Shift 2	8.00
Shift 3	8.00

Rough-Cut Resource:

Rough-Cut Conversion:

Accounting Code: **DEFAULT**

Add Date: **03/20/2012**

Change Date: **12/20/2012**

Last Activity Date: **03/20/2012**

Period-To-Date Costs

Cost Type	Amount
Actual Labor	\$0.00
Standard Labor	\$0.00
Standard Overhead	\$0.00

Year-To-Date Costs

Cost Type	Amount
Actual Labor	\$0.00
Standard Labor	\$0.00
Standard Overhead	\$0.00

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OVR

The Department screen contains the following fields:

Field	Description
Department	This is a unique 3-character alphanumeric code that is used to identify the department.
Status	One of the following values: <ul style="list-style-type: none"> <li>• Active – used when stock component items are issued to a production order via Component Issue</li> <li>• Inactive – used when non-stock component items are issued to a production order via Component Issue</li> </ul>
Description	The description of the department.

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Field	Description
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this department is available for work
Rough-Cut Resource	This field is reserved for future use
Rough-Cut Conversion	This field is reserved for future use
Accounting Code	This field is reserved for future use
Add Date	The date the row was added to the database
Change Date	The date the row was last changed in the database
Last Activity Date	This field is reserved for future use
Period-To-Date Costs	This field is reserved for future use
Year-To-Date Costs	This field is reserved for future use

## **Teams**

You use this option to set up and maintain Production Teams. Teams are typically groups of workers which perform together to complete production tasks. Teams can be assigned a capacity which is usually the sum of the hours for each of the workers in the team.

To view this screen, select option 'd' from the File Maintenance menu.

The screenshot shows a 'Team' form with the following fields and values:

- Team Number: TM001
- Description: WELDING TEAM
- Shift 1 Capacity: 8.00
- Shift 2 Capacity: 8.00
- Shift 3 Capacity: 8.00
- Rough-Cut Resource: (empty)
- Conversion: (empty)
- Date Added: 03/01/2013
- Date Changed: (empty)

At the bottom of the form, it says '(New Document)' and 'OVR'.

The Team screen contains the following fields:

Field	Description
Team	This is a unique 4-character alphanumeric code that is used to identify the team.
Description	The description of the team.
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this team is available for work
Rough-Cut Resource	This field is reserved for future use
Rough-Cut Conversion	This field is reserved for future use
Accounting Code	This field is reserved for future use
Date Added	The date the row was added to the database
Date Changed	The date the row was last changed in the database

## Operations

Use this option to set up and maintain Standard Operation. Operations define frequently used production operations where a consistent description and combination of resources is used. When performing Routing Maintenance, the user can enter a new routing step and reference an Operation from this table to pre-fill the remaining information for the step.

To view this screen, select option 'e' from file Maintenance Menu.

The Operation screen contains the following fields:

Field	Description
Operation	This is a unique 4-character alphanumeric code that is used to identify the operation.
Description	The description of the Work Center.
Hours Type	One of the following values: <ul style="list-style-type: none"> <li>Labor-Based – This operation will be scheduled based on Labor Hours needed, used, and remaining</li> <li>Machine-Based – This operation will be schedule based on Machine Hours needed, used, and remaining</li> </ul>



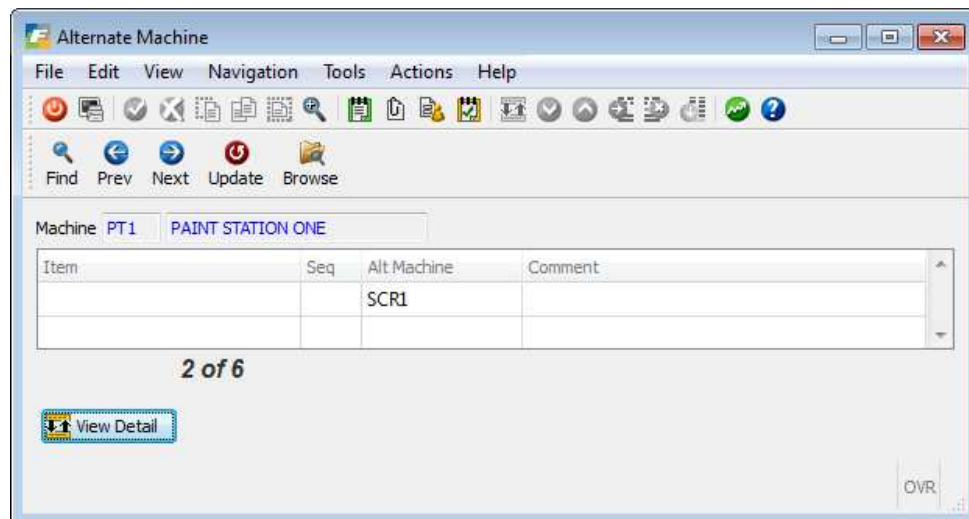
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Field	Description
Work Center	The default Work Center associated with this operation
Machine	The default Machine associated with this operation
Job Class	The default Job Class associated with this operation
Department	The default Department associated with this operation
Team	The default Team associated with this operation
Tool Number	An optional identifier for a tool or collection of tools needed for this operation. Tools are typically stored and dispatched from a central tool crib or cage.
Current Setup Hours	Enter the number of hours required to prepare this operation for start. Minutes can be entered as a decimal equivalent (1 hour and 25 minutes would be entered as 1.41666 hours)
Current Labor Hours	Enter the number of hours required to produce this item. See Basis Code below for an understanding of how this number should be entered.
Labor Basis Code	One of the following values: <ul style="list-style-type: none"><li>• Hours per piece – The value in Current Labor hours in the number of hours required to product one unit of this item. Minutes can be entered as a decimal equivalent (1 hour and 25 minutes would be entered as 1.41666 hours)</li><li>• Pieces per Hour – The value in Current Labor hours in the number of units of the item which is produced in one hour.</li></ul>
Average Move Time	This field is reserved for future use.
Standard Move Time	This field is reserved for future use.
Date Last Changed	The date the row was last changed in the database
Add Date	The date the row was added to the database

## Alternate Machine

Use this menu option to define machines which can act as alternates or substitutes for a base machine. These alternates are accessible when maintaining routing steps in a production order. If a given machine is unavailable or over-committed, an alternate can be selected.

To view this screen, select option 'i' from the File Maintenance menu.



### Alternate Machine - Header

Use the 'Find' and 'Update' options to select a machine to be replaced. Enter the following fields:

Field	Description
Machine	Enter the machine
Description	Displays the machine description

### Alternate Machine - Detail

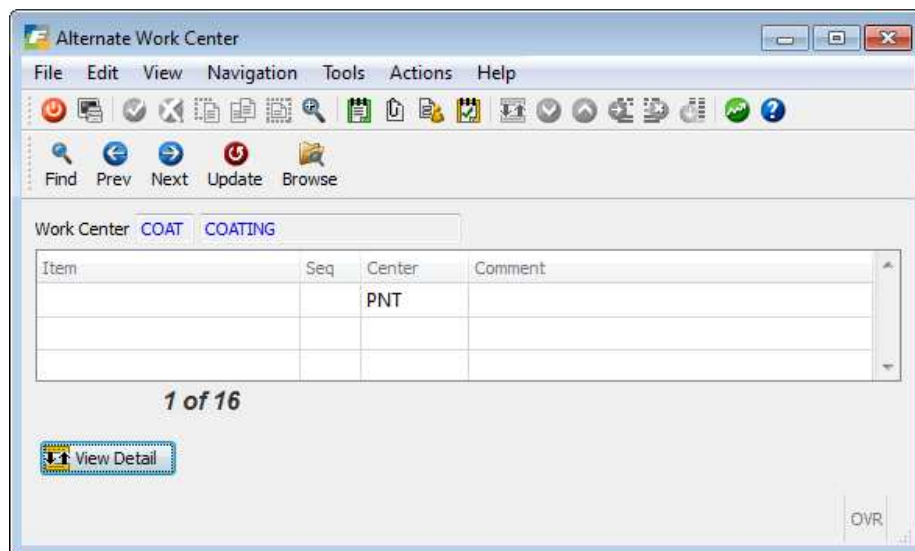
This section of the window allows you to enter one or more alternate machines

Field	Description
Item	Enter the item which has a routing step that uses the machine
Seq	Enter the routing step for the item that uses the machine
Alt Machine	Enter the alternate machine, or zoom for a list
Comment	Enter an optional free-form comment that might be helpful when using this alternate machine.

## **Alternate Work Center**

Use this menu option to define work centers which can act as alternates or substitutes for a base work center. These alternates are accessible when maintaining routing steps in a production order. If a given work center is unavailable or over-committed, an alternate can be selected.

To view this screen, select option 'j' from the File Maintenance menu.



### **Alternate Work Center - Header**

Use the 'Find' and 'Update' options to select a work center to be replaced. Enter the following fields:

Field	Description
Work Center	Enter the work center
Description	Displays the work center description

### **Alternate Work Center - Detail**

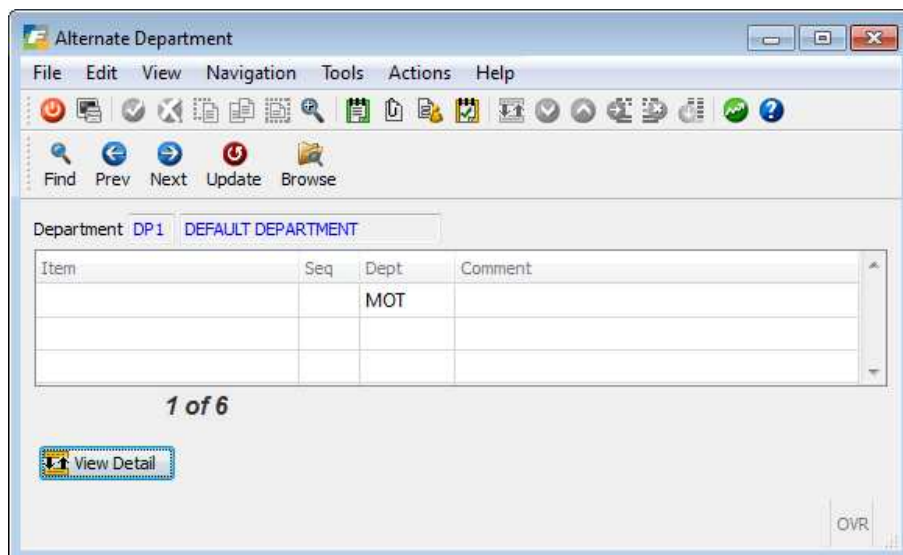
This section of the window allows you to enter one or more alternate work centers

Field	Description
Item	Enter the item which has a routing step that uses the work center
Seq	Enter the routing step for the item that uses the work center
Alt Work Center	Enter the alternate work center, or zoom for a list
Comment	Enter an optional free-form comment that might be helpful when using this alternate work center.

## Alternate Department

Use this menu option to define departments which can act as alternates or substitutes for a base department. These alternates are accessible when maintaining routing steps in a production order. If a given department is unavailable or over-committed, an alternate can be selected.

To view this screen, select option 'k' from the File Maintenance menu.



### Alternate Department - Header

Use the 'Find' and 'Update' options to select a department to be replaced. Enter the following fields:

Field	Description
Department	Enter the department
Description	Displays the department description

### Alternate Department - Detail

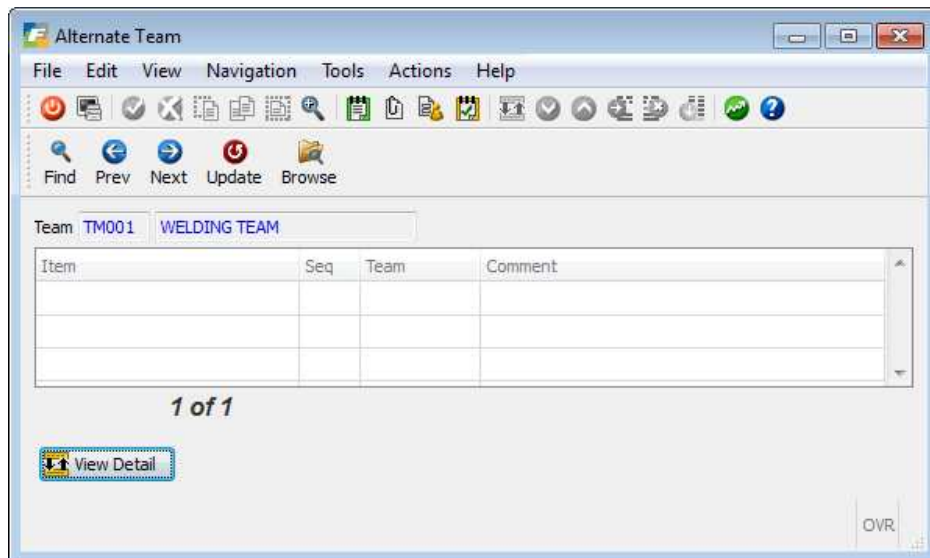
This section of the window allows you to enter one or more alternate departments

Field	Description
Item	Enter the item which has a routing step that uses the department
Seq	Enter the routing step for the item that uses the department
Alt Department	Enter the alternate department, or zoom for a list
Comment	Enter an optional free-form comment that might be helpful when using this alternate department.

## **Alternate Team**

Use this menu option to define teams which can act as alternates or substitutes for a base team. These alternates are accessible when maintaining routing steps in a production order. If a given team is unavailable or over-committed, an alternate can be selected.

To view this screen, select option 'I' from the File Maintenance menu.



### **Alternate Team - Header**

Use the 'Find' and 'Update' options to select a team to be replaced. Enter the following fields:

Field	Description
Team	Enter the team
Description	Displays the team description

### **Alternate Team - Detail**

This section of the window allows you to enter one or more alternate teams

Field	Description
Item	Enter the item which has a routine step that uses the team
Seq	Enter the routing step for the item that uses the team
Alt Team	Enter the alternate team, or zoom for a list
Comment	Enter an optional free-form comment that might be helpful when using this alternate team.

## **Work Center/Warehouse**

You use this option to set up and maintain entries in the Work Center/Warehouse file. Work center/Warehouse entries must be set up for each production facility (warehouse) which will be using the work center in production. Production orders are entered to produce an item in a specific production facility (warehouse), and the work centers used in the item's routing to produce it must exist in the same facility.

To view this screen, select option 'm' from the File Maintenance menu.

Work Center/Warehouse

File Edit View Navigation Tools Actions Help

Find Prev Next Add Update Delete Browse

Work Center

Warehouse

Status

Description

Department

Type

Number of Machines

Number of Workers

Shift 1 Capacity

Shift 2 Capacity

Shift 3 Capacity

Rough-Cut Resource

Conversion

Standard Queue Time

Average Queue Time

Current Labor Rate

Current Overhead Rate

Unit Price

Add Date

Change Date

**(No Documents Selected)**

OVR

Select Add to enter a new Work Center/Warehouse. When you enter the Work Center, the remaining values on the screen are filled in with default information from the Work Center table. You can accept these values, or change them for the Work Center/Warehouse combination. Any changes you make are stored separately from the values in the Work Center table.

## ***Fitrix Manufacturing Course Workbook***

The Work Center/Warehouse screen contains the following fields:

Field	Description
Work Center	This is a unique 4-character alphanumeric code that is used to identify the work center.
Warehouse	Enter the identifier of the Production Facility where the Work Center will be used.
Status	One of the following values: <ul style="list-style-type: none"><li>• Active – used when stock component items are issued to a production order via Component Issue</li><li>• Inactive – used when non-stock component items are issued to a production order via Component Issue</li></ul>
Description	The description of the Work Center.
Department	If you want this work center to also be associated with a production department, select or enter one here.
Type	This field is reserved for future use
Number of Machines	If this Work Center is a collection of machines with the same characteristics, enter the number of machines in the work center.
Number of Workers	If this Work Center is a collection of workers, enter the number of workers in the work center.
Rough-Cut Resource	This field is reserved for future use
Rough-Cut Conversion	This field is reserved for future use
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this work center is available for work
Standard Queue Hours	This field is reserved for future use
Average Queue Hours	This field is reserved for future use
Labor Rate	The standard rate per hour for direct labor. This rate is used when calculating a standard cost for an item using this work center in one or more routing steps.
Overhead Rate	The standard rate per hour for indirect costs. This rate is used when calculating a standard cost for an item using this work center in one or more routing steps.
Add Date	The date the row was added to the database
Change Date	The date the row was last changed in the database
Last Activity Date	The last date that activity was posted to this work center

## Machine/Warehouse

You use this option to set up and maintain entries in the Machine/Warehouse file. Machine/Warehouse entries must be set up for each production facility (warehouse) which will be using the machine in production. Production orders are entered to produce an item in a specific production facility (warehouse), and the machines used in the item's routing to produce it must exist in the same facility.

To view this screen, select option 'n' from the File Maintenance menu.

Field	Value
Machine	SCR1
Warehouse	MIAMI
Status	Active
Description	SCREEN PRINT 1
Work Center	SCRN
Department	DP1
Acquired Date	09/27/2010
Vendor	123457
Purchase Order	0291
Cost Amount	\$5000.00
Minimum Service Int	0
Major Service Int	0
Expected Life Years	8.00
Total Hours Used	0.00
YTD Hours Used	0.00
Cuml Maintenance Cost	\$0.00
Standard Queue Time	1.0000
Average Queue Time	1.0000
Shift 1 Capacity	8.00
Shift 2 Capacity	8.00
Shift 3 Capacity	0.00
Last Repair Date	09/27/2010
Last Activity Date	
Rough_Cut Resource	
Conversion	
Add Date	09/27/2010
Change Date	03/01/2013

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OVR

Select Add to enter a new Machine/Warehouse. When you enter the Machine, the remaining values on the screen are filled in with default information from the Machine table. You can accept these values, or change them for the Machine/Warehouse combination. Any changes you make are stored separately from the values in the Machine table.



## ***Fitrix Manufacturing Course Workbook***

The Machine/Warehouse screen contains the following fields:

Field	Description
Machine	This is a unique 4-character alphanumeric code that is used to identify the machine.
Warehouse	Enter the identifier of the Production Facility where the machine will be used.
Status	One of the following values: <ul style="list-style-type: none"><li>• Active – used when stock component items are issued to a production order via Component Issue</li><li>• Inactive – used when non-stock component items are issued to a production order via Component Issue</li></ul>
Description	The description of the Work Center.
Work Center	If you want this machine to also be associated with a work center, select or enter one here.
Department	If you want this machine to also be associated with a production department, select or enter one here.
Acquired Date	The date this machine was placed into operation
Vendor	The vendor from which this machine was acquired
Purchase Order	The vendor's purchase order
Cost Amount	The purchase cost of the machine
Minimum Service Interval	The minimum number of working days allowed between minor service for this machine
Major Service Interval	The number of working days allowed between major service for this machine
Expected Life in Years	The number of years of useful life
Total Hours Used	This field is reserved for future use
YTD Hours Used	This field is reserved for future use
Cumulative Maintenance Cost	The total cost expended to service the machine
Last Maintenance Type	This field is reserved for future use
Standard Queue Hours	This field is reserved for future use
Average Queue Hours	This field is reserved for future use
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this machine is available for work
Rough-Cut Resource	This field is reserved for future use
Rough-Cut Conversion	This field is reserved for future use

***Fitrix Manufacturing Course Workbook***

Field	Description
Last Repair Date	Date of the last repair
Last Activity Date	This field is reserved for future use
Add Date	The date the row was added to the database
Change Date	The date the row was last changed in the database

## Department/Warehouse

You use this option to set up and maintain entries in the Department/Warehouse file. Department/Warehouse entries must be set up for each production facility (warehouse) which will be using the department in production. Production orders are entered to produce an item in a specific production facility (warehouse), and the departments used in the item's routing to produce it must exist in the same facility.

To view this screen, select option 'o' from the File Maintenance menu.

Select Add to enter a new Department/Warehouse. When you enter the Department, the remaining values on the screen are filled in with default information from the Department table. You can accept these values, or change them for the Department/Warehouse combination. Any changes you make are stored separately from the values in the Department table.

The Department/Warehouse screen contains the following fields:

Field	Description
Department	This is a unique 3-character alphanumeric code that is used to identify the department.
Warehouse	Enter the identifier of the Production Facility where the department will be used.

**Fitrix Manufacturing Course Workbook**

Field	Description
Status	One of the following values: <ul style="list-style-type: none"><li>• Active – used when stock component items are issued to a production order via Component Issue</li><li>• Inactive – used when non-stock component items are issued to a production order via Component Issue</li></ul>
Description	The description of the Work Center.
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this department is available for work
Rough-Cut Resource	This field is reserved for future use
Rough-Cut Conversion	This field is reserved for future use
Accounting Code	A code to assign general ledger account numbers to a department. The account code references a table that contains the general ledger account numbers. To view a list of account codes, click on the magnifying glass.
Add Date	The date the row was added to the database.
Change Date	The date the row was last changed in the database.
Last Activity Date	Date of last activity for this department.
Period-To-Date Costs	Actual costs for this department for the current period
Year-To-Date Costs	Actual costs for this department for the current year.

## **Team/Warehouse**

You use this option to set up and maintain entries in the Team/Warehouse file. Team/Warehouse entries must be set up for each production facility (warehouse) which will be using the team in production. Production orders are entered to produce an item in a specific production facility (warehouse), and the teams used in the item's routing to produce it must exist in the same facility.

To view this screen, select option 'p' from the File Maintenance menu.

Team

File Edit View Navigation Tools Actions Help

Find Prev Next Add Update Delete Browse

Team Number TM001

Description WELDING TEAM

Shift 1 Capacity 8.00

Shift 2 Capacity 8.00

Shift 3 Capacity 8.00

Rough-Cut Resource

Conversion

Date Added 03/01/2013

Date Changed

(New Document)

OVR

Select Add to enter a new Team/Warehouse. When you enter the Team, the remaining values on the screen are filled in with default information from the Team table. You can accept these values, or change them for the Team/Warehouse combination. Any changes you make are stored separately from the values in the Team table.

The Team/Warehouse screen contains the following fields:

Field	Description
Team	This is a unique 4-character alphanumeric code that is used to identify the team.
Warehouse	Enter the identifier of the Production Facility where the team will be used.
Description	The description of the team.
Shift 1,2,3 Capacity	Enter the capacity in hours for each shift that this team is available for work
Rough-Cut Resource	This field is reserved for future use

***Fitrix Manufacturing Course Workbook***

Field	Description
Rough-Cut Conversion	This field is reserved for future use
Accounting Code	This field is reserved for future use
Date Added	The date the row was added to the database
Date Changed	The date the row was last changed in the database

## Setting up Routing Steps

Steps to maintain the Standard Routing include the following options from the File Maintenance submenu:

- Routing Maintenance
- Work Center Mass Replace
- Machine Mass Replace

These options allow you to add or maintain Standard Routings and work with resources used by the routings.

## Routing

Use this menu option to define a routing for a produced item. A routing consists of one or more routing steps, which are typically performed in a sequential order. Each step identifies:

- Optional time required to setup a step to begin production
- The labor time required to complete the step for an item, expressed as either hours per piece, or pieces per hour
- The machine time required to complete the step for an item.
- The resources required to process the step. These resources can be departments, work centers, machines, teams or workers.

To view this screen, select option 'f' from the File Maintenance menu.

The screenshot shows the 'Routing' window with the following details:

- Item Code: 400-100HBTGV
- Desc: 17-400 WETSUIT SPRAY GUN
- M/P: Manufactured
- Routing: MFG
- Revision Level:
- Eng Change:

Step	Std Opr	Description	Type	Work Ctr	Dept	Machine	Setup Hr	Run Labor	Piece
0001	0010	STANDARD ASSEMBLY		WC01			0.00000	0.5000000	Hours per piece
0002	0030	INSPECTION		WC01			0.00000	0.1000000	Hours per piece
0003	0040	PACKAGING		WC01			0.00000	0.2500000	Hours per piece

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View Detail

OVR

## Routing - Header

Use the 'Find' and 'Update' options to select an item identifier and routing code to maintain, or use 'Add' to enter a new routing for an existing item. Enter into the following fields:

Field	Description
Item Code	The identifier for the item being produced
Description	Displays the item description
M/P	Displays P=purchased, or M=manufactured
Routing	The unique identifier for this routing, for this item. An item can have more than one bill of material. See the Update Inventory Information screen reference for a description of the 'Default Routing' for an item, and how it is used.
Revision Level	Enter an optional engineering revision level for the routing
Eng Change	Enter an optional engineering code associated with the current Revision Level

## Routing - Detail

This section of the window allows you to enter one or more routing steps for the item. For each routing step, you can enter the following values:

Field	Description
Step	Enter a unique value for this step. It is common practice to enter a sequential value, starting at 0001, but you may enter a combination of letters and characters. The routing steps will display and print in the order of this column.
Std Oper (Standard Operation)	Enter an Operation code which was previously set up in the Operation table. If you do not enter a value here, you must enter the remaining columns for the step yourself.
Description	Enter up to 30 characters of descriptive text for the step.
Type	Select one of the following values: <ul style="list-style-type: none"> <li>• Inside – this operation is to be performed in the production facility</li> <li>• Outside- this operation is to be performed by a third party vendor or contractor</li> </ul>
Work Center	Enter or select an optional Work Center to be used for this step.
Dept	Enter or select an optional Department to be used for this step.
Machine	Enter or select an optional Machine to be used for this step.
Setup Hr	Enter an optional hours required to setup the step before production begins. Minutes can be entered as a decimal equivalent (1 hour and 25 minutes would be entered as 1.41666 hours)
Run Labor	Enter the number of hours required to produce this item. See Basis Code below for an understanding of how this number should be entered.

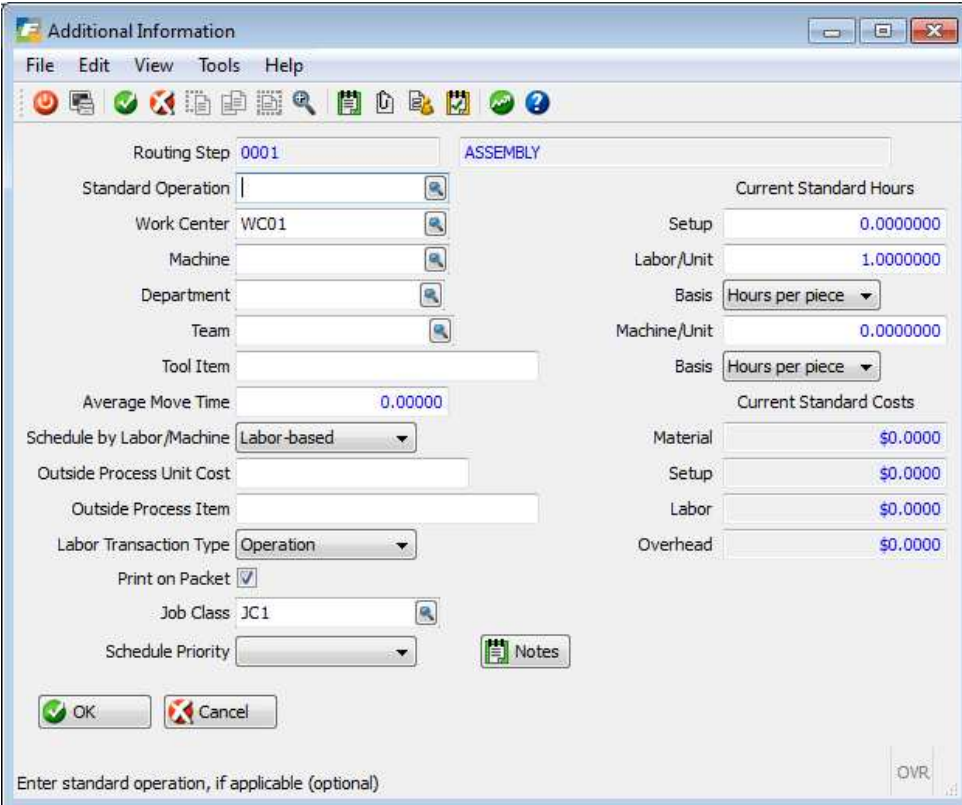


Field	Description
Piece (Labor Basis Code)	<p>One of the following values:</p> <ul style="list-style-type: none"> <li>Hours per piece – The value in Current Labor hours in the number of hours required to product one unit of this item. Minutes can be entered as a decimal equivalent (1 hour and 25 minutes would be entered as 1.41666 hours)</li> <li>Pieces per Hour – The value in Current Labor hours in the number of units of the item which is produced in one hour.</li> </ul>

## Routing Details Window

This window displays when you position the cursor on a specific step and select the  button.

The following window displays:



**Additional Information**

File Edit View Tools Help

Routing Step: 0001 ASSEMBLY

Standard Operation: [ ]

Work Center: WC01

Machine: [ ]

Department: [ ]

Team: [ ]

Tool Item: [ ]

Average Move Time: 0.00000

Schedule by Labor/Machine: Labor-based

Outside Process Unit Cost: [ ]

Outside Process Item: [ ]

Labor Transaction Type: Operation

Print on Packet: ☒

Job Class: JC1

Schedule Priority: [ ]

Current Standard Hours

Setup: 0.0000000

Labor/Unit: 1.0000000

Basis: Hours per piece

Machine/Unit: 0.0000000

Basis: Hours per piece

Current Standard Costs

Material: \$0.0000

Setup: \$0.0000

Labor: \$0.0000

Overhead: \$0.0000

OK Cancel

Notes

Enter standard operation, if applicable (optional)


OVR

Field	Description
Routing Step	This is the value from the main screen and cannot be changed in this window
Standard Operation	Enter or select an Operation code which was previously set up in the Operation table. If you do not enter a value here, you must enter the remaining columns for the step yourself.
Work Center	Enter or select an optional Work Center to be used for this step.
Department	Enter or select an optional Department to be used for this step.
Team	Enter or select an optional Machine to be used for this step.
Tool Item	An optional identifier for a tool or collection of tools needed for this operation. Tools are typically stored and dispatched from a central tool crib or cage.
Average Move Time	This field is reserved for future use
Schedule by Labor/Machine	One of the following values: <ul style="list-style-type: none"> <li>• Labor-Based – This operation will be scheduled based on Labor Hours needed, used, and remaining</li> <li>• Machine-Based – This operation will be schedule based on Machine Hours needed, used, and remaining</li> </ul>
Outside Process Unit Cost	When the step has a Type of 'Outside', enter the cost per unit from the outside process source to perform this step.
Outside Process Item	When the step has a Type of 'Outside', enter the item number to be generated on a Purchase Order to the vendor for this step.
Labor Transaction Type	This field is reserved for future use.
Print on Packet	Check this box if you want the step to be print on a Production Packet for the item.
Job Class	This field is reserved for future use.
Current Standard Hours - Setup	Enter an optional hours required to setup the step before production begins. Minutes can be entered as a decimal equivalent (1 hour and 25 minutes would be entered as 1.41666 hours)
Current Standard Hours – Labor/Unit	Enter the number of labor hours required to produce this item. See Basis Code below for an understanding of how this number should be entered.
Current Standard Hours – Labor/Unit Basis	One of the following values: <ul style="list-style-type: none"> <li>• Hours per piece – The value in Current Labor hours in the number of hours required to product one unit of this item. Minutes can be entered as a decimal equivalent (1 hour and 25 minutes would be entered as 1.41666 hours)</li> <li>• Pieces per Hour – The value in Current Labor hours in the number of units of the item which is produced in one hour.</li> </ul>
Current Standard Hours – Machine/Unit	Enter the number of machine hours required to produce this item. See Basis Code below for an understanding of how this number should be entered.

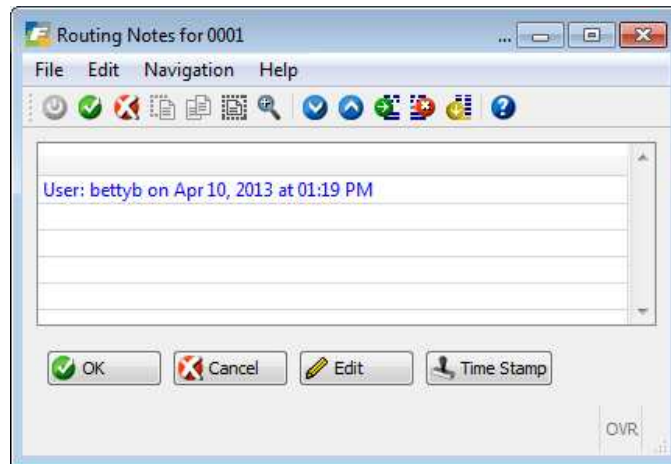
Field	Description
Current Standard Hours – Machine/Unit Basis	One of the following values: <ul style="list-style-type: none"><li>• Hours per piece – The value in Current Machine hours in the number of hours required to product one unit of this item. Minutes can be entered as a decimal equivalent (1 hour and 25 minutes would be entered as 1.41666 hours)</li><li>• Pieces per Hour – The value in Current Machine hours in the number of units of the item which is produced in one hour.</li></ul>
Current Standard Costs	These fields are reserved for future use.
Schedule Priority	If Finite Scheduling is being used in the Production Scheduling module, this indicates which resource should be considered the constraint. Only one of Work Center, Department, Machine or Team can be selected.'

## ***Routing Notes Window***



This window displays when you position the cursor on a specific step and select the  button.

The following window displays:



You may enter one or more lines of text for the routing step. The notes will be copied to any production orders created for the item, and will be printed with the routing step on the Production Packet.

## Work Center Mass Replace

Use this menu option to replace one work center with another, in the routing steps in which it is used. This is useful in cases where a work center is being obsoleted or substituted for another center.

To view this screen, select option 'g' from the File Maintenance menu.

Replace	Item	Routing	Seq	Oper	Description
<input type="checkbox"/>	12120U	MFG	0001		ASSEMBLY
<input type="checkbox"/>	12120	MFG	0001		ASSEMBLY
<input type="checkbox"/>	400-100HBTGV	MFG	0001	0010	STANDARD ASSEMBLY
<input type="checkbox"/>	AUTOMATED SAFETY	MFG	0001		ASSEMBLY
<input type="checkbox"/>	C-MAC	MFG	0001		ASSEMBLY
<input type="checkbox"/>	AC1121A	MFG	0001		ASSEMBLY
<input type="checkbox"/>	ALP7292	MFG	0001		GENERAL ASSEMBLY
<input type="checkbox"/>	AC1121A	MFG	0002		TEST
<input type="checkbox"/>	C-MAC	MFG	0002		TEST
<input type="checkbox"/>	400-100HBTGV	MFG	0002	0030	INSPECTION
<input type="checkbox"/>	400-100HBTGV	MFG	0003	0040	PACKAGING
<input type="checkbox"/>	C-MAC	MFG	0003		ANTI-VIRUS SCAN

### Work Center Mass Replace - Header

Use the 'Find' and 'Update' options to select a work center to be replaced. Enter the following fields:

Field	Description
Replace with Work Center	Enter the replacing work center, or zoom for a list
Description	Displays the work center description

## Work Center Mass Replace - Detail

This section of the window allows you to select one or more routing steps for which the mass replace should be executed.

Field	Description
Replace	All routing steps where this work center is used are automatically displayed and checked. You may leave them checked to replace the work center, or uncheck to skip replacement for the routing step.

Click OK for the replacement to be executed.

## Machine Mass Replace

Use this menu option to replace one machine with another, in the routing steps in which it is used. This is useful in cases where a machine is being obsoleted or substituted for another machine.

To view this screen, select option 'h' from the File Maintenance menu.

## Machine Mass Replace - Header

Use the 'Find' and 'Update' options to select a machine to be replaced. Enter the following fields:

Field	Description
Replace with Machine	Enter the replacing machine, or zoom for a list
Description	Displays the machine description

## **Machine Mass Replace - Detail**

This section of the window allows you to select one or more routing steps for which the mass replace should be executed.

Field	Description
Replace	All routing steps where this machine is used are automatically displayed and checked. You may leave them checked to replace the machine, or uncheck to skip replacement for the routing step.

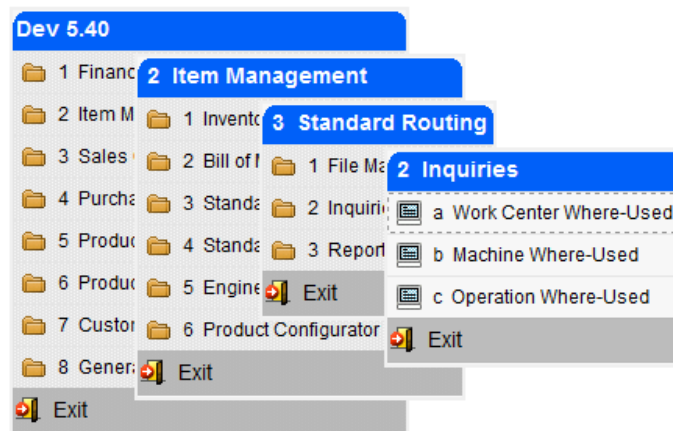
Click OK for the replacement to be executed.

## Standard Routing Inquiries

Steps to review Standard Routing module information include the following options from the Inquiries submenu:

Work Center Where-Used  
Machine Where-Used  
Operation Where-Used

The options on this menu allow you to review the usage of resources within routings.

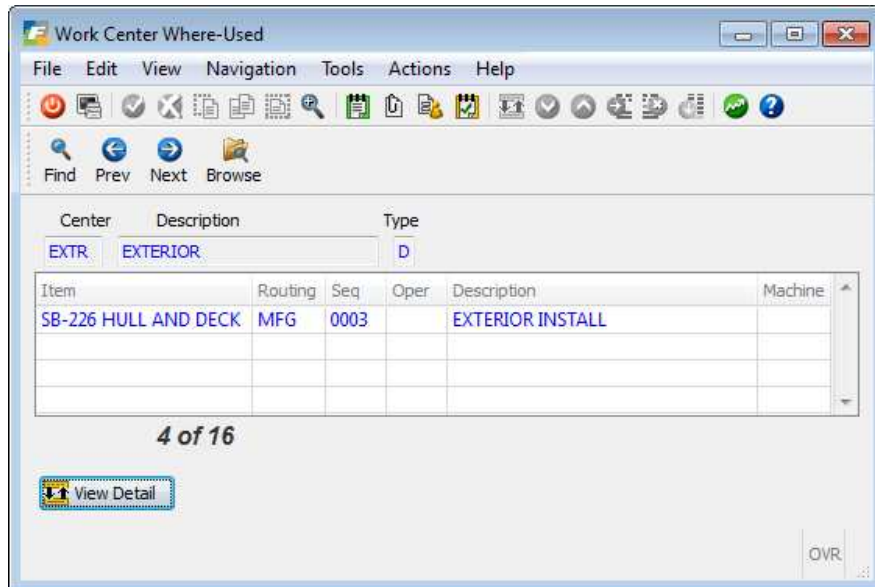




## **Work Center Where-Used**

Use this menu option to review a list of routing steps which use a given work center.

To view this screen, select option 'a' from the Inquiries menu.



### **Work Center Where-Used - Header**

Use the 'Find' to select a work center to review. Enter the following fields:

Field	Description
Center	Enter the work center to review
Description	Enter an optional description to search for
Type	This field is reserved for future use

### **Work Center Where-Used - Detail**

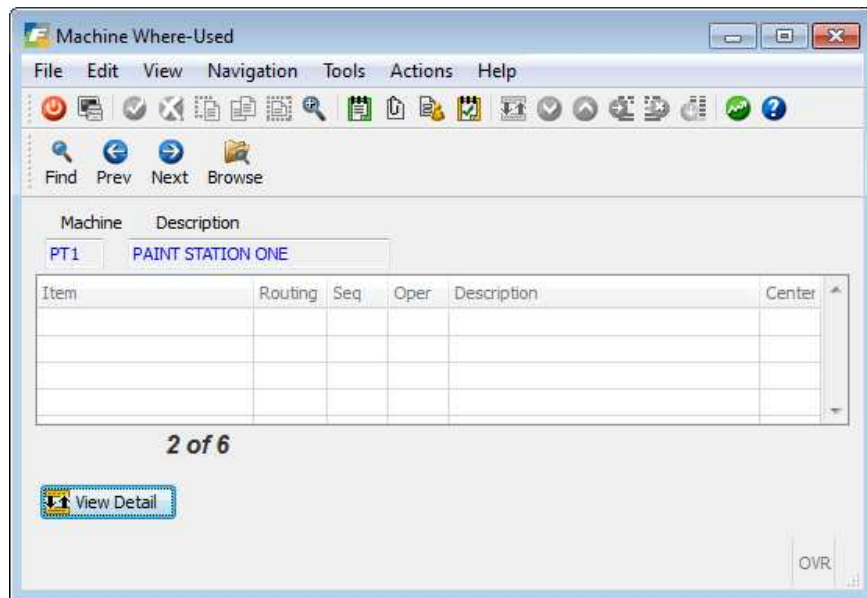
This section of the window allows you to display the routing steps which use the work center.

Field	Description
Item	The produced item
Routing	The routing code for the produced item's routing
Seq	The routing step
Oper	The standard operation for the routing step
Description	The descriptive text for the routing step
Machine	The optional machine for the step

## Machine Where-Used

Use this menu option to review a list of routing steps which use a given machine.

To view this screen, select option 'b' from the Inquiries menu.



### Machine Where-Used - Header

Use the 'Find' to select a machine to review. Enter the following fields:

Field	Description
Machine	Enter the machine to review
Description	Enter an optional description to search for

### Machine Where-Used - Detail

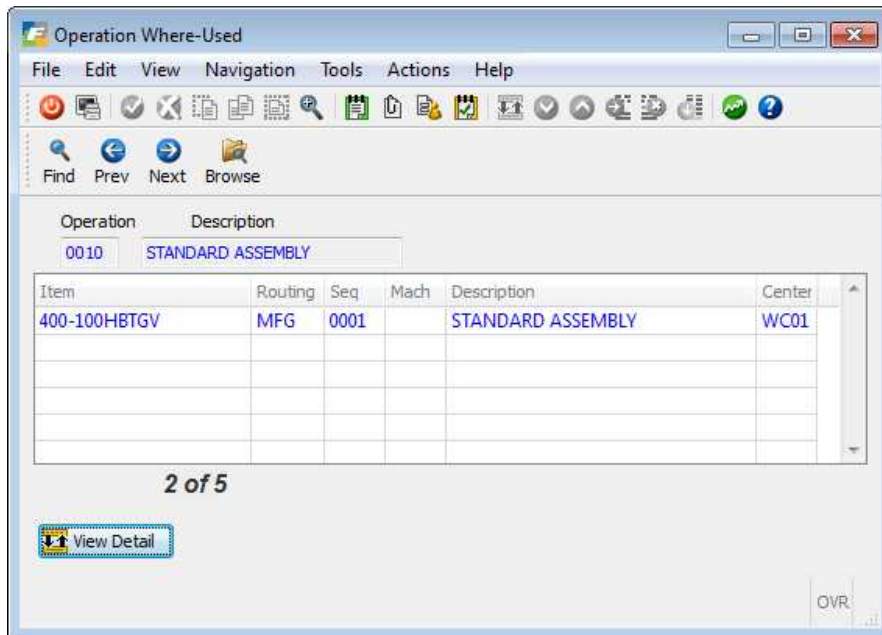
This section of the window allows you to display the routing steps which use the work center.

Field	Description
Item	The produced item
Routing	The routing code for the produced item's routing
Seq	The routing step
Oper	The standard operation for the routing step
Description	The descriptive text for the routing step
Work Center	The optional work center for the step

## Operation Where-Used

Use this menu option to review a list of routing steps which use a given standard operation.

To view this screen, select option 'c' from the Inquiries menu.



### Operation Where-Used - Header

Use the 'Find' to select an operation to review. Enter the following fields:

Field	Description
Operation	Enter the operation to review
Description	Enter an optional description to search for

### Operation Where-Used - Detail

This section of the window allows you to display the routing steps which use the work center.

Field	Description
Item	The produced item
Routing	The routing code for the produced item's routing
Seq	The routing step
Mach	The optional machine for the routing step
Description	Te descriptive text for the routing step
Work Center	The optional work center for the step

## Reports

The options on the Reports menu allow you to view and print Standard Routings and resource usages.



### ***Routing List***

This report prints the routing steps for a given produced item or range of items, and routing code

### ***Work Center Where-Used***

This report prints a list of routing steps that use a selected work center or range of work centers

### ***Machine Where-Used***

This report prints a list of routing steps that use a selected machine or range of machines

### ***Operation Where-Used***

This report prints a list of routing steps that use a selected standard operation or range of operations

## **Section Summary**

Standard Routing maintains information about how items are produced, and the resources required to produce them.

Setting up Standard Routing includes:

- Defining Work Centers, Machines, Departments, Teams, Operations
- Defining the production facilities in which the above resources will be used
- Defining alternates for Work Centers, Machines, Departments and Teams

The main tasks which are performed in Standard Routing include:

- Maintaining routings for produced items
- Maintaining work center and machine usage via Mass Replace

## Lab Exercise a: Standard Routing Set up Tasks

In this lab you will be setting up resources used by routings.

### Set up Work Centers (option a on File Maintenance menu):

1. **Set up Work Centers** – except where indicated, accept the default values for all other fields:

Work Center	Description	Labor Rate	Overhead Rate
CUT	Cutting and Fab	Enter a reasonable standard labor rate per hour to assign any routing step using time at this work center	Enter a reasonable standard overhead rate per hour (if applicable) to assign any routing step using time at this work center. If no overhead cost is to be assigned, enter zero.
ASSY	Assembly Time	Enter a reasonable standard labor rate per hour to assign any routing step using time at this work center	Enter a reasonable standard overhead rate per hour (if applicable) to assign any routing step using time at this work center. If no overhead cost is to be assigned, enter zero.

## Lab Exercise b: Routing Maintenance

**Update Routing (option f on the File Maintenance menu):**

2. **Add a new routing for the window assemble from the Bill of Materials chapter- WINASSY**

**Header**

Routing Code – use 'MFG'

**Detail**

Select a type of 'Inside'

Leave machine blank

Seq	Description	Work Center	Department	Setup Hrs	Run Hrs
0001	Cutting	CUT	DP1	0.25	0.5
0002	Assembly	ASSY	DP1	0	0.75