Fitrix
Manufacturing

Course Workbook

Version 5.30
Revised October 2009

Restricted Rights Legend

Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS252.227-7013. Fourth Generation Software Solutions, 700 Galleria Parkway, Suite 480, Atlanta, GA 30039.

Software License Notice

Your license agreement with Fourth Generation Software Solutions, which is included with the product, specifies the permitted and prohibited uses of the product. Any unauthorized duplication or use of Fitrix INFORMIX-4GL version, in whole or in part, in print, or in any other storage and retrieval system is forbidden.

Licenses and Trademarks

Fitrix is a registered trademark of Fourth Generation Software Solutions.
Informix is a registered trademark of Informix Software, Inc.
UNIX is a registered trademark of AT&T.

FITRIX ACCOUNTING MANUALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, FURTHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE FITRIX ACCOUNTING MANUALS IS WITH YOU. SHOULD THE FITRIX ACCOUNTING MANUALS PROVE DEFECTIVE, YOU (AND NOT FOURTH GENERATION SOFTWARE SOLUTIONS SOFTWARE OR ANY AUTHORIZED REPRESENTATIVE OF FOURTH GENERATION SOFTWARE SOLUTIONS) ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION IN NO EVENT WILL FOURTH GENERATION SOFTWARE SOLUTIONS BE LIABLE TO YOU FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE SUCH FITRIX ACCOUNTING MANUALS, EVEN IF FOURTH GENERATION SOFTWARE SOLUTIONS OR AN AUTHORIZED REPRESENTATIVE OF FOURTH GENERATION SOFTWARE SOLUTIONS HAS BEE ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY. IN ADDITION, FOURTH GENERATION SOFTWARE SOLUTIONS SHALL NOT BE LIABLE FOR ANY CLAIM ARISING OUT OF THE USE OF OR INABILITY TO USE SUCH FITRIX SOFTWARE OR MANUALS BASED UPON STRICT LIABILITY OR FOURTH GENERATION SOFTWARE SOLUTIONS'S NEGLIGENCE. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

Fourth Generation Software Solutions
700 Galleria Parkway, Suite 4800
Atlanta, GA 30339

Corporate: (770) 432-7623
Fax: (770) 432-3448
E-mail: sales@fitrix.com

Software License Agreement

This software is licensed or sub-licensed by Fourth Generation Software Solutions, Inc. This Software License Agreement ("Agreement") may be a legal contract between you, the end user, and Fourth Generation Software Solutions, Inc. ("FGSS"). This Agreement is printed on the software media envelope, and by breaking the seal on the software media envelope, you are agreeing to be bound by this Agreement and all its terms and conditions if you have not negotiated other terms or have executed another software license agreement with FGSS or one of its distributors. If you do not agree to the terms and conditions stated in this Agreement, please return the unopened software media envelope and all companion materials (including written documentation and containers) to where you obtained them within thirty (30) days of purchase for a refund in full.

LICENSES

Fourth Generation Software Solutions grants you the non-exclusive and non-transferable right to use one copy of the standard FGSS software programs ordered ("Software"), and associated user and technical documentation ("Documentation"), on the Designated CPU (the specific computer system identified by you in a purchase order or otherwise.), subject to the terms and conditions of this Agreement and in consideration of payment of FGSS license fees. You may access the Software lawfully licensed to you on any number of terminals connected to the Designated CPU. You may transfer the Software to a single hard disk, provided you keep the original solely for backup or archival purposes. You may modify the software lawfully licensed to you, and/or merge it with other programs for your use in machine-readable object code format on the Designated CPU, but any portion so modified, or merged with other programs, shall continue to be subject to the terms and conditions of this Agreement.

Backup Copy. You may make backup copies of the Software and of any portions thereof which are modified or merged with other programs in accordance with this Agreement. All such backup copies shall also be subject to the terms and conditions of this Agreement. You must maintain an accurate record of the location of the backup copies at all times.

Restrictions. Unless otherwise authorized by FGSS, you may not install, electronically transfer, network or otherwise use the Software on any CPU other than the Designated CPU in a network. The standard FGSS license fees apply only when one CPU functions as both the client CPU and the database server CPU. You may not make any copies of the Documentation except as specifically provided above, you may not make any copies of the Software except as specifically provided above, you may not make alterations to the Software or to the Documentation, or to any part thereof, including, but not limited to, unmodified sub-routines, functions, libraries, or other binary code segments of the Software. You may not rent, sub-license, lease, distribute, or grant other rights to the Software or the Documentation to others. You may not reverse engineer, disassemble , decompile, reverse translate, or in any manner decode the Software in order to derive any source code not licensed by Licensor.

Proprietary Rights and Confidentiality. All title and rights of ownership I the software and Documentation remain with FGSS and are protected by copyright., patent and/or trade secret laws. You agree to take all steps necessary to protect FGSS's proprietary rights in the Software and Documentation including, but not limited to, the proper display of copyright, trademark, trade secret and other proprietary notices on any copies of the Software. You must reproduce and include any copyright ,trade secret, trademark or proprietary data notices, and other legends and logos on the backup copies. You will, at your own cost and expense, protect and defend Licensor's and its suppliers' ownership of the Software and Documentation against all claims, liens and legal processes of your creditors and keep the Software and Documentation free and clear of all such claims, liens and processes. You will not disclose or publish to others, and will keep confidential the Software.

Terms and Termination. This Agreement is effective until terminated. You may terminate this Agreement by destroying the Software and Documentation and all copies thereof. FGSS may immediately terminate the Agreement if you breach any representation, warranty, agreement or obligation in the Agreement. Upon termination, you shall either promptly return to FGSS all copies of the Software and Documentation in your possession or destroy all copies of the Software and Documentation, and certify in writing to FGSS that all such copies have been destroyed. Software Generation Tools. If the enclosed Software is a 4GL Software generation tool, then you have a royalty-free right to reproduce and distribute program executable files created using the Software if you agree to indemnify, hold harmless, and defend FGSS from any claims, lawsuits or liabilities, and to pay all expenses and damages including without imitation attorney's fees, that arise from the use, licensing or distribution of your software product. This royalty-free right does not apply to FGSS Menus and FGSS User Control Libraries. Royalties are due FGSS on each

application resold, licensed or transferred to a CPU other than the Designated CPU that incorporates FGSS Menus and./or FGSS User Control Libraries.

WARRANTY AND LIMITATIONS

Limited Warranty. FGSS warrants and represents that it is the owner of the Software and/or has the right to license the Software, and that for a period of ninety (90) days after the initial delivery of the Software to you, the latest version of the Software released by FGSS shall substantially perform in accordance with the standard FGSS Documentation. FGSS's entire liability and your exclusive remedy shall be for FGSS, at its option, to either; replace the Software that does not meet FGSS's limited warranty described above and which is returned to FGSS with its original distribution media; or attempt to correct any errors which you find in the Software during this warranty period and which prevent the Software from substantially performing as described in the standard FGSS Documentation. Any replacement Software will be warranted for the remainder of the original warranty period or for thirty (30) days, whichever is longer. Limitations of Warranty. The above warranty is null and void if you modify or change your copy of the Software in any way not authorized by this Agreement, or if failure of the Software has resulted from accident, abuse or misapplication. FGSS does not warrant that the functions contained in the Software will meet your requirements, or that the operation of the Software will be uninterrupted or error free, or that all defects will be corrected. FGSS shall not be required to correct errors during the above described warranty period attributable to equipment malfunction, products other than the Software, use of the Software in conflict with or contravention of the Documentation or the terms of this Agreement; or accident, neglect, misuse, or abuse of the Software.

DISCLAIMER OF WARRANTY FGSS MAKES NO OTHER WARRANTIES REGARDING THE SOFTWARE OR DOCUMENTATION, INCLUDING WITHOUT LIMITATION, EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND ANY OTHER WARRANTY, EXPRESS OR IMPLIED, LIMITATION OF LIABILITY, IN NO EVENT SHALL FGSS BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT, OR CONDWQUENTIAL DAMAGES LOSS OF BUSINESS LOSS OF PROFITS, LOSS OF GOODWILL, OR TORTIOUS CONDUCT RELATING TO, CAUSED BY OR ARISING OUT OF ANY BREACH OF OBLIGATIONS OR DELAY IN DELIVERY OF SOFTWRE OR DOCUMENTATION UNDER THE AGREEMENT, OR FROM YOUR USE OR INABILITY TO USE THE SOFTWARE, EVEN IF FGSS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU, ANY DAMAGES THAT FGSS IS REQUIRED TO PAY FOR ANY AND ALL CAUSES, WHETHER FOR NEGLIGENCE, BREACHOF CONTRACT, OR OTHERWISE, AND REGARDLESS OF THE FORM OF THE ACTION IN THE AGGREGATE, SHALL BE LIMITED IN AMOUNT TO THE ROYALTIES PAID BY YOU TO FGSS FOR THE SPECIFIC COPY OR COPIES OF SOFTWARE.

Restricted Rights Legend

Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS252.227-7013. Fourth Generation Software Solutions, 700 Galleria Parkway., Suite 480, Atlanta, GA 30039.

General This Agreement shall be governed by the laws of the State of Georgia, and shall inure to the benefit of Licensor it's successors, administrators, heirs and assigns. The United Nations Convention for the International Sale of Goods shall not apply to this Agreement. The parties agree that Cobb County in the State of Georgia shall be the proper forum for any action, including arbitration, brought under this Agreement. No actions, regardless of form, arising from the transactions under the Agreement may be brought by any party hereto more than 2 years after the facts creating the cause of action become known to such party. If any term, provision or part of the Agreement is to any extent held invalid, void or unenforceable by a court of competent jurisdiction the remainder of the Agreement shall not be impaired or affected thereby, and each term provision and part shall continue in full force and effect. The terms, conditions and warranties contained in the Agreement that by their sense and context are intended to survive the termination thereof by the parties hereunder shall so survive the termination of the Agreement. FGSS shall not be in default or liable for any failure in performance or loss or damage under this Agreement due to any cause beyond its control.

Table of Contents

Chapter 1 - Learning Fitrix Accounting

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

Fitrix Accounting System

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

Relational Database. 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, bm,rt)
Purchasing (pu)
Replenishment (rl)

Manufacturing

Bill of Material
Standard Routing
Production Order Processing
Material Planning

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:

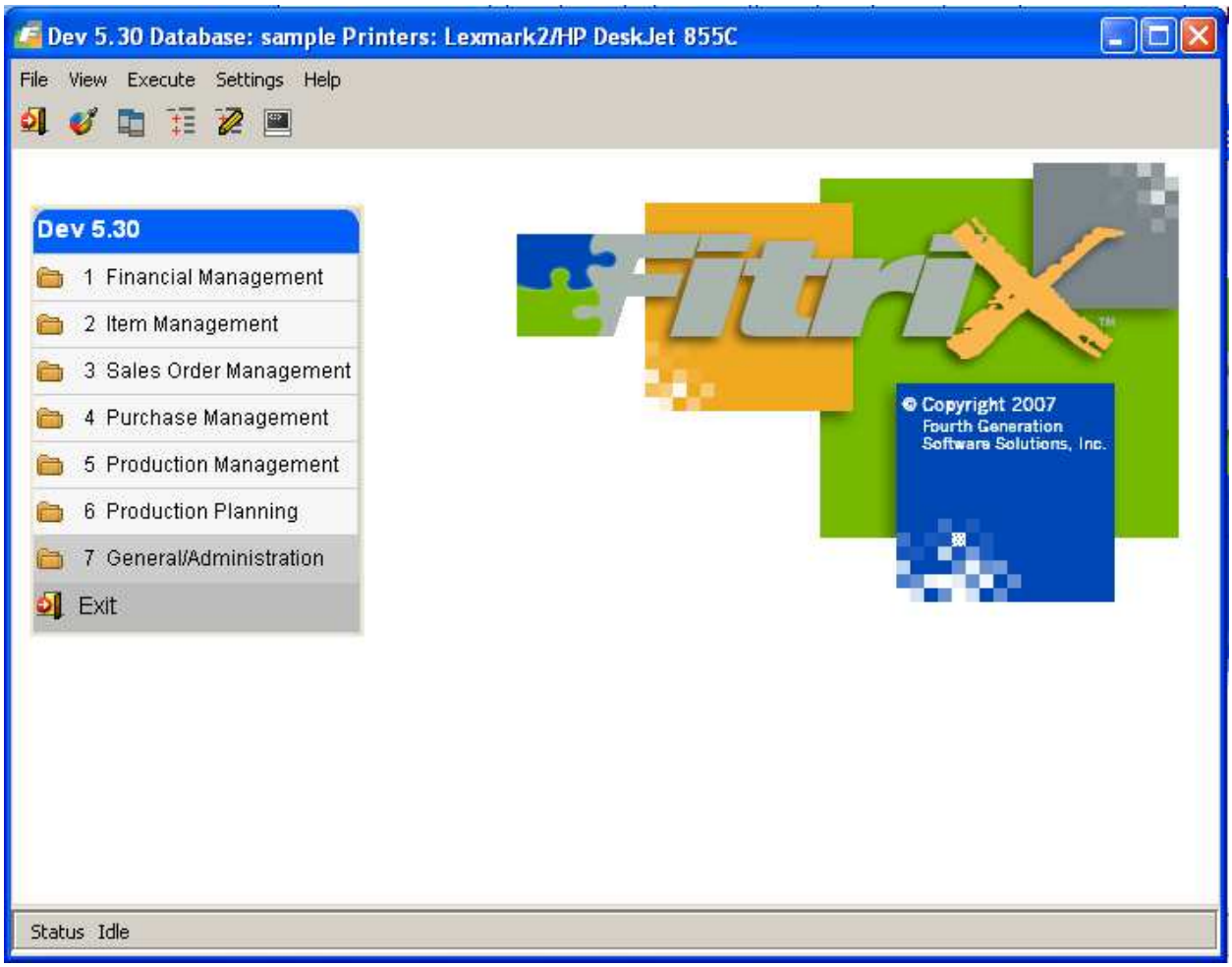
Entry. A transaction is initiated by entering a document. Documents entered may be updated at any time before posting.
Edit. An edit list is printed after documents are entered and before they are posted. This list shows all documents waiting to be posted. If mistakes are found on this report, corrections 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
File	Allows you to exit the Fitrix system.
View	Offers user preferences to change the way Fitrix screens display. Your choices are Classic, Explorer, and Edit.
Execute	Manage configuration and security settings
Settings	Allows you to change the color scheme or database
Help	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.

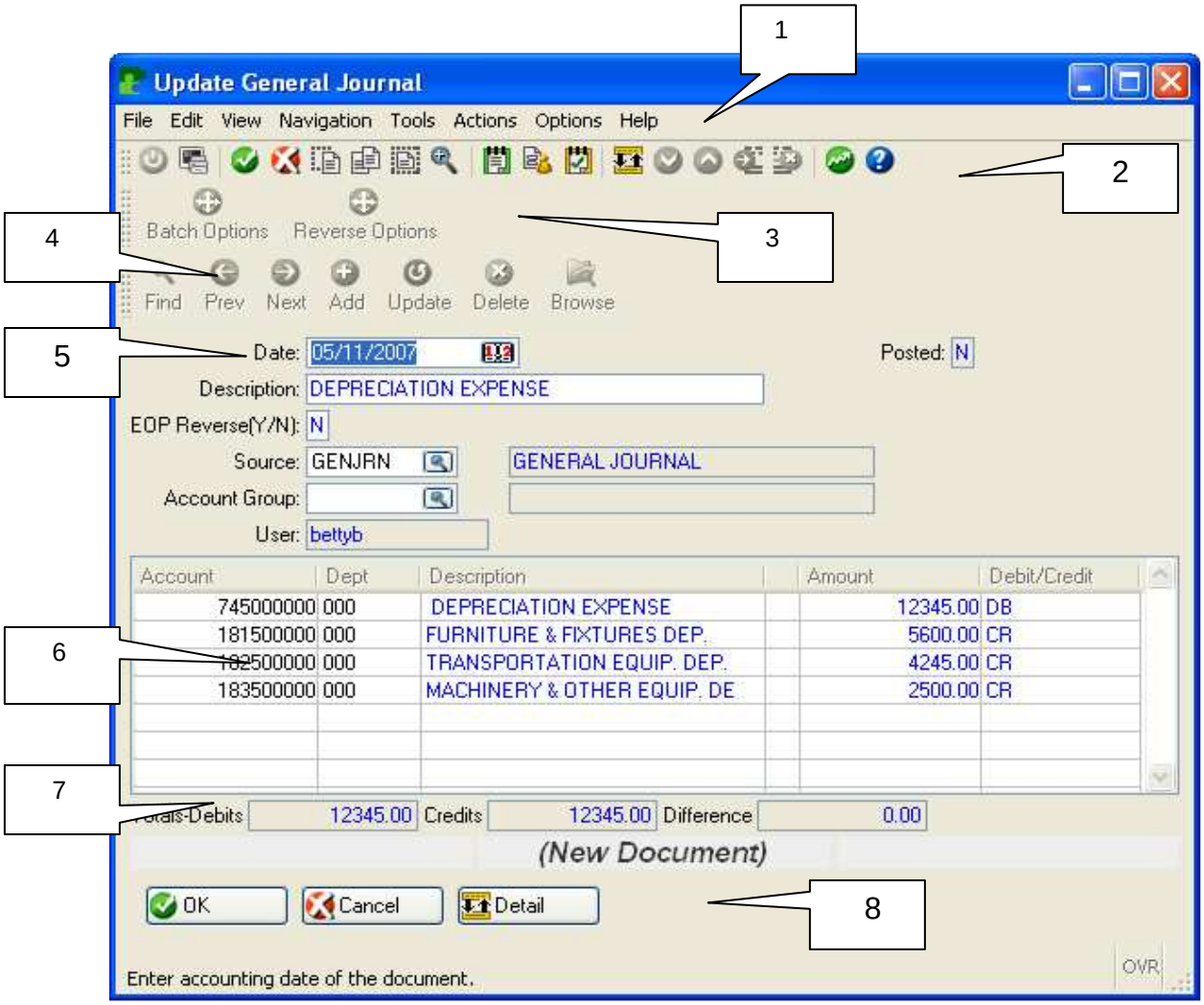
Note: When a menu item icon is a file folder, an additional submenu is available.

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 at the beginning of 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.
5	Header Section	This section is just below the Action toolbar and contains basic or general information about a document.
6	Detail Section	This section contains labeled columns that correspond to information in lines or rows.
7	Totals	This section is a reference section displaying debit and credit totals information.
8	OK, Cancel, Detail	The OK button accepts new data or any changes you have made. This is exactly the same as pressing the **ENTER** key. The cancel button will abort any new data or changes you have entered. This is the same as pressing the **ESC** key. When in the header section of the screen, clicking on the Detail button will put you in the detail section of the screen. When in the detail the button is now labeled “Header” and clicking on it will put you back in the header section of the screen.

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.

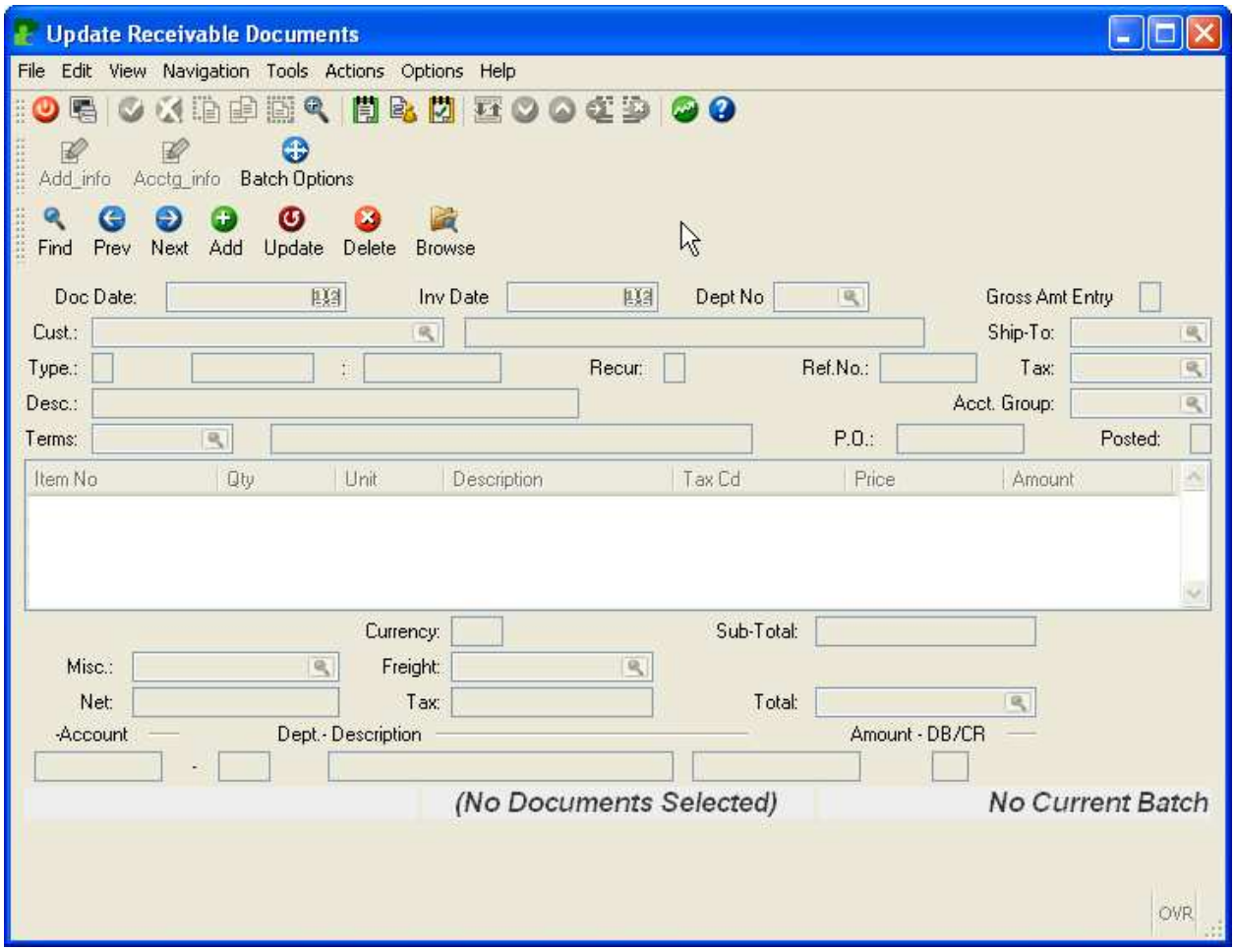
Action Menu Commands

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

Click the command.

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.



Below are the fields and descriptions for data entry commands:

Field	Description
Add	Allows you to add any new document.
Update	Allows you to modify an existing document once it has been selected or found.
Delete	Allows you to delete a document if it is not posted.
Find	Use the find command to retrieve one or more records. There are three ways to use the Find command. **To find all records** stored for a program, click the OK button (or press ENTER key) without entering any data in the screen. **To find a particular record,** enter a piece of information that is unique to that record (i.e.; customer code, invoice number), and then click OK or press ENTER. **To find a group of records** enter search criteria using wild cards or relational operators (for more information, review chapter 7 in the Getting Started With Fitrix User Guide.).

Field	Description
Browse	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.
Next	Allows you to view the next document by paging down through the found documents.
Prev	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 Exit or press Q and then ESC key three times to return to the main menu.

Print Selection Dialog Box 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 clients that are running Fitrix version 5.2.

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.

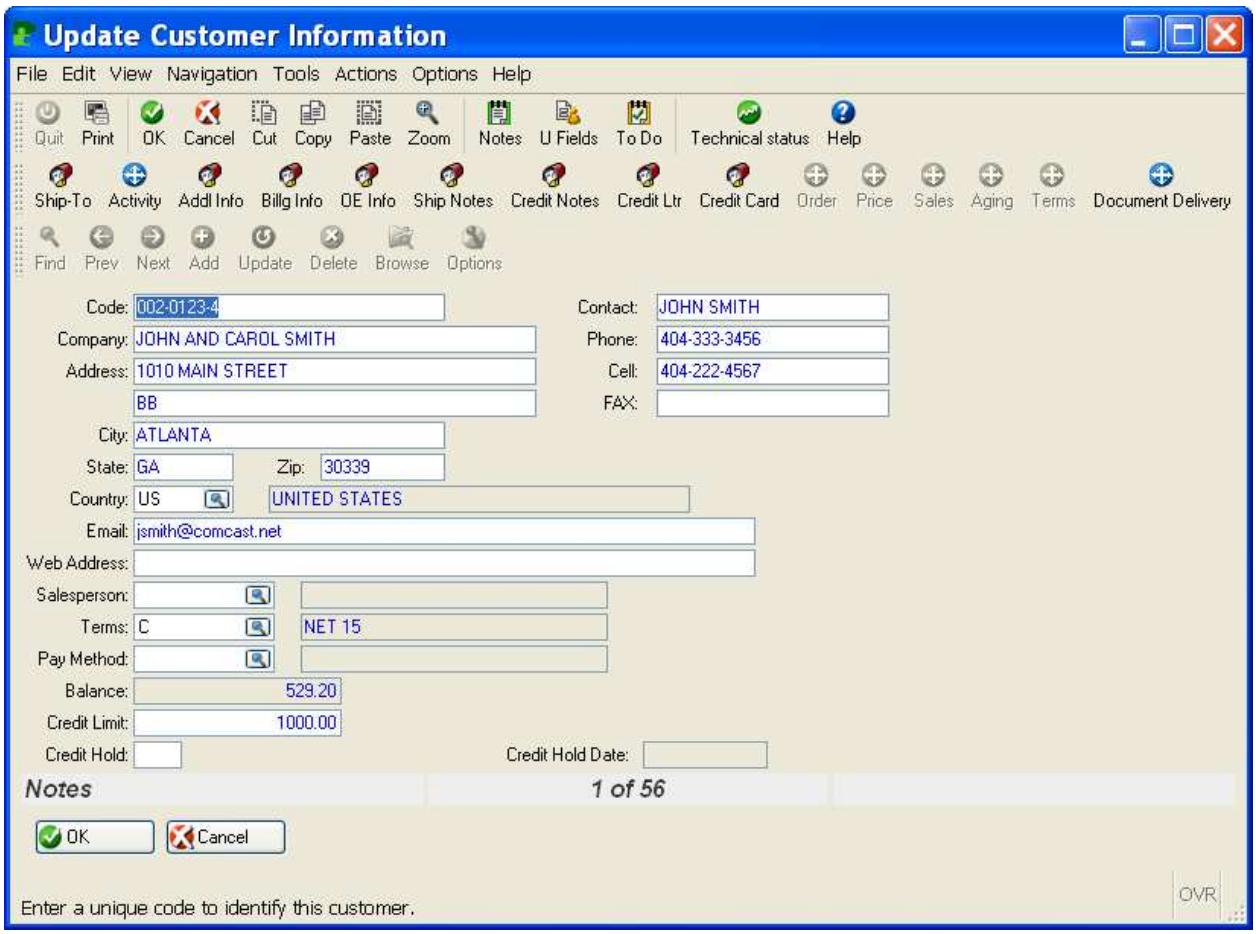
Order Entry:

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

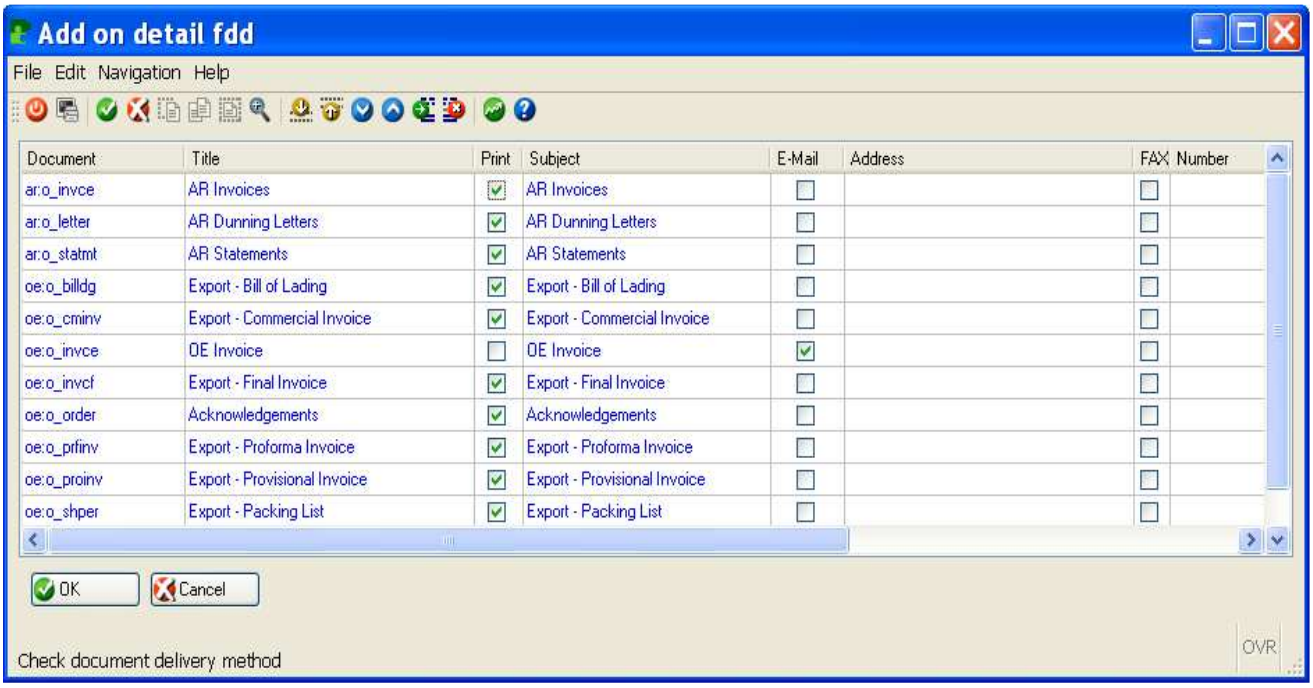
Purchasing:
Vendor Purchase Order

Accounts Receivable:
Invoice
Customer Statement
Dunning Letters

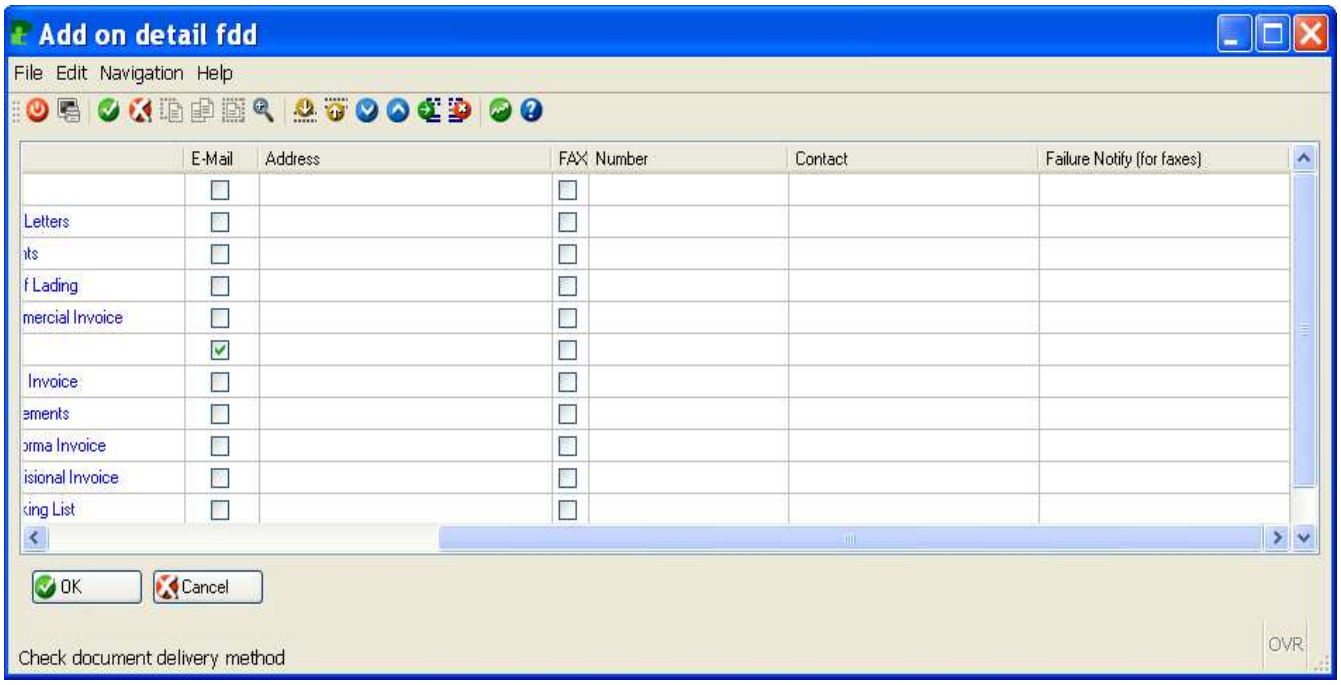
A new icon labeled Document Delivery has been added to the Update Customer Information and Update Vendor Information Toolbar and is only accessible when in Update mode.



When you click on this icon the following screen displays listing all report programs that currently support FDD/Background Print:



By scrolling to the right the two additional fields for fax Contact and Failure notify can be viewed.



After FDD is installed by going into update mode for each customer the default setting will be set to Print for all reports. You can then update for each customer as necessary.

Field Definitions:

Document – Fitrix program name.

Title- Title of 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.

E-mail- 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.

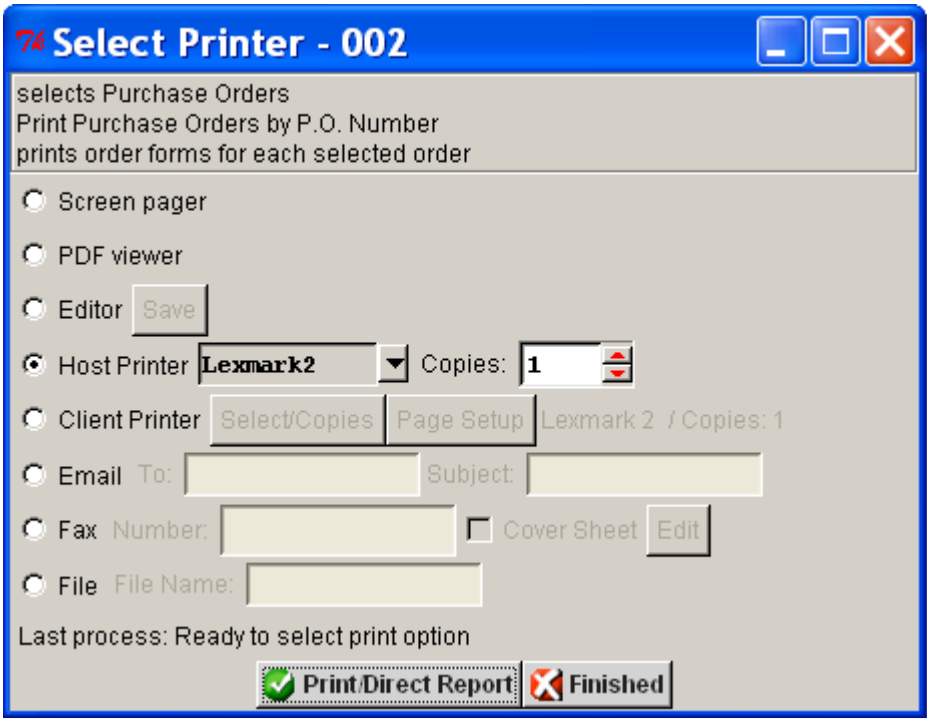
Number- the fax number you wish to send the report to.

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.

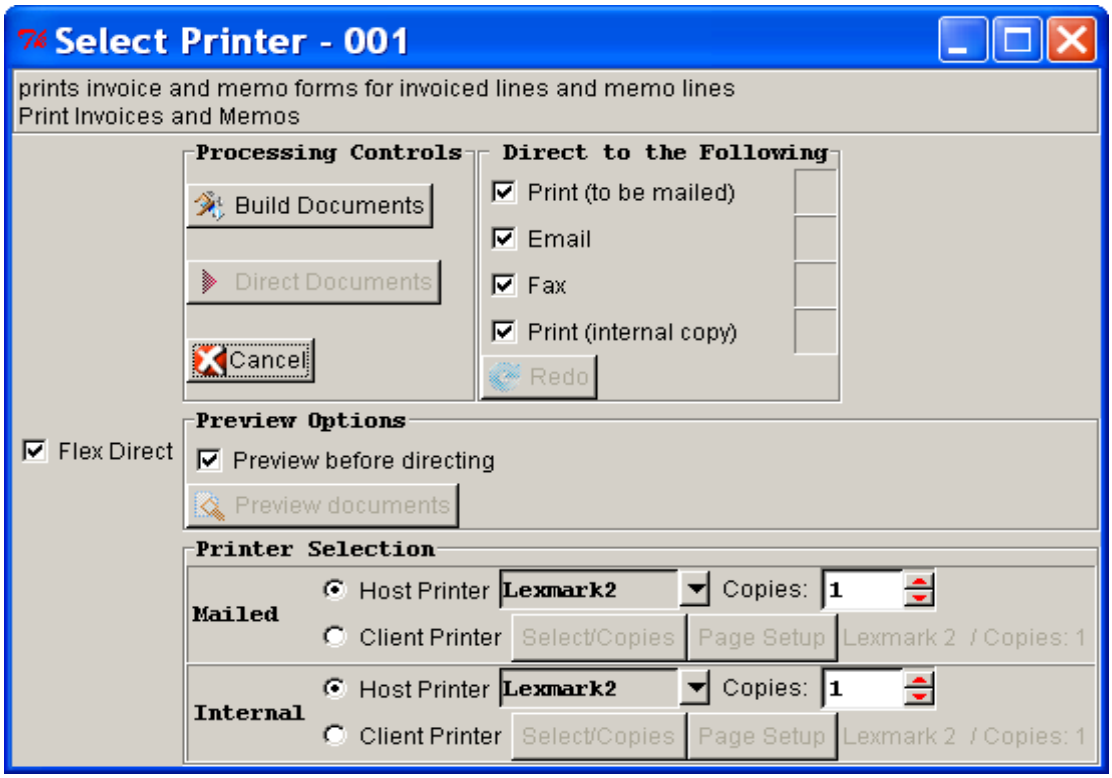
Non-FDD PRINTER DIALOG BOX:

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

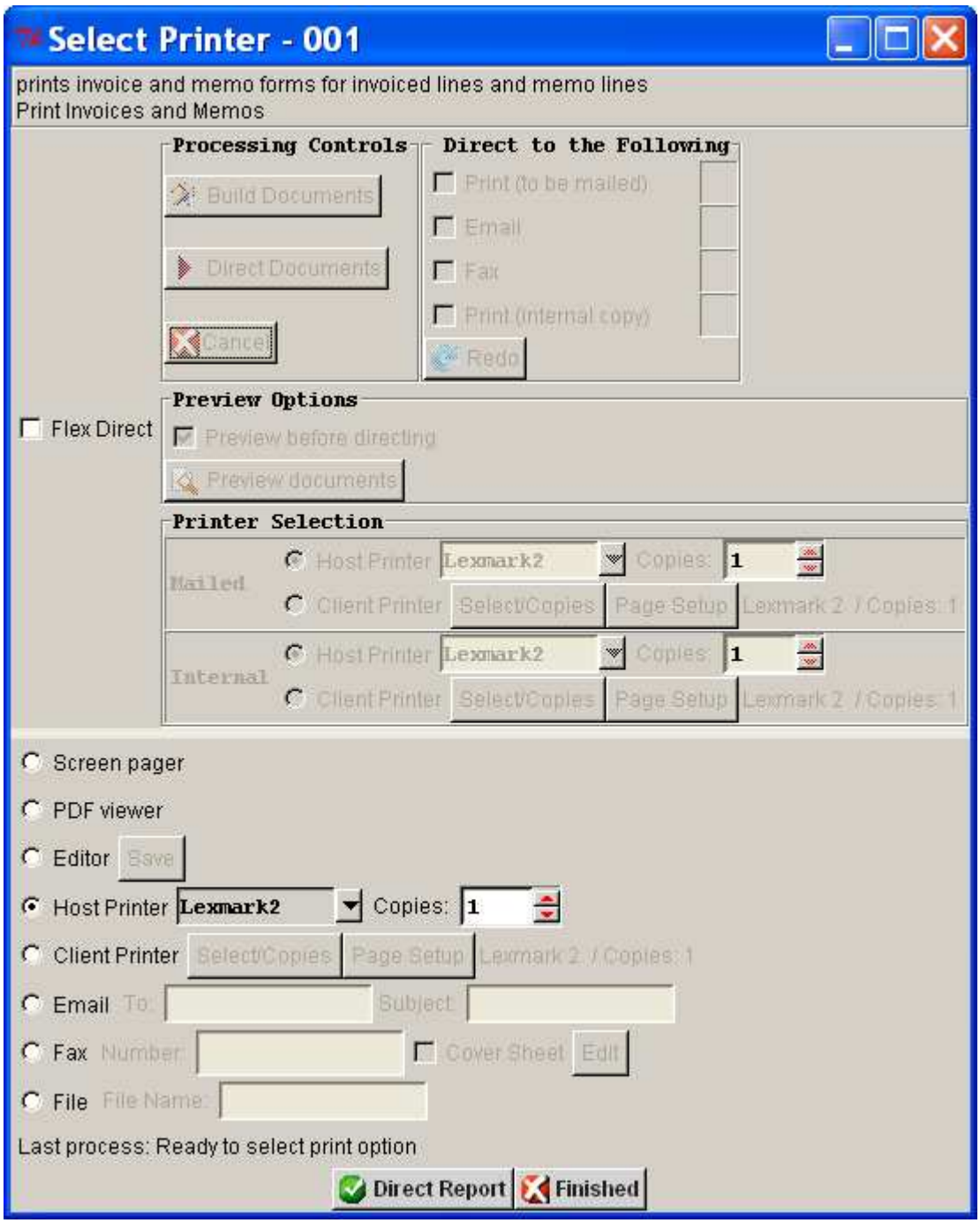


FDD PRINTER DIALOG BOX:

Report programs that support FDD will have this printer dialog box:

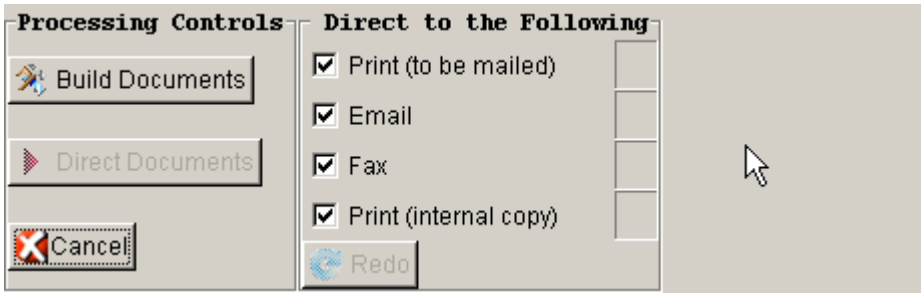


If you do not wish to use the flex direct options simply uncheck the flex direct box and the printer dialog box will disable the FDD options and display all options that are on the non FDD printer dialog box.


Select Printer - 001
prints invoice and memo forms for invoiced lines and memo lines
Print Invoices and Memos
Processing Controls
Build Documents
Direct Documents
Cancel
Direct to the Following
Print (to be mailed)
Email
Fax
Print (internal copy)
Redo
Flex Direct
Preview Options
Preview before directing
Preview documents
Printer Selection
Mailed
Host Printer
Lexmark2
Copies:
1
Client Printer
Select/Copies
Page Setup
Lexmark 2 / Copies: 1
Internal
Host Printer
Lexmark2
Copies:
1
Client Printer
Select/Copies
Page Setup
Lexmark 2 / Copies: 1
Screen pager
PDF viewer
Editor
Save
Host Printer
Lexmark2
Copies:
1
Client Printer
Select/Copies
Page Setup
Lexmark 2 / Copies: 1
Email
To:
Subject:
Fax
Number:
Cover Sheet
Edit
File
File Name:
Last process: Ready to select print option
Direct Report
Finished

The FDD printer dialog box is divided into three sections:

Processing controls:

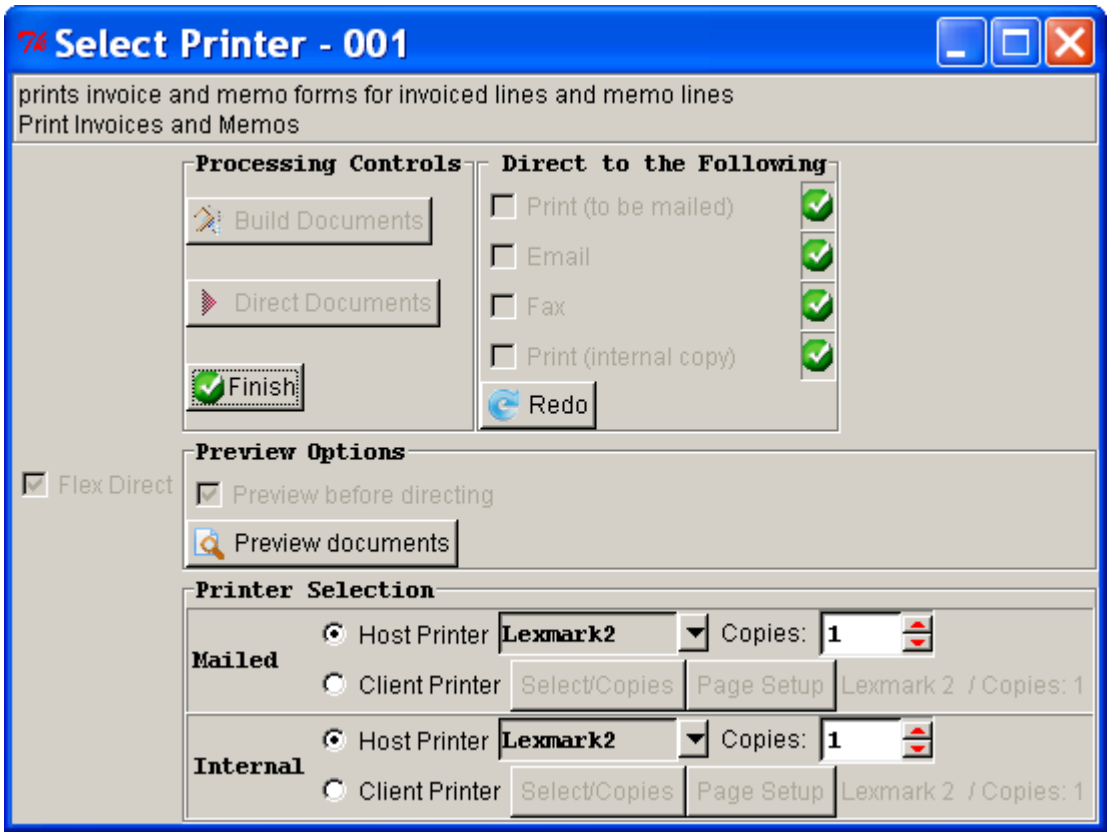


The example above shows that the documents will be processed via print to be mailed, email, fax, and internal print to be filed. These boxes can be unchecked as needed.

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.

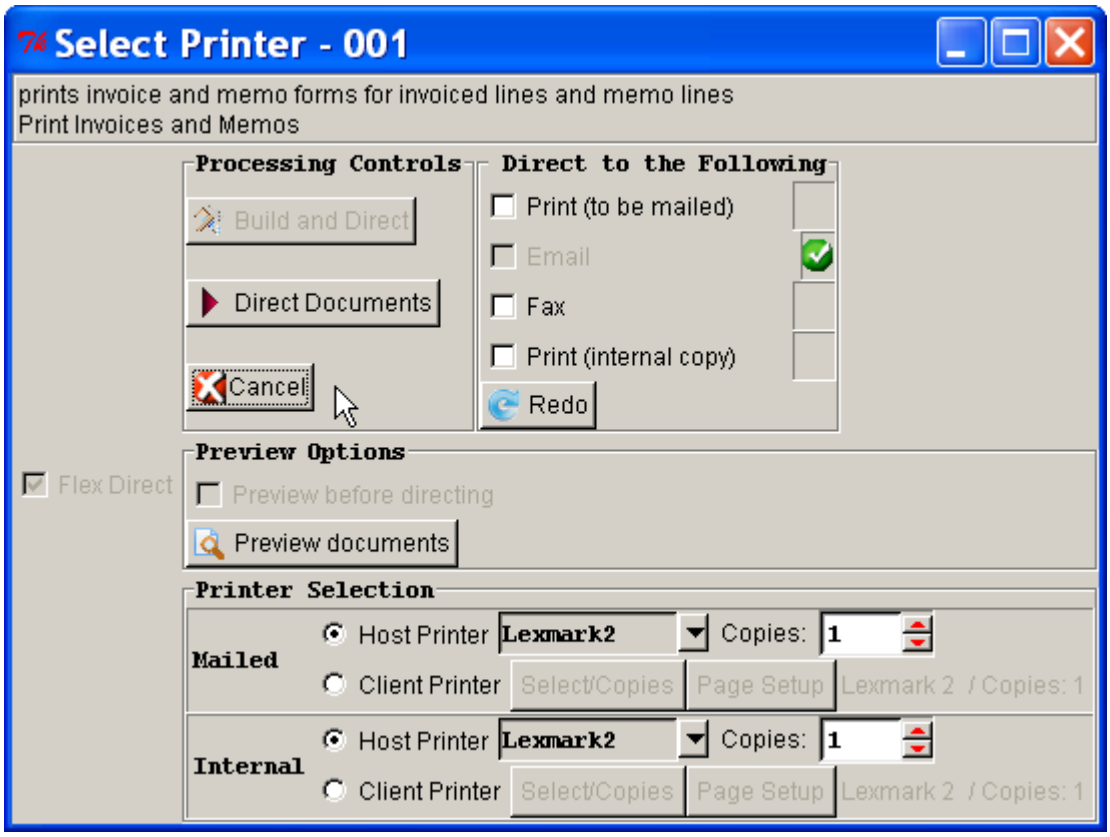
If all Direction method check boxes were checked, the printer dialog box will look like this after the documents were printed/sent:



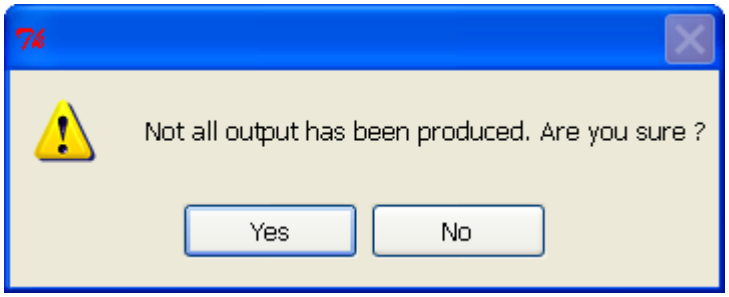
The green check marks indicate the direction methods that were processed. To return to the menu, click the finished button.

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.

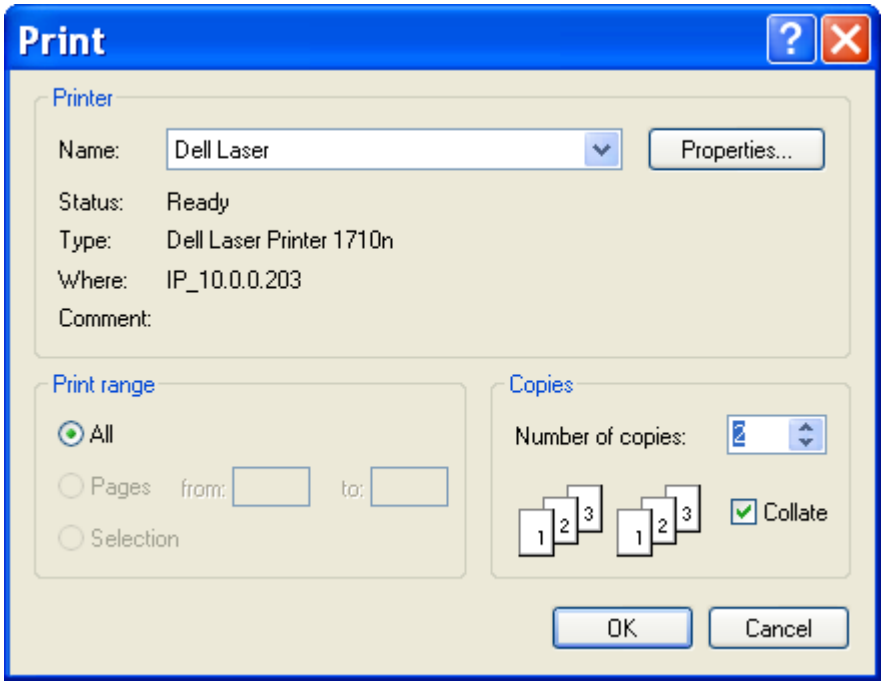
Mailed – printer selection will only be accessible if the Print (to be mailed) check box is checked. Select either a network printer or a client printer and the number of copies to print for the documents that will be mailed.

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.

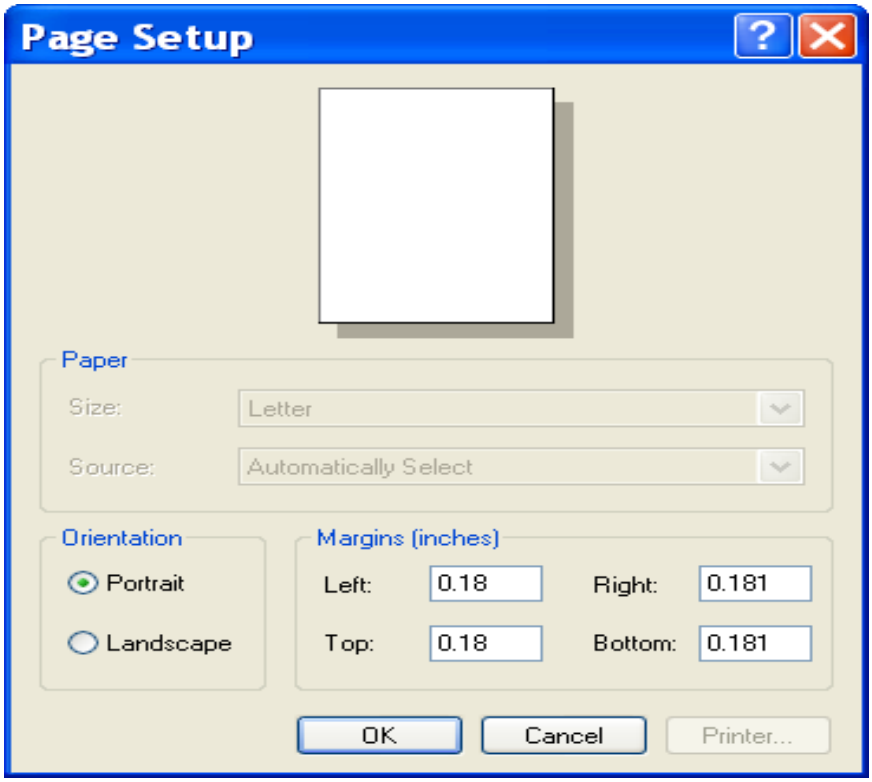
Note about Client Printers:

If you change your printer selection to a client printer the printer selection section will display two new buttons:
Select/Copies and Page Setup.

Select/Copies – click this button to select the client printer and the number of copies you wish to print:

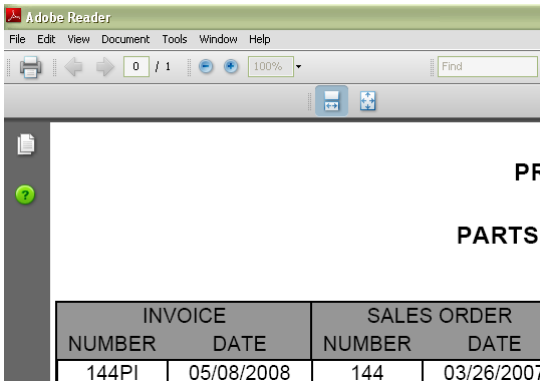


Page Setup – click this option to review/change the page set up:

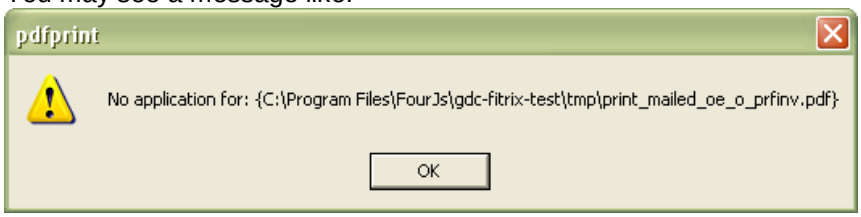


To proceed click the Build Documents button. Since a client printer was selected, Adobe Acrobat will direct copy(s) to the printer.

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: 

.

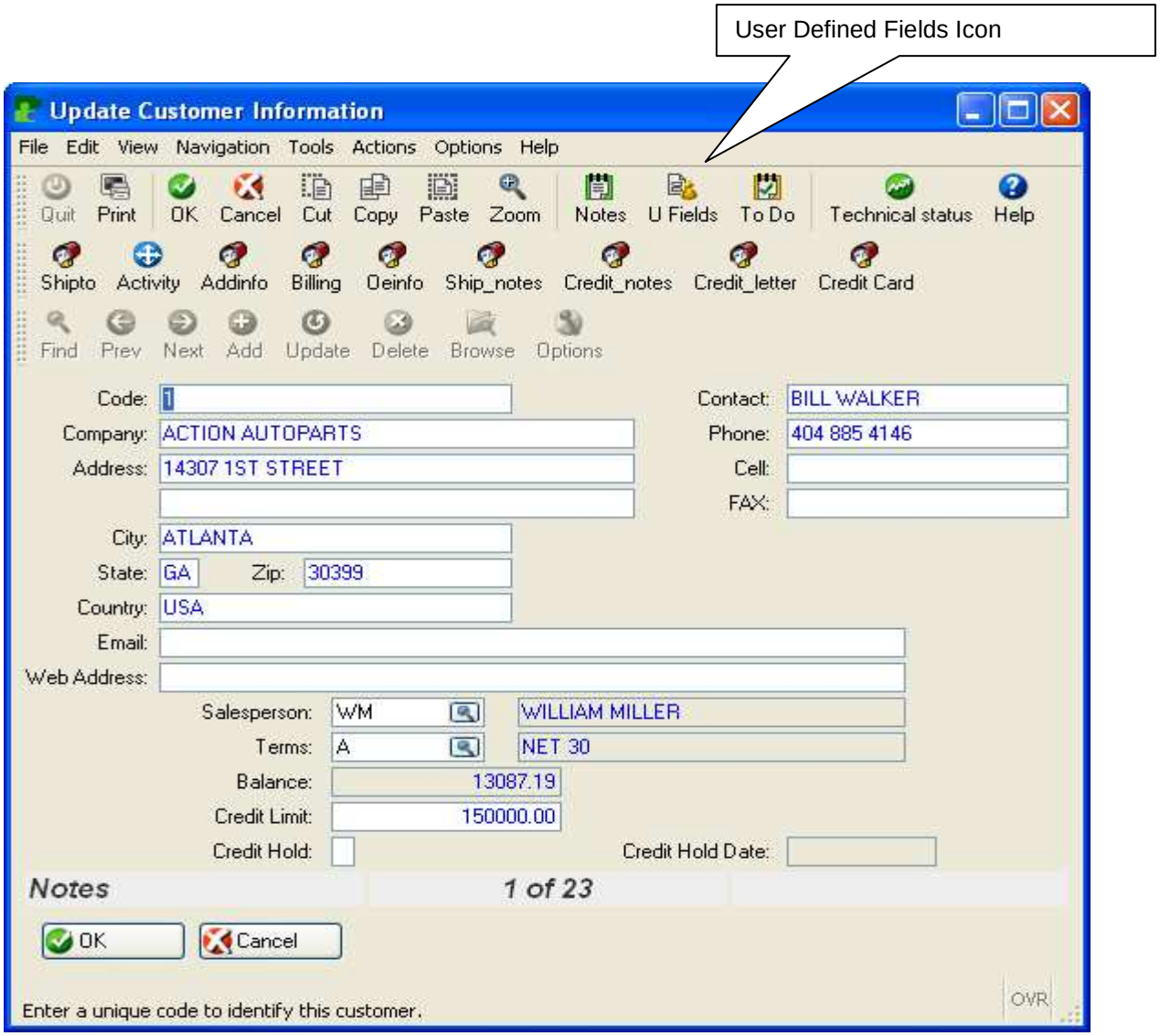
User Control Libraries

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

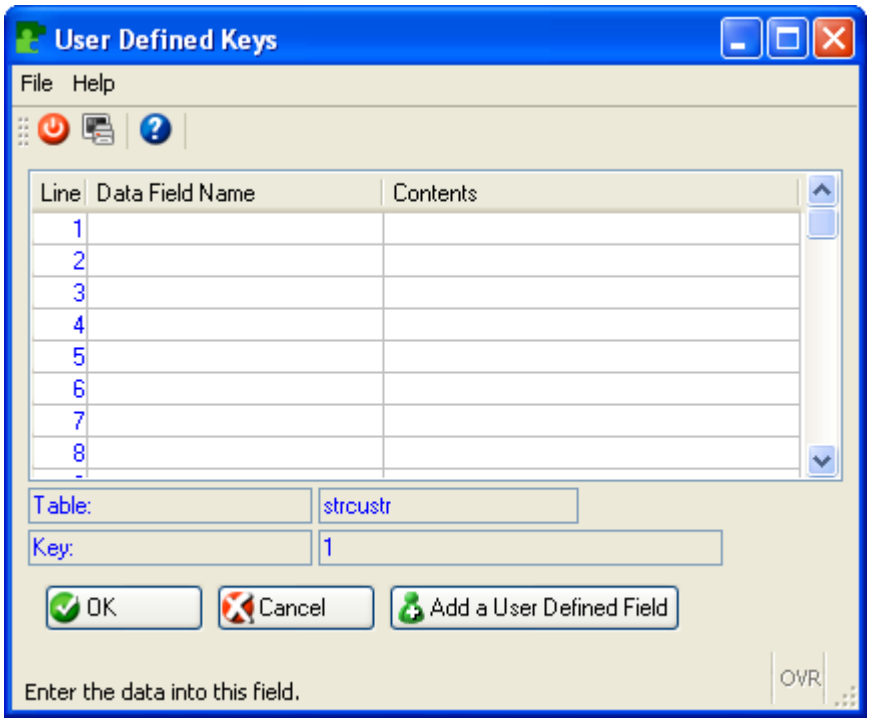


User defined fields allow you to store additional information within a given program without modifying the programs. These fields are only used in data entry screens and are specific to the data entry screen. Up to fifty User-Defined Fields can be defined for every data screen.

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:



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.

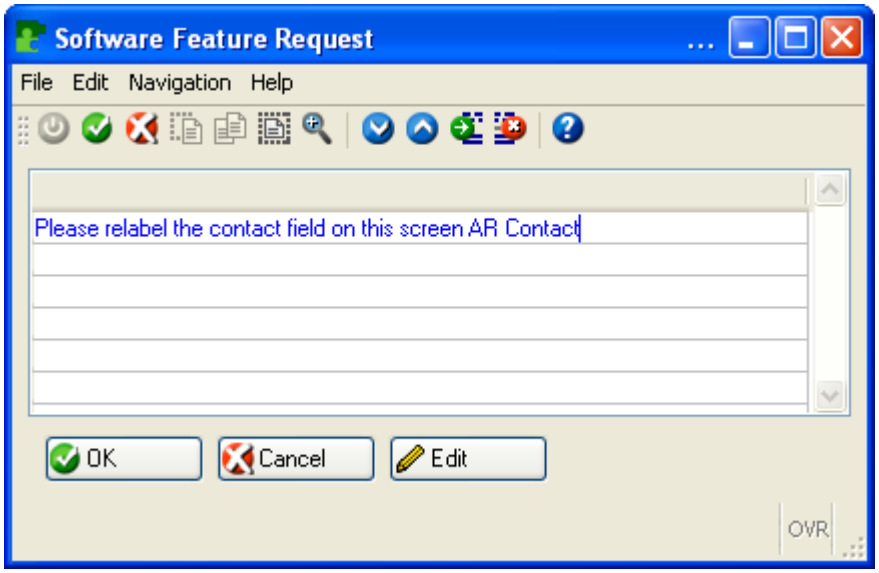
Contents is the column where the document specific data will be entered.

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 entry in this field the next time a record is entered and stored.

Feature Request

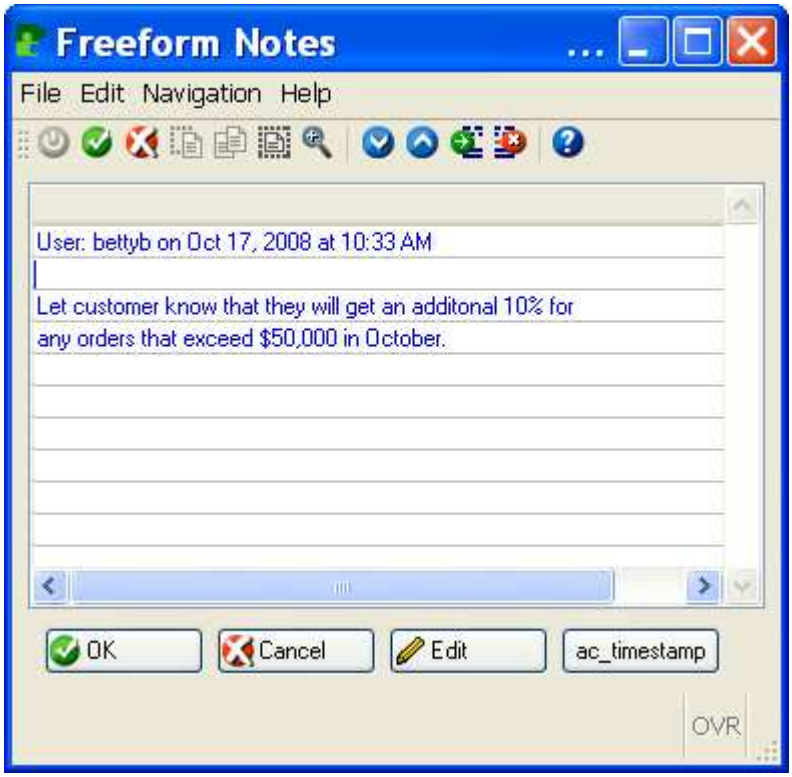
This option launches a screen program where you can enter any program features you need. This information is then logged in the errlog file so your system administrator can review it and make the requested changes.



Freeform Notes

Freeform Notes allow the entry of text to be applied to any document. Up to 99 lines of free form 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.



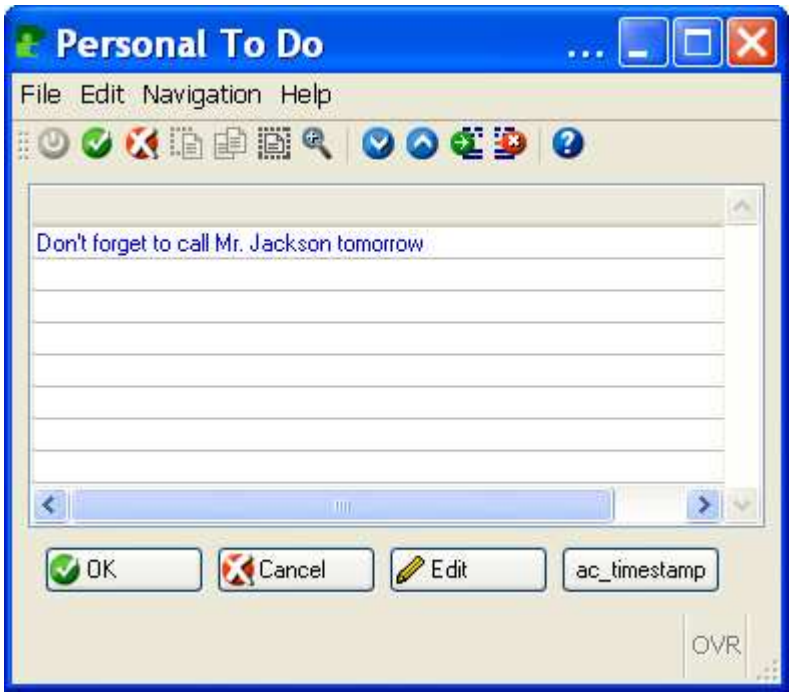
By clicking on the ac_timestamp button you can also insert the user id, date, and time entered into the note.

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

Personal "To Do" Notes

To-Do notes allow users to manage a personalized To-Do list from within any accounting module.

This list is specific to the user login and is accessed by clicking the **To Do** button (or pressing Ctrl-T) at any time the system is *not* in update mode.



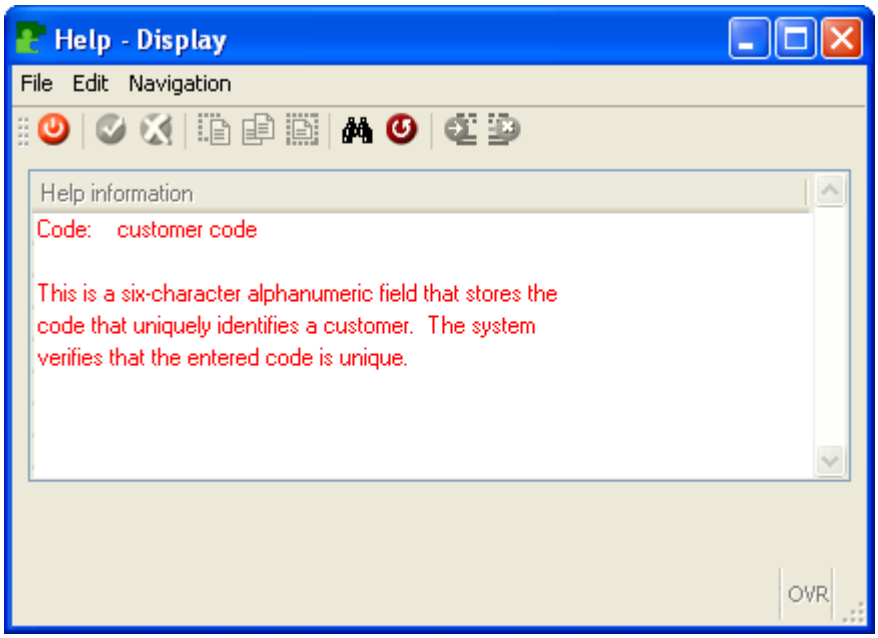
By clicking on the ac_timestamp button you can also insert the user id, date, and time entered into the note.

Click the OK button (or press ENTER) to store.

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.

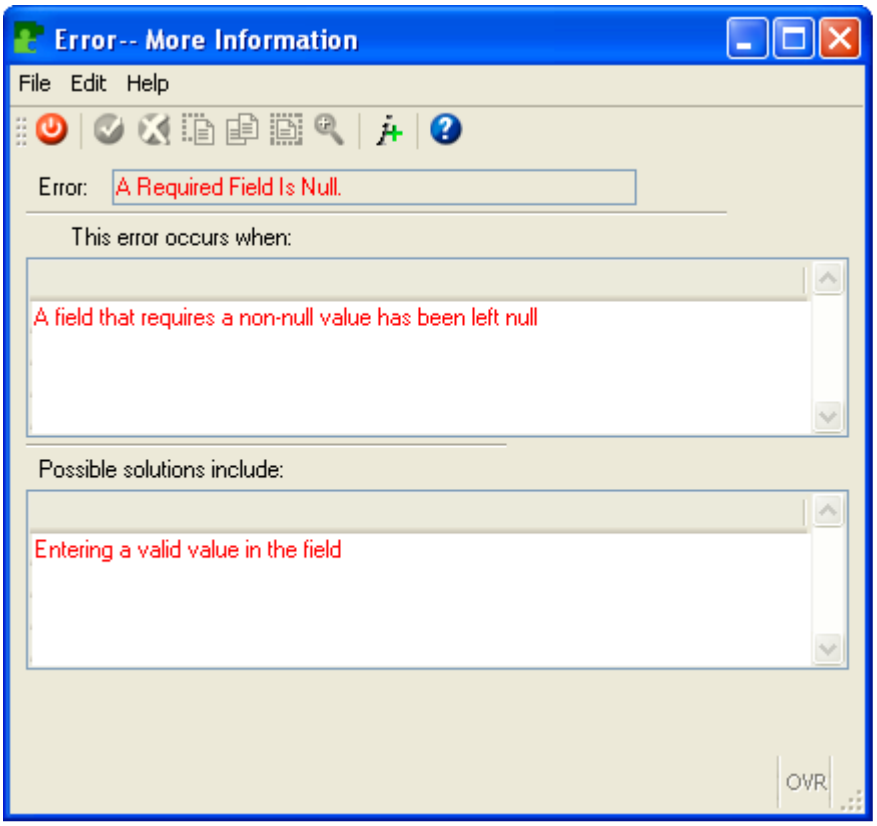


Click on Exit button or press (Q)uit to return to the Customer Information screen.

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
Edit- View	Allows you to scroll through text with arrow keys.
Edit - Update	Used to update error messages.
Help - Technical Status	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.
Log	Allows you to automatically log system information and add comments to the error log. This is also useful information for your technical support.
Quit	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 *any*thing 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 balance 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 none 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:

1. Search for all transactions dated from April 1, 2007 to May 31, 2007.

In that Date field, enter 060107 : 073107 and press enter or click on OK to accept.
This search selects all transactions between the specified dates, *including* those dated April 1 and May 31. 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.

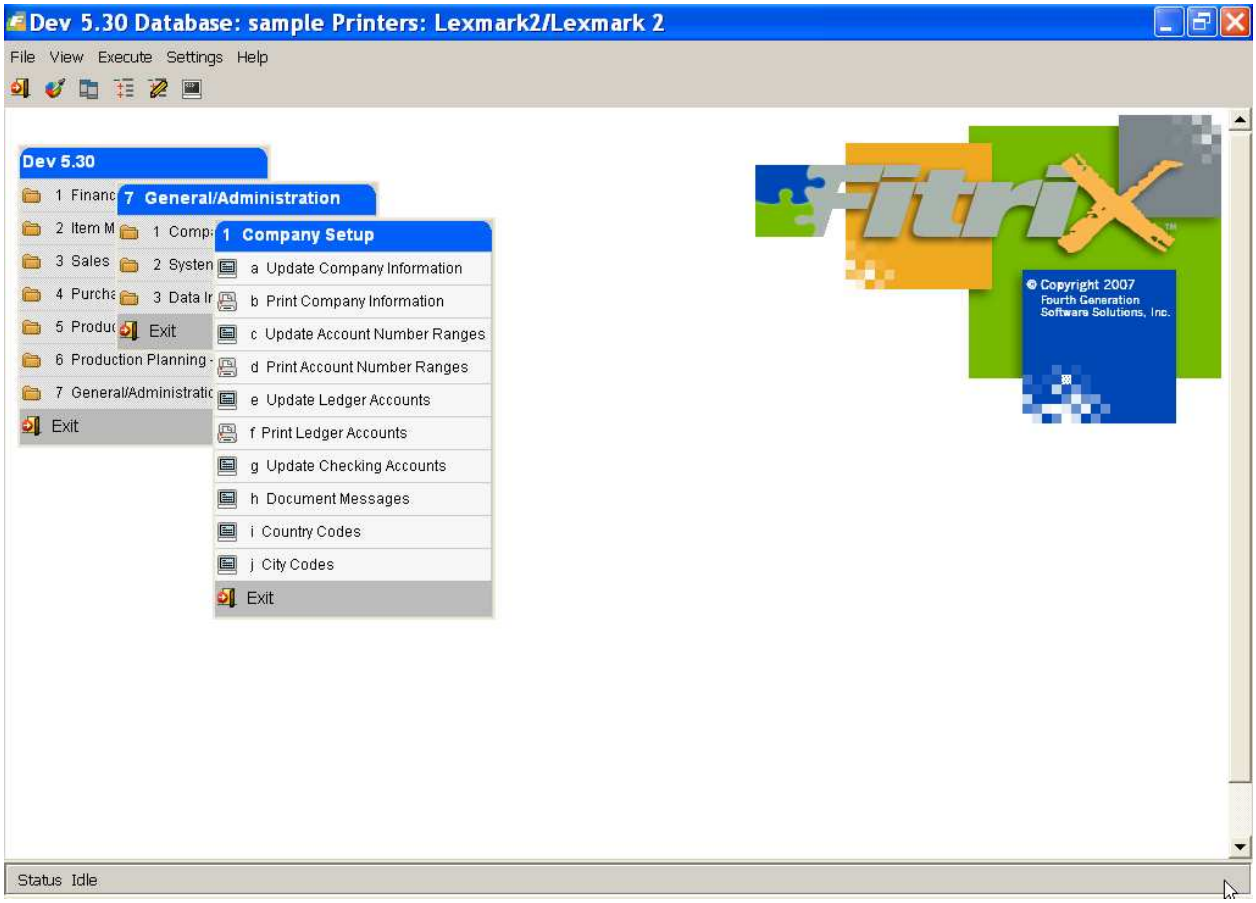
Company Set Up & Multilevel Tax

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 Set Up Company Menu contains the menu options for setting up company information and base files.

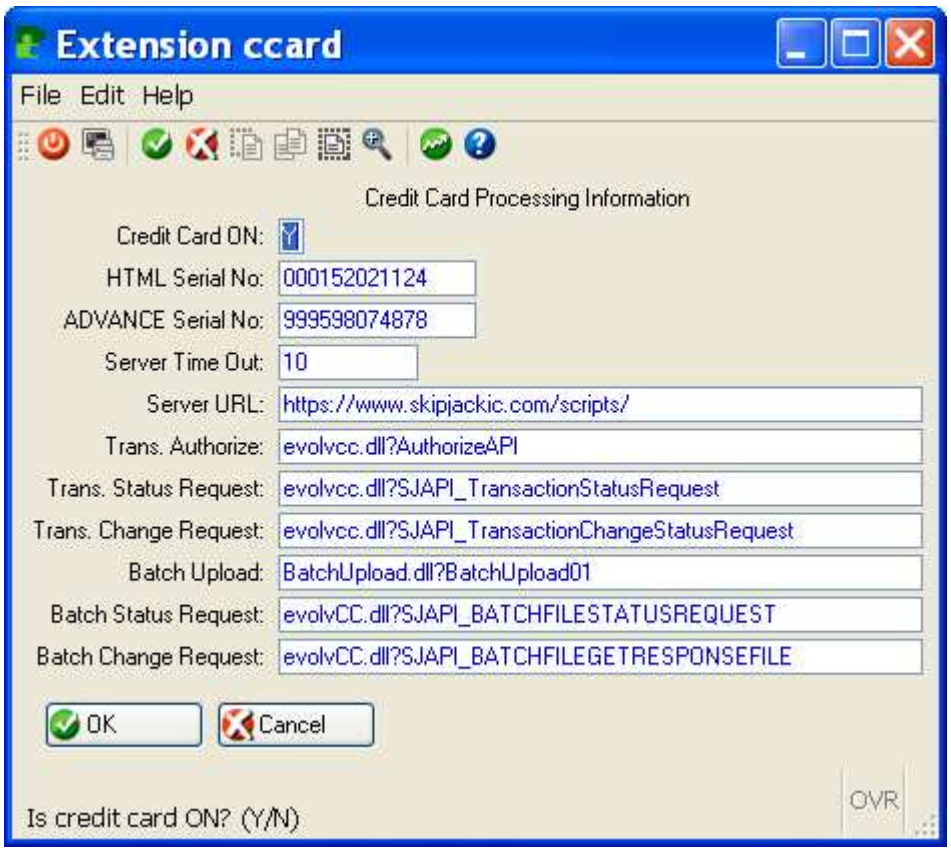
To view this screen, select any General/Administration from the main menu, and then select Company Setup.



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.
Note: By clicking on the Addl Info, a screen containing additional information, such as telephone number, displays. By clicking on Credit Card icon, a screen containing information needed to use Credit Card processing displays.



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.

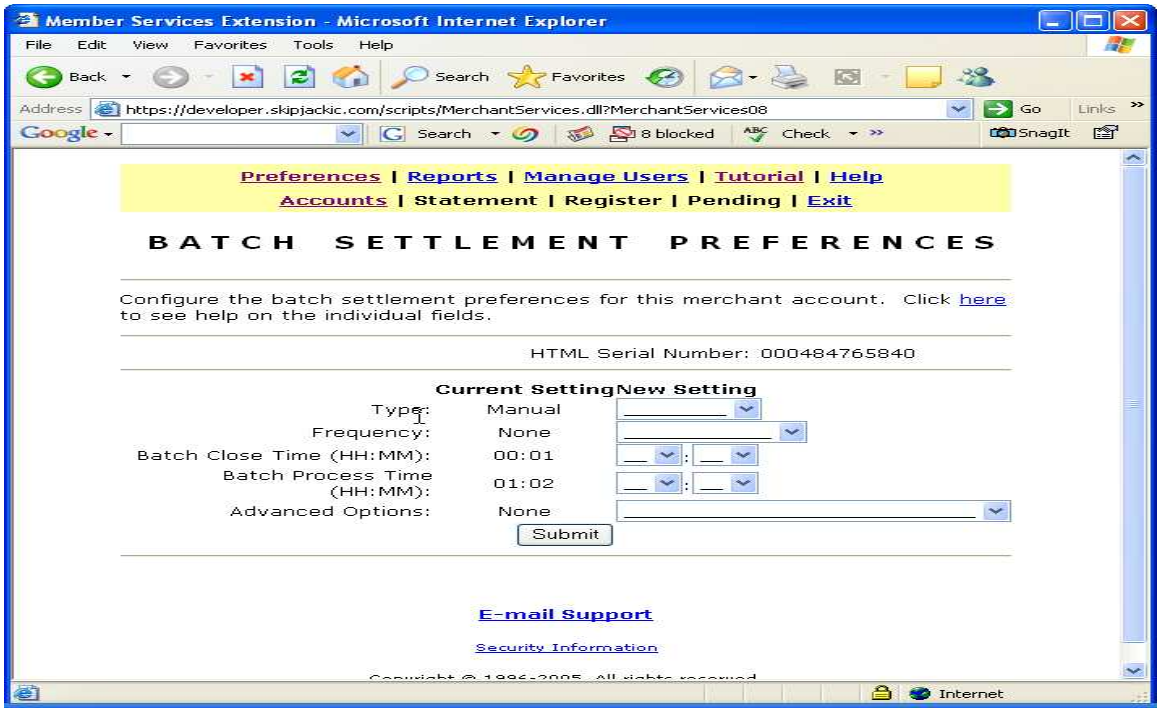
Batch Upload – assigned by Skipjack to upload batches for settlement

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).

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.



You will also need to:

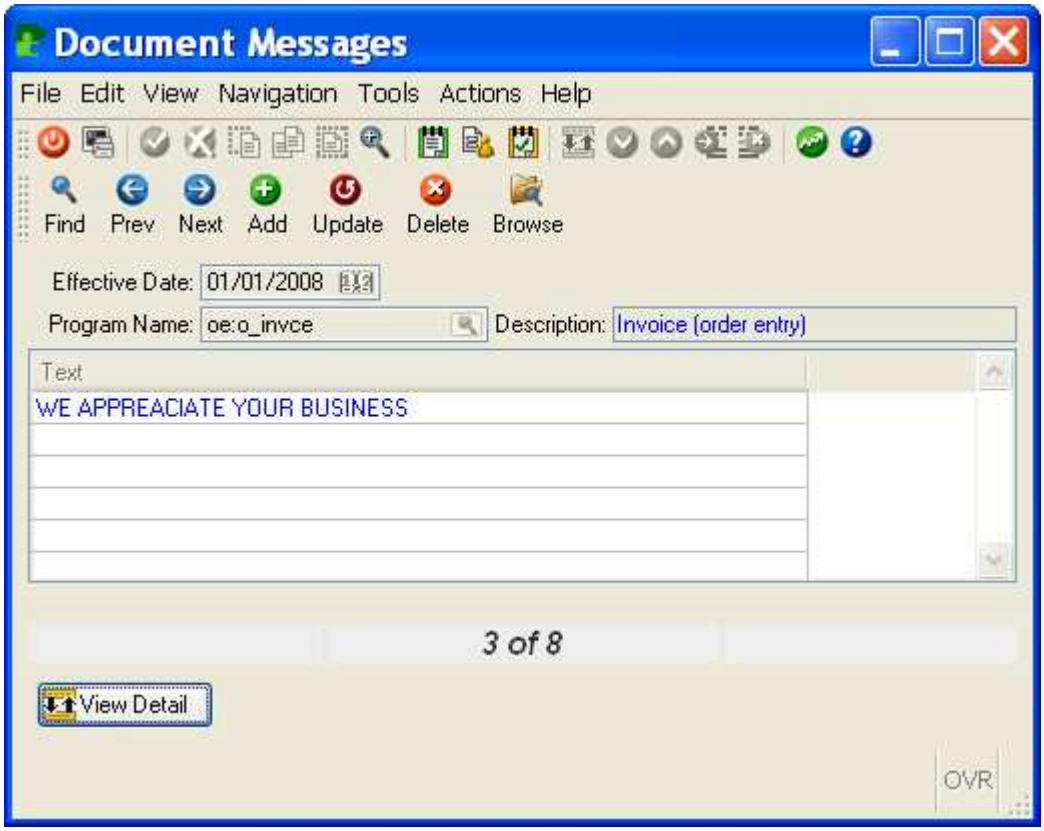
Enable blind credits - Click "Edit Account" button and enable "Allow Blind Credits." option. This is so all outstanding credits automatically settle at the end of the day.

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

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.

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 to enter messages on various forms.



Go into Add mode.
Enter the effective beginning date for the message.
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

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

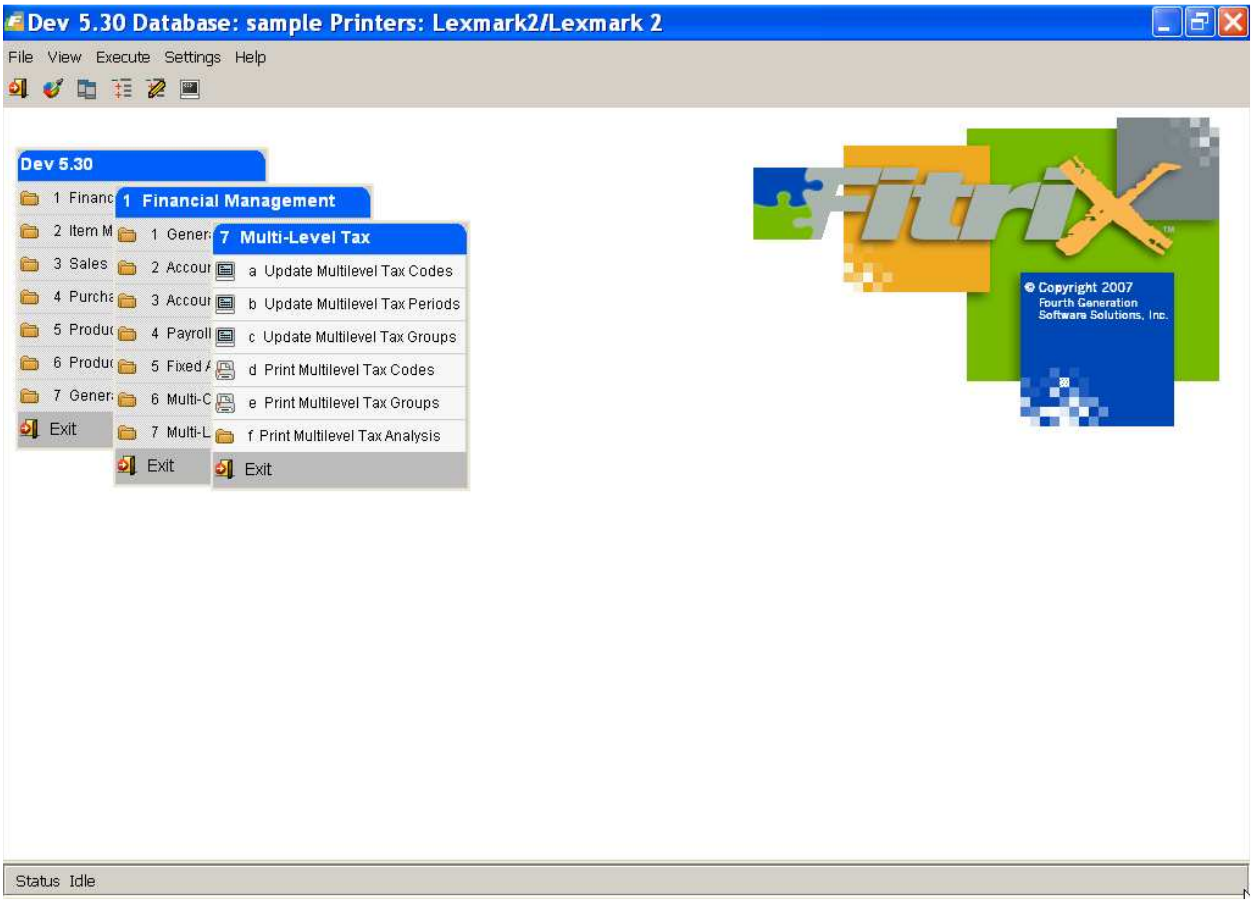
Country Codes - this program comes preloaded with countries around. When setting up customer, ship-tos, vendors, and pay-tos the country code is validated against the countries found here.

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.

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

Multilevel Tax

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



The menu selections are:

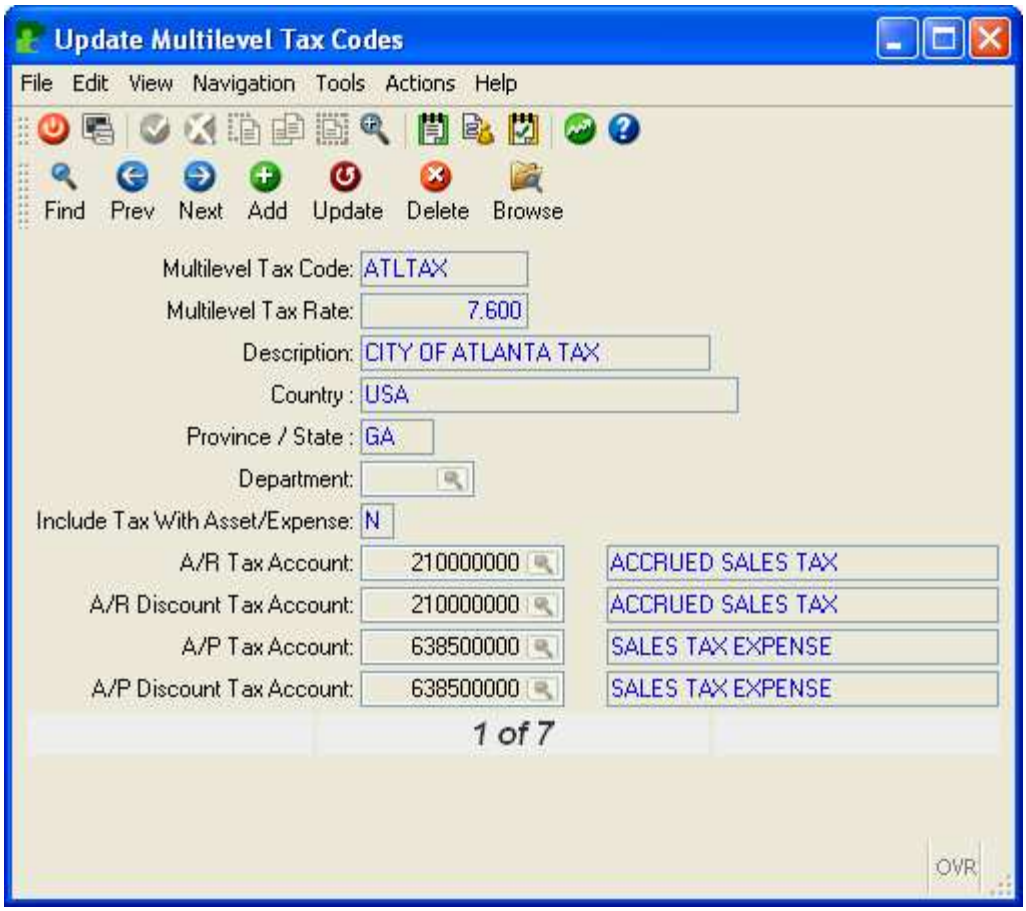
Update Multilevel Tax Code - A specific code that identifies a percentage for taxation.
Update Multilevel Tax Group - A grouping of one or more tax codes that comprise a specific tax situation. For example, if a sales tax is comprised of a county and city tax, you would first set up a tax code for county 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.
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 **(a) Update Multilevel Tax Codes**. The Multilevel Tax Code data entry screen displays
2	Click the **Find** button
3	Press the **Enter** key. All multilevel tax code records are retrieved.
4	Click the **Nxt** or **Prv** buttons to navigate to the record you wish to view.
5	Update the record, and then click OK.
6	Press **Quit** to return to the Multilevel Tax menu.

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



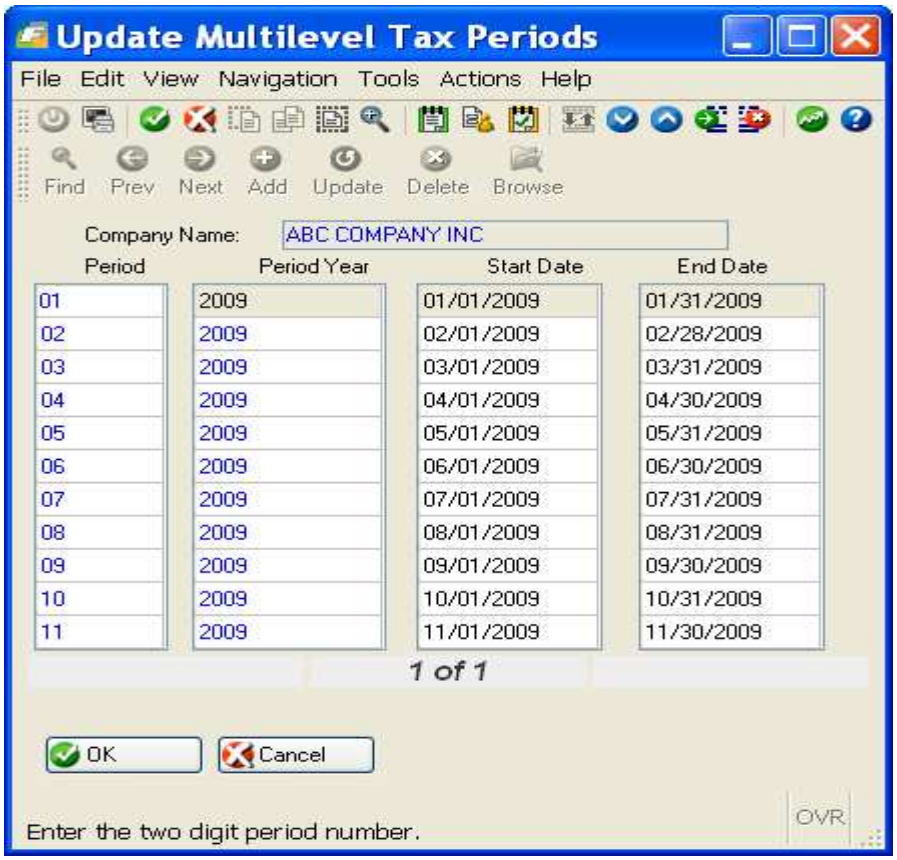
The field descriptions for this screen are:

Field	Description
Multilevel Tax Code:	User defined code unique for a specific tax rate.
Multilevel Tax Rate:	Tax rate entered as a percentage.
Description:	User defined description for tax code and rate.
Department:	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.
Include Tax with Asset/Expense:	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).
A/R Tax Account::	Enter the appropriate accounts receivable account number to which the tax will post. This field is required.
A/R Discount Tax Account:	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.
A/P Tax Account::	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.
A/P Discount Tax Account:	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) Update Multilevel Tax Periods.** The Multilevel Tax Code data entry screen displays
2	Click the **Update** button. *Note:* 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	**Update** 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.



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

Field	Description
Multilevel Tax Group Code:	A unique User defined code identifying a tax group
Description:	Tax Group Description.

Field	Description
Tax Code:	Allows you to define at least one code for a Tax Group. You can have up to four tax codes.
Description:	System generated, based upon the tax code defined.
Rate:	System generated, based upon the tax code defined.
Cumulative:	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.

Batch Control

NOTE: Batch control is covered in greater detail in Chapter 11 of 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 #l 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:

Module	Application	Batch Type
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

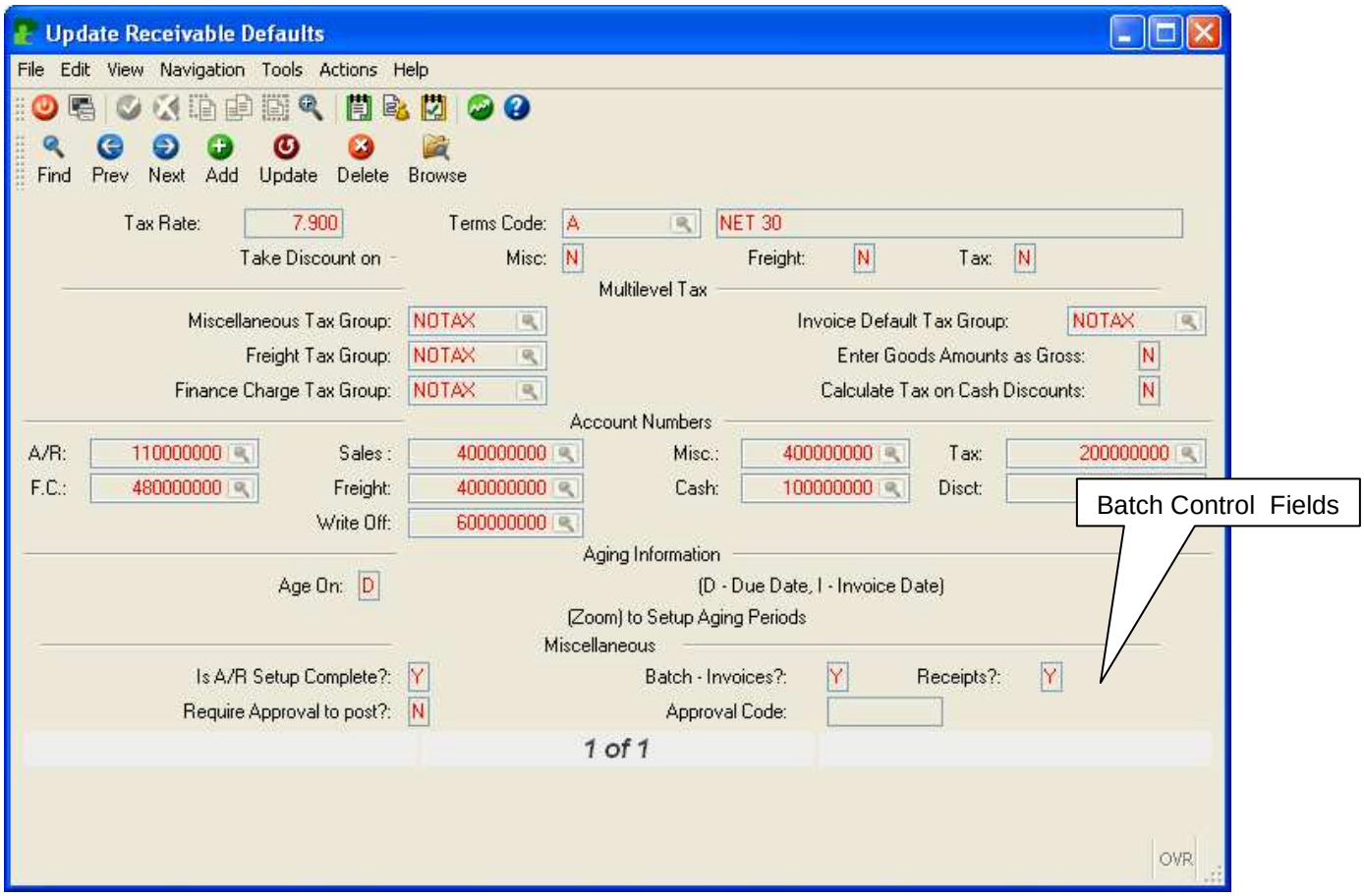
The mechanics of batch control are identical in each application.

Activating Batch Controls

TO ACTIVATE BATCH CONTROL (INITIAL SET UP):

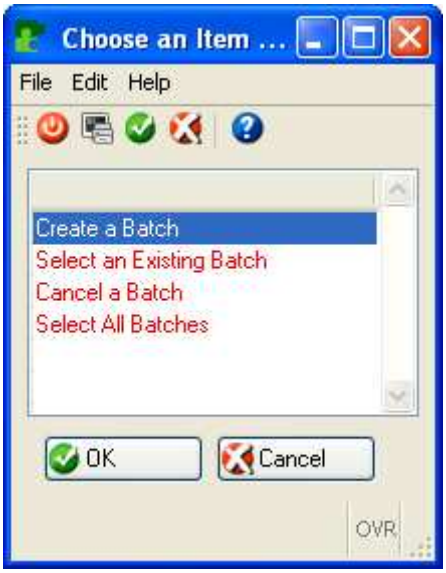
Step	Action
1	Select the Set up menu for each module and then select the update defaults menu.
2	Select update from the menu and move cursor to batch field.
3	From the **Batch** field, change flag to **Y** to activate batch control.
4	From the **Require Approval To Post** field choose **Y** or **N**. If flag is set to **Y**, 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. If approval is not necessary, the flag should bet set to **N**. *Note:* Once a batch has been approved for posting, the user can make no changes to the batch.

Step	Action
5	From the **Approval Code** field, enter the approval code needed to approve batches for posting. *Note:* The Code entered will not be visible on the screen. *Note:* If at a later date this code needs to be changed, original code will be needed to access this field.
6	Finish updating, and then click OK.
7	Click Exit or Press Quit to return to the menu.



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

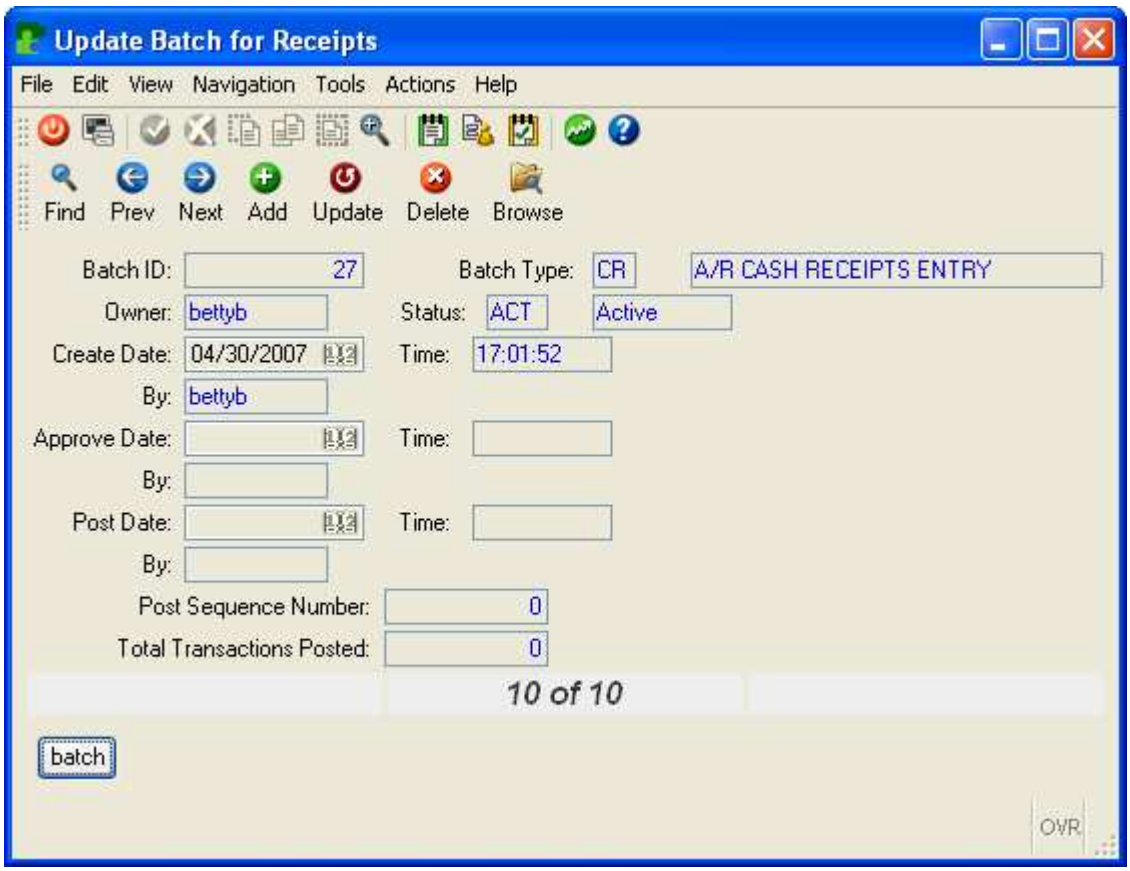
A Batch can be approved from the Administration menu or from within the application using the Batch Maintenance screen.

Administration Menu:

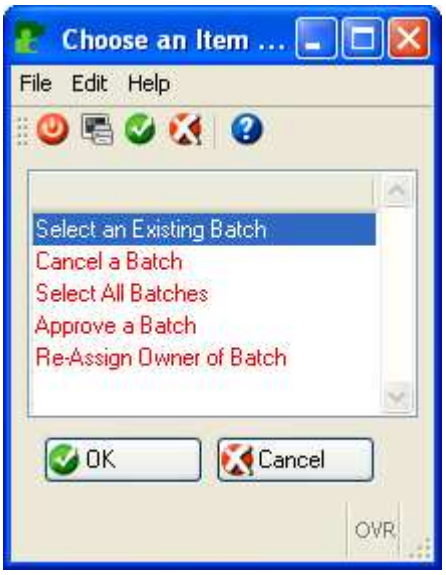
There is a menu option at the end of each Administration menu within each module. All batches regardless of module type can be reviewed and approved from the Administration menu.

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.).



Step	Action
1	Choose option **Batch Maintenance**. From AR, AP, GL, or CD menus. The Batch Maintenance data entry screen displays.
2	Click the **Find** button
3	Press the **Esc** key. All batch control records are retrieved.
4	Click the **Nxt** or **Prv** buttons to navigate to the record you wish to view.
5	Select **Options** from the Action Menu, and then select batch from the action sub-menu.

Step	Action
6	The following picker window displays:  *Note:* If batch displayed on screen is approved (status = APR), picker window will not have an Approve option. It will have an Unapprove option instead.
7	Click the **Approve a Batch** option, and then click **OK.** *Note:* You can also unapprove or re-assign ownership of a batch using this procedure: **Approve Current Batch** - Batch is now approved for posting and no changes can be made to the batch. **Unapprove Current Batch** - this option is used to "unapprove" 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) **Re- Assign Owner Of Current Batch** - This function is used to re-assign an active batch to a different user.
8	The **Status** updates to **APR**. Click **Exit** or press **Quit** 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 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.**

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)elete allows you to delete the document that is currently being displayed. There are exceptions to this; for example in AP a posted document cannot be deleted.**

ZOOM Command

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

1. **Click Exit three times to return to the main menu and then go to (3) for 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 view through "windows", items from which to make a choice in filling in this field.**

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.**

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. **Click exit three times to 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 Accounts Payable from Main Menu.**
2. **Choose (9) from Accounts Payable Menu (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 Shift 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.**
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.**

Lab Exercise c: Set Up 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 General Ledger 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 items 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. **Click Exit or press (Q) to return to the menu.**

Tax Periods

1. **Select Update Multilevel Tax Periods.**

2. **Define monthly tax periods for the next year after the current year beginning with January for period 1 by choosing (U)pdate. Entry will be:**

Period	=	01
Period Year	=	2008
Start Date	=	01012008
End Date	=	12312008

   Open all periods for 2008.

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
- Set up Multilevel Tax codes
- Introduction to Batch Processing

Lab Exercise a: Commands

Data Entry Commands

Objective: To become familiar with the screen action commands.

3. **Open the Accounts Payable main menu. From the Main Menu, choose selection 3. You may type "3" or click on it to select it.**

4. **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.**

4. **From this menu selection choose "a" to select Update Vendor Information**.

5. **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.

6. **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.**

7. **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.**

8. **Choose (N)ext and the screen will display the information for the next vendor.**

9. **Choose (P) and the screen will display the information for the previous vendor.**

10. **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.**

11. **Click OK to return to the original data entry screen.**

12. **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

13. **(D)elete allows you to delete the document that is currently being displayed. There are exceptions to this; for example in AP a posted document cannot be deleted.**

ZOOM Command

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

1. **Click Exit three times to return to the main menu and then go to (3) for 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 view through "windows", items from which to make a choice in filling in this field.**

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.**

6. **Click exit to return to the Payable Ledger menu.**

7. **Select Update Payable Documents again.**

8. **Choose (a)dd and position cursor on vendor field.**

9. **Enter "1*" and ENTER to display all the vendors whose code begins with 1.**

10. **Press ESC to return to the Vendor field without selecting a vendor code.**

13. **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.

14. **Click the Cancel button (or press ESC).**

15. **Click exit three times to 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 Accounts Payable from Main Menu.**
2. **Choose (9) from Accounts Payable Menu (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 Shift 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. **hoose (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.**
2. **Click Exit or press (Q) to go back to the menu.**

Print Account Number Ranges

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

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.**

Lab Exercise c: Set Up 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 General Ledger 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 items 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. **Click Exit or press (Q) to return to the menu.**

Tax Periods

1. **Select Update Multilevel Tax Periods.**

2. **Define monthly tax periods for the next year after the current year beginning with January for period 1 by choosing (U)pdate. Entry will be:**

Period	=	01
Period Year	=	2008
Start Date	=	01012008
End Date	=	12312008

   Open all periods for 2008.

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
- Set up Multilevel Tax codes
- Introduction to Batch Processing

Chapter 2 – Bill of Material

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, 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.

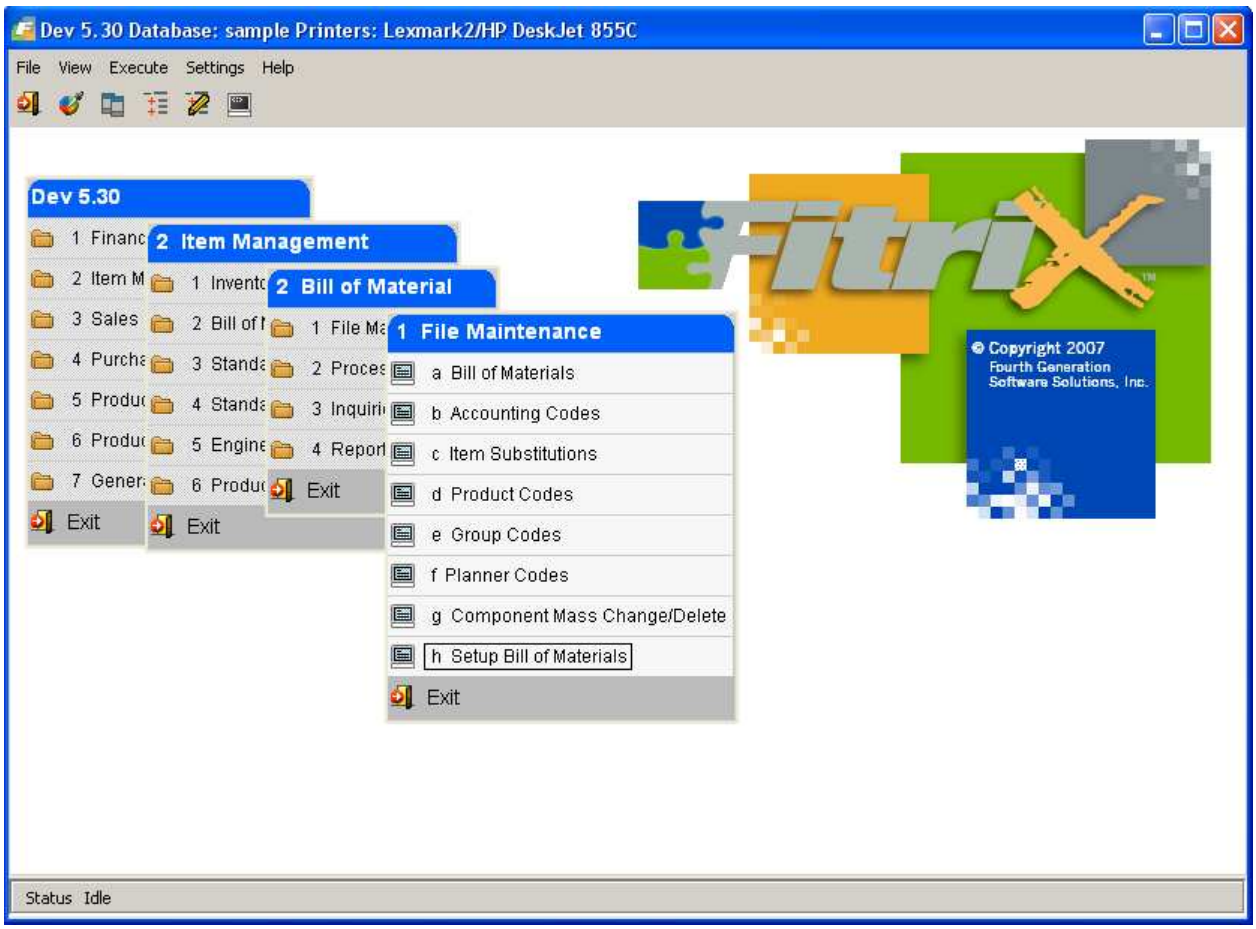
Material Planning uses bills of material when planning component requirement production and purchases from parent item demand.

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

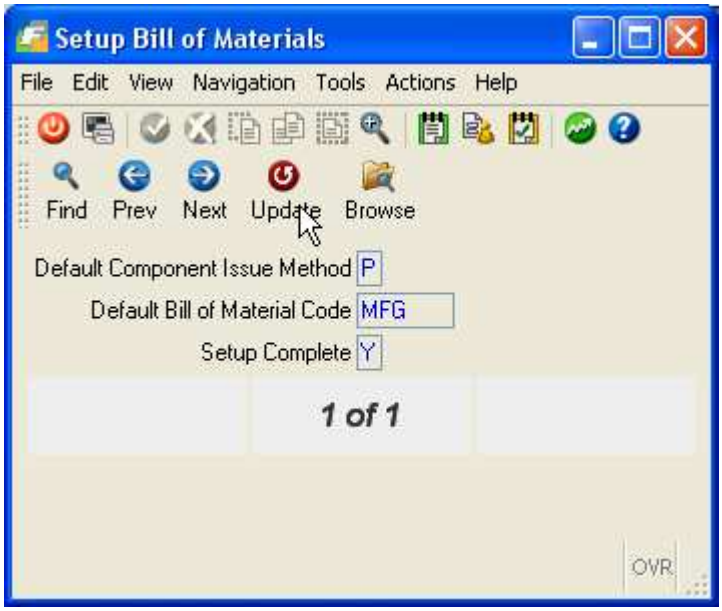
The options on this menu allow you to setup the initial Bill of Material default settings, and the reference files used in other sections of the Bill of Material module.



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	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: • 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. • 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. • 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. • 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.
Default Bill of Material Code	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.
Setup Complete	Set this value to Y when you are ready to begin using bills of material.

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.

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:

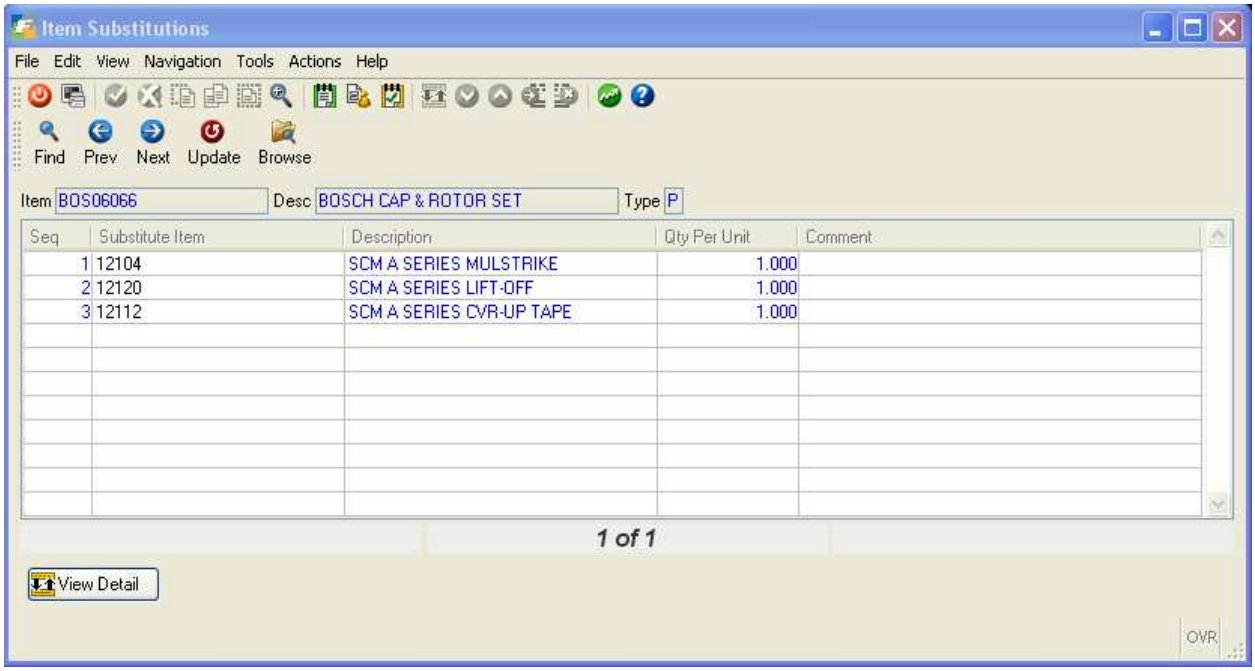
Field	Description
Accounting Code	This is a unique 13-character alphanumeric code that identifies the particular accounting code.

Field	Description
Account Type	One of the following values: • STK – used when stock component items are issued to a production order via Component Issue • NON – used when non-stock component items are issued to a production order via Component Issue • WIP RECEIPT – used when the end item on a production order is received via Production Receipt • LABOR – used when run labor is posted to a routing step on a production order. • SETUP – used when setup labor is posted to a routing step on a production order • OVERHEAD – used when overhead costs are posted to a routing step on a production order • OUTSIDE PROCESS – used when units are reported complete on an outside process routing step on a production order
Description	The description of the Accounting Code/Type combination.
Account Number	The G/L account number for which production transactions are to be posted.

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:



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
Desc:	The substitute item's description. This field is for reference only.

Field	Description
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)**.

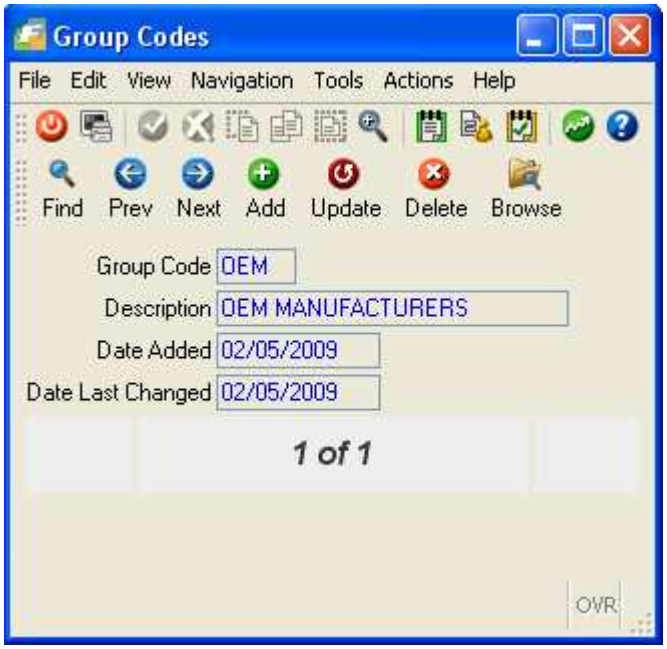
The following fields can be entered:

Field	Description
Product Code	Enter a unique 3-character product code
Description	The product code description
Type:	P=purchased, M=manufactured

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)**.



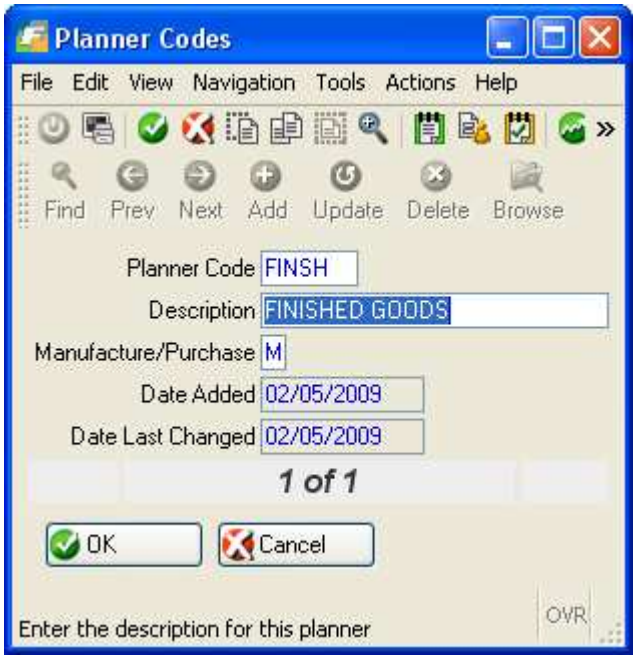
The following fields can be entered:

Field	Description
Group Code	Enter a unique 3-character group code
Description	The group code description
Type:	P=purchased, M=manufactured

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 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

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

All occurrences of the component item to be replaced are listed. Choose the parent item for which the Change/Replace action is to take place, by checking the box for the parent item.

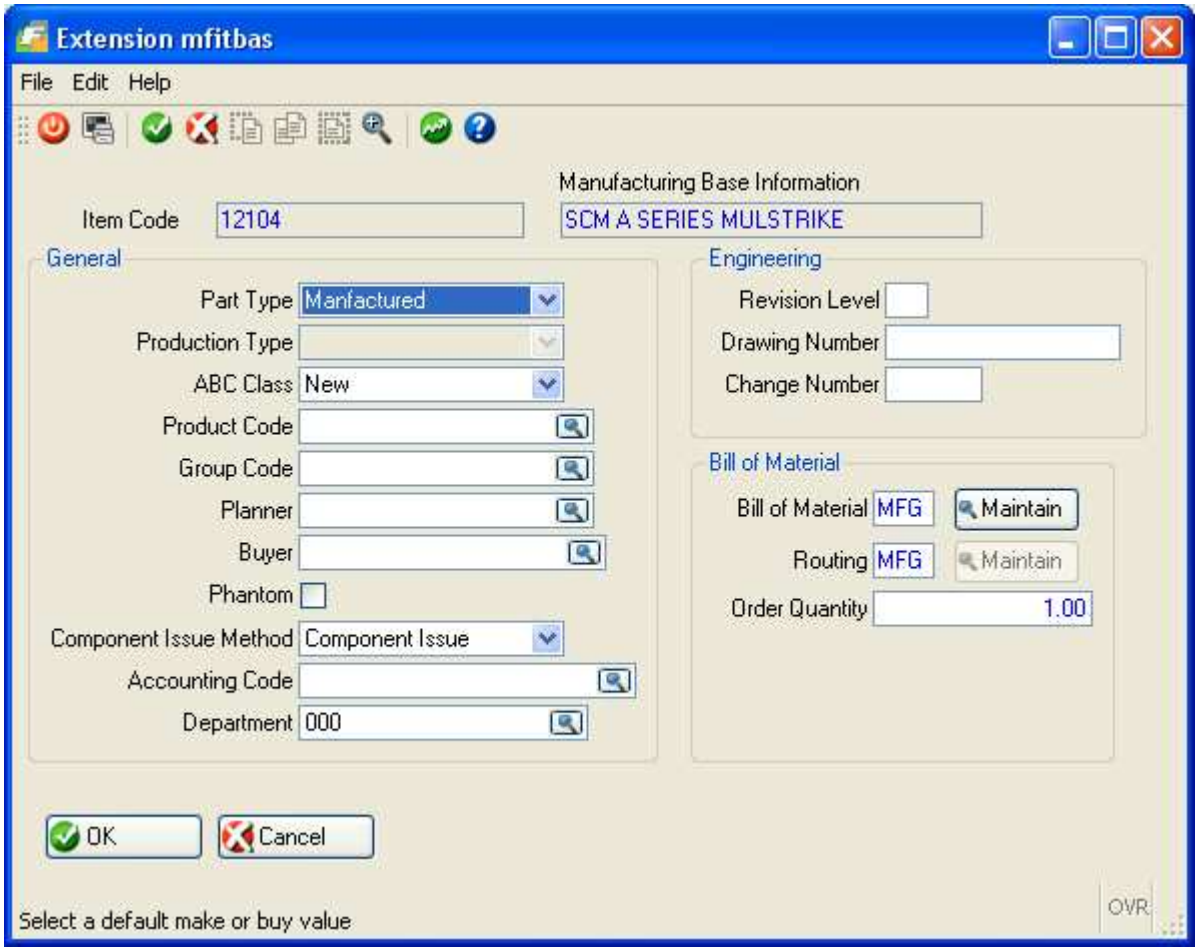
Maintaining Items

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. Training for this menu option is provided in the Fitrix Distribution Course Workbook. This workbook focuses on the fields relevant to the Manufacturing modules.

To access the manufacturing-related fields, add or update an item in Inventory Control/Inventory Maintenance/Update Inventory Information, then select the Mfg-Base button. The following window displays:



The following fields are available:

Field	Description
Item Code:	Inventory Item Code
Description:	Item Description
Part 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 an an item to be produced, warning messages will be displayed.
ABC Class	An optional classification to be used in reports. It rates an item in comparison to other items as an extension of it's cost times 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
G roup 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:	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', then this item is entered as a component in the parent items the 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 directory; any shortages will trigger an explosion to the component items in the collection.
Component Issue Method	For items which are to be used as components in a bill of material, one of the following values: • Component Issue – Issue this item via the Component Issue transaction in the Production Order Processing module • 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 items is being received to inventory. This is often referred to as 'backflushing'. • Operation Complete – Issue this item via the Operation Completion transaction in the Production Order Processing module. • 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.
Accounting Code	This field is reserved for future use
Department	This field is reserved for future use
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.

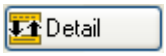
Field	Description
Engineering Drawing Number	Enter an optional drawing number that could be cross-referenced to a physical drawing or electronic document
Engineering Change Number	In cases where Revision Levels are used, this can further reference an engineering department change number that advanced 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 option 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 I which it is used.

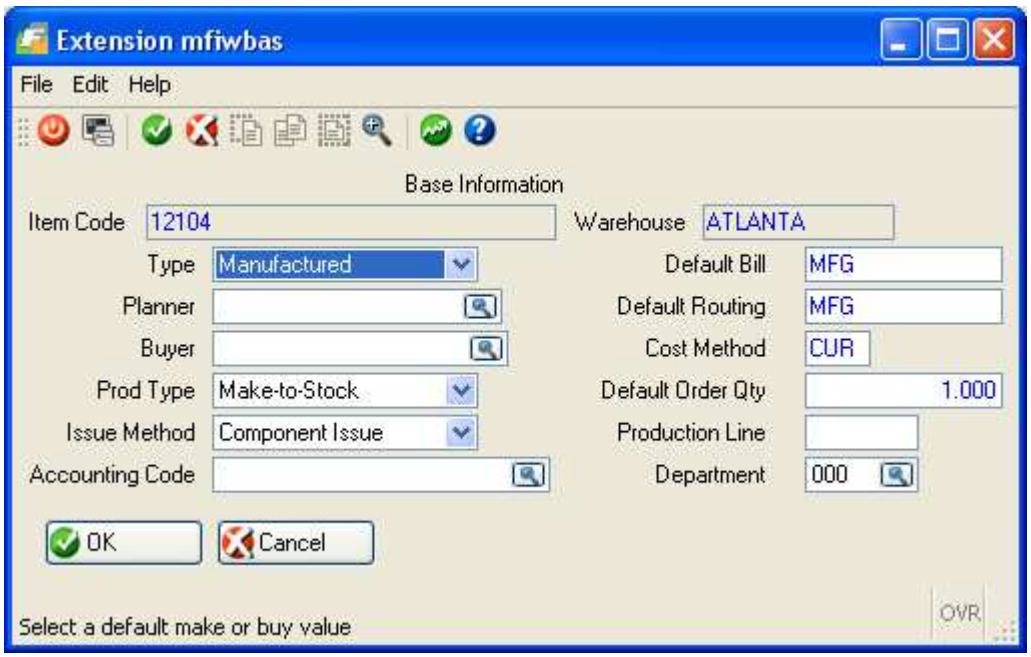
Maintaining Item/Warehouse Manufacturing Information

From the detail section if 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 

button, move the cursor to the warehouse to be maintained for the item, and select the 

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	This field is reserved for future use
Issue Method	For items which are to be used as components in a bill of material, one of the following values: • Component Issue – Issue this item via the Component Issue transaction in the Production Order Processing module • 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 items is being received to inventory. This is often referred to as ‘backflushing’. • Operation Complete – Issue this item via the Operation Completion transaction in the Production Order Processing module. • 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.

Field	Description
Accounting Code	This field is reserved for future use
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	This field is reserved for future use
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	This field is reserved for future use

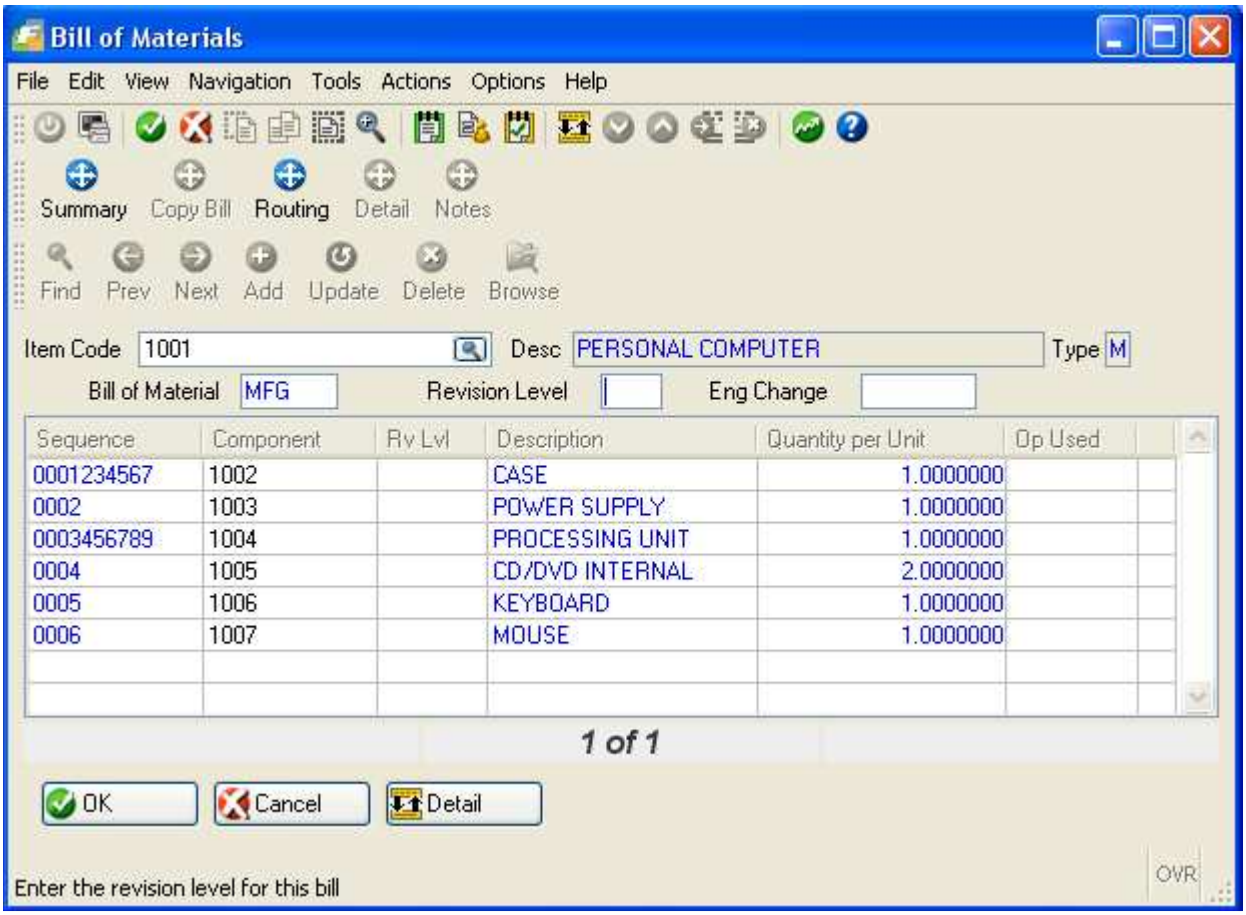
Maintaining Bills of Material

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 window displays:



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

Field	Description
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

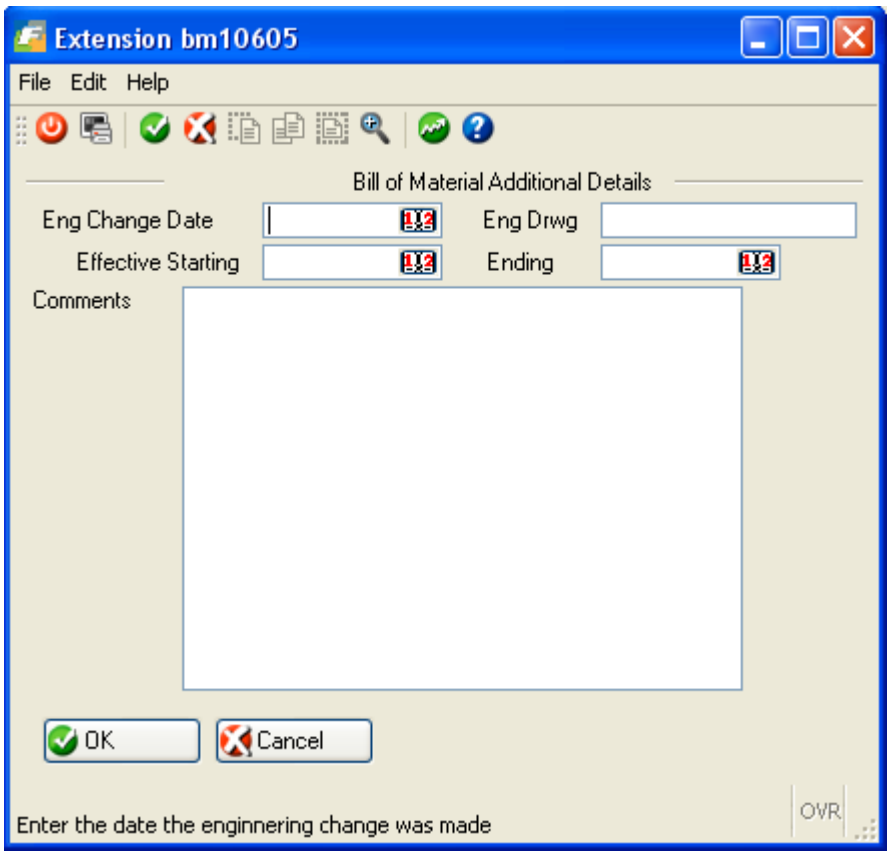
Enter one or more component items. The combination of the sequence and component item must be unique within the bill. This implies that the same component item can be entered more than once, as long as the sequence is different. This can be useful when a specific component is used throughout the bill, 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.

Summary

To display the summary window from the Bill of Material Header section, select the 

button. The following window is displayed:

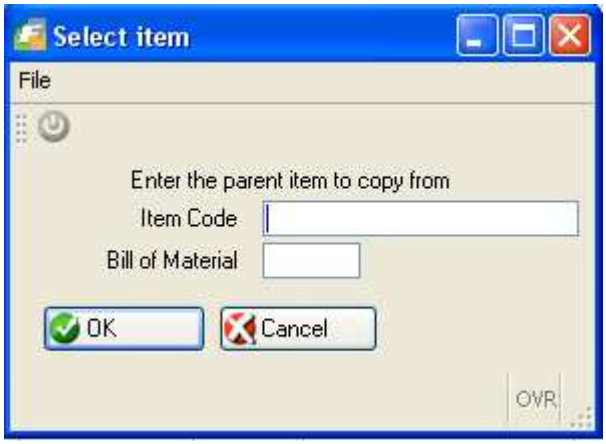


You can enter in the following fields:

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 Add button, enter the new Item Code and Bill of Material, then select the Copy Bill button. The following window displays:



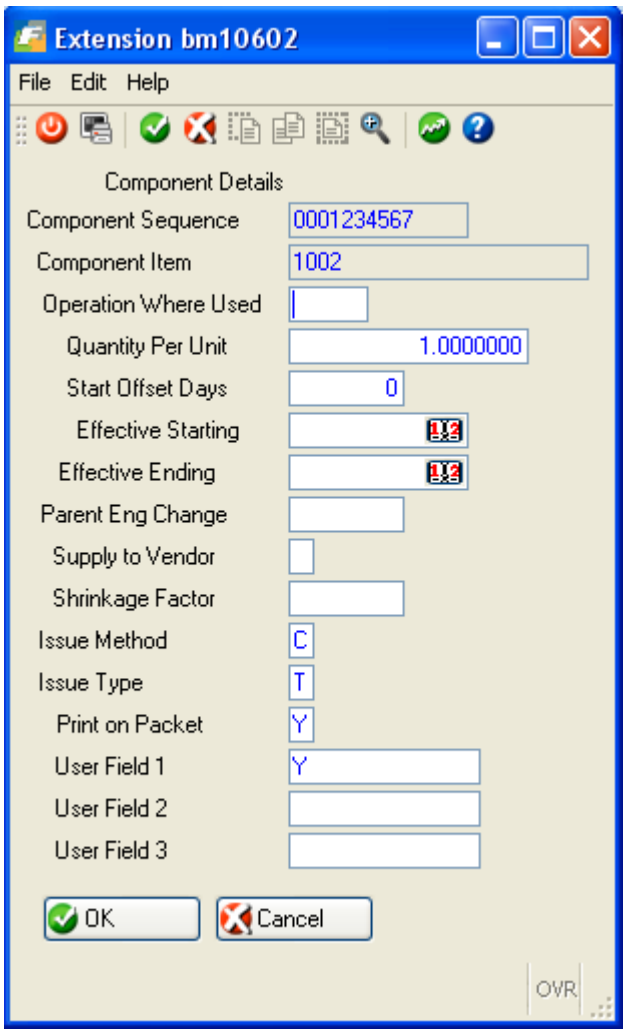
Enter the Item Code and Bill of Material to copy from, and click OK.

Routing

To activate the Routing Maintenance programs for the current item, select the Routing 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 Detail button. The following window is displayed:



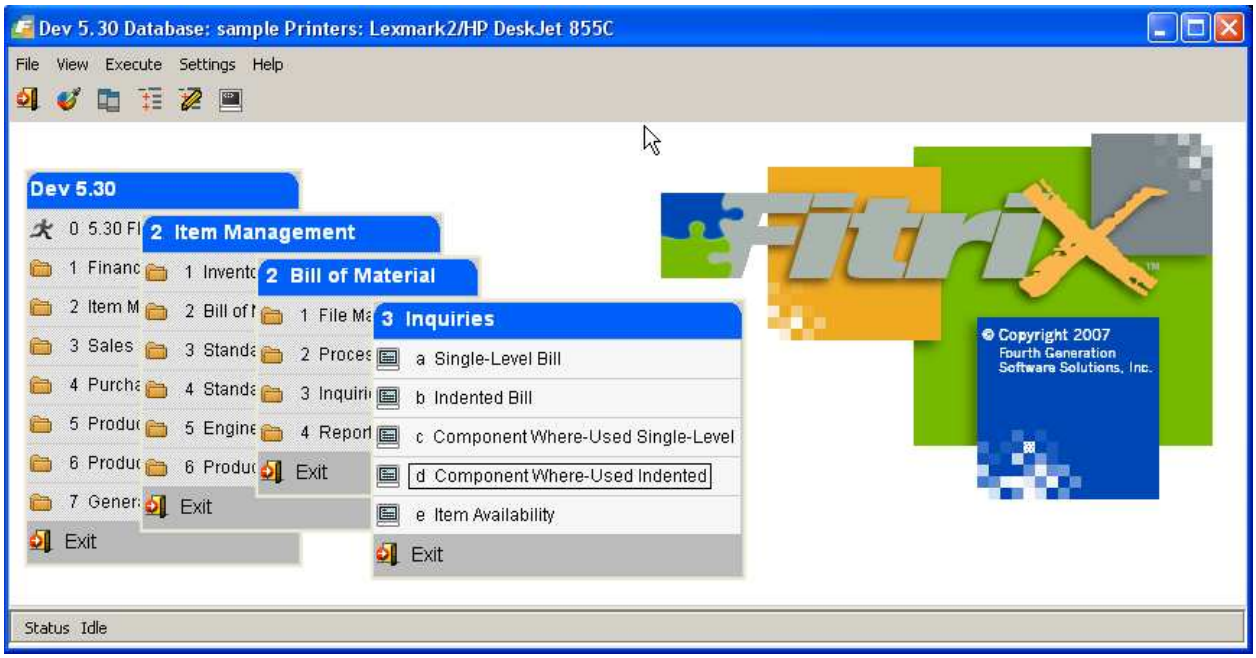
You can enter into the following fields:

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

Field	Description
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.
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: • C - Component Issue – Issue this item via the Component Issue transaction in the Transaction Processing submenu • P - Production Receipt – Issue this item via the Production Receipt transaction in the Transaciton 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 'backflushing'. • O - Operation Complete – this option is reserved for future use. • blank - 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.
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

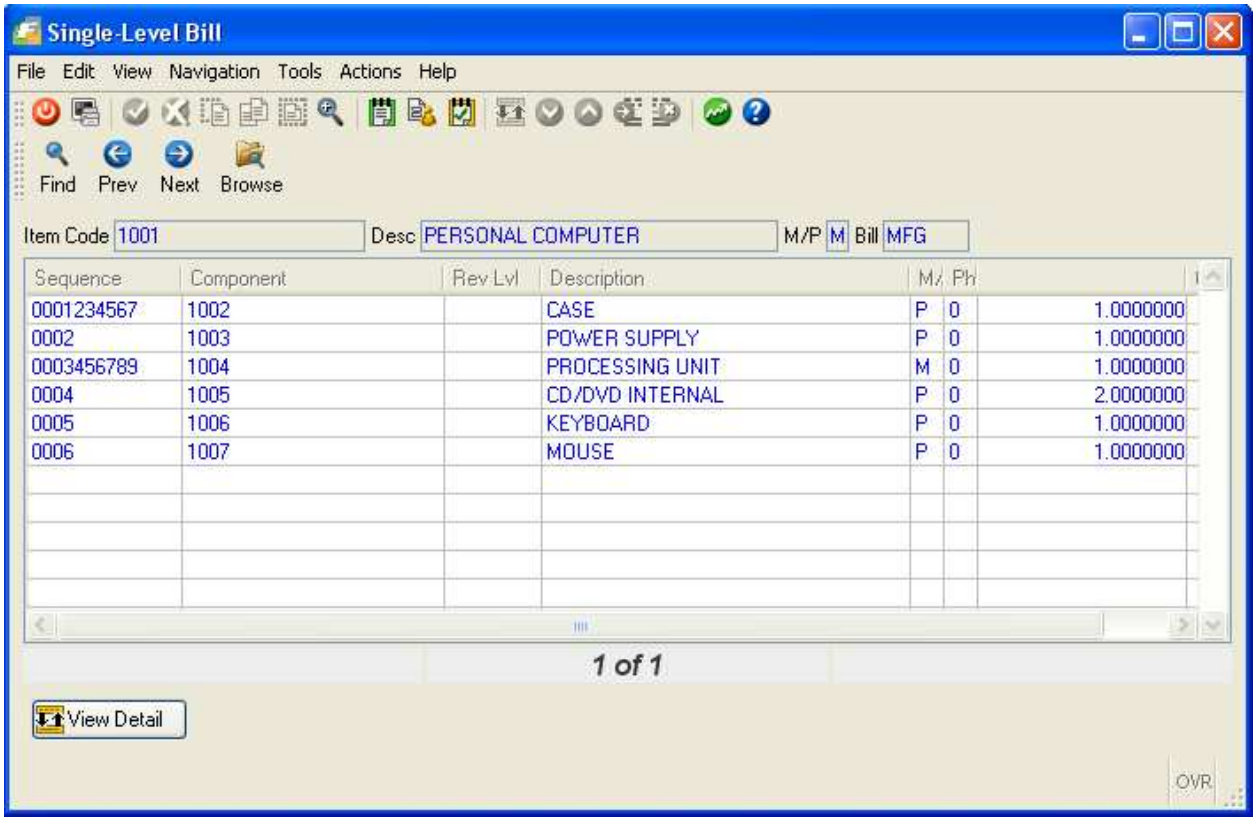
The options on the Inquiries allows you to view bills of material by parent or by component, in multiple formats



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:

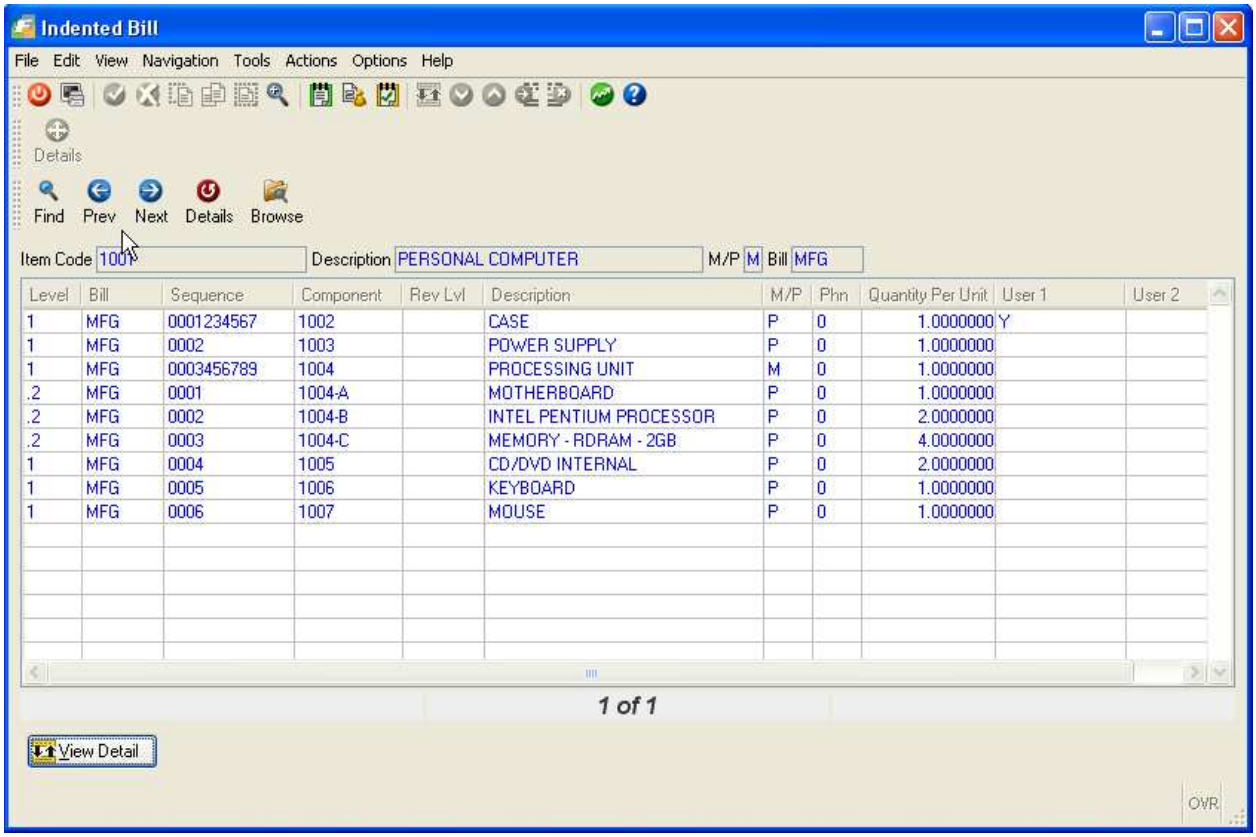


The fields displayed have already been defined earlier in the workbook

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:

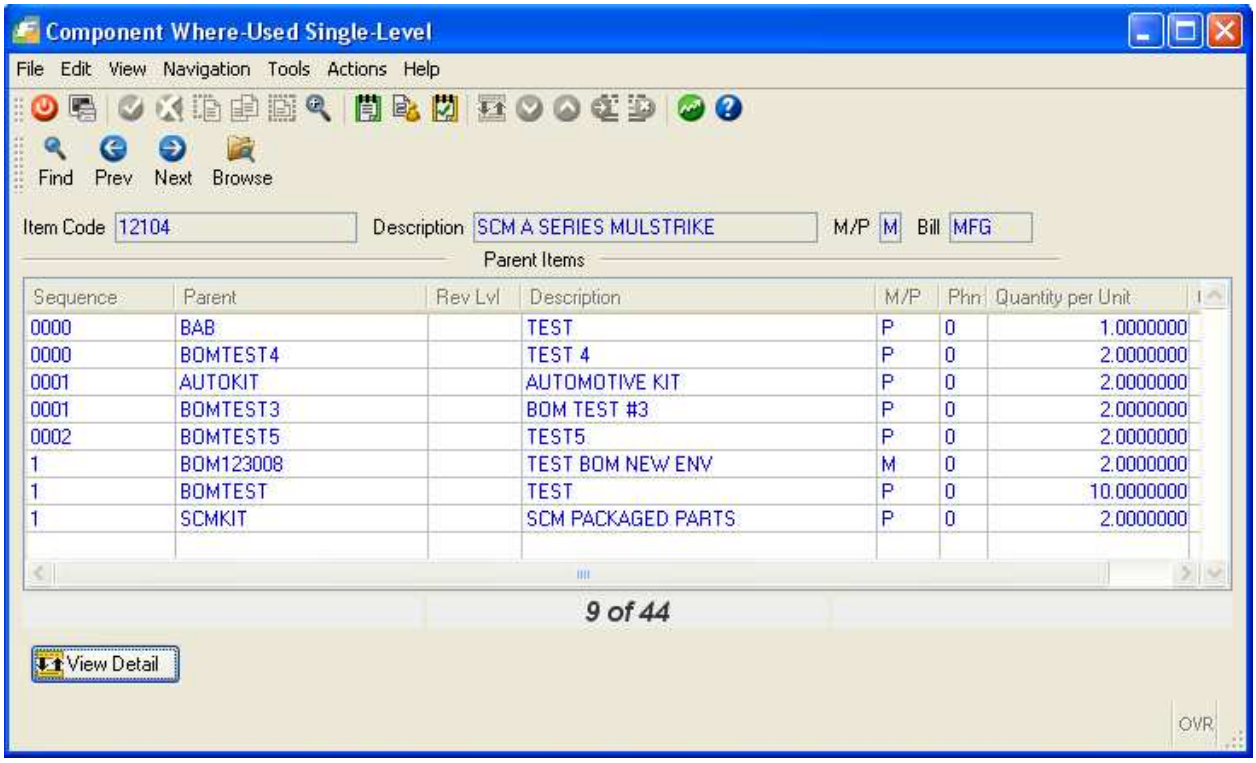


The ‘Level’ column indicates the current level relative to the parent item. For each component that has its own bill of material, the level is incremented and indented, showing the components. The other fields displayed have already been defined earlier in the workbook

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:

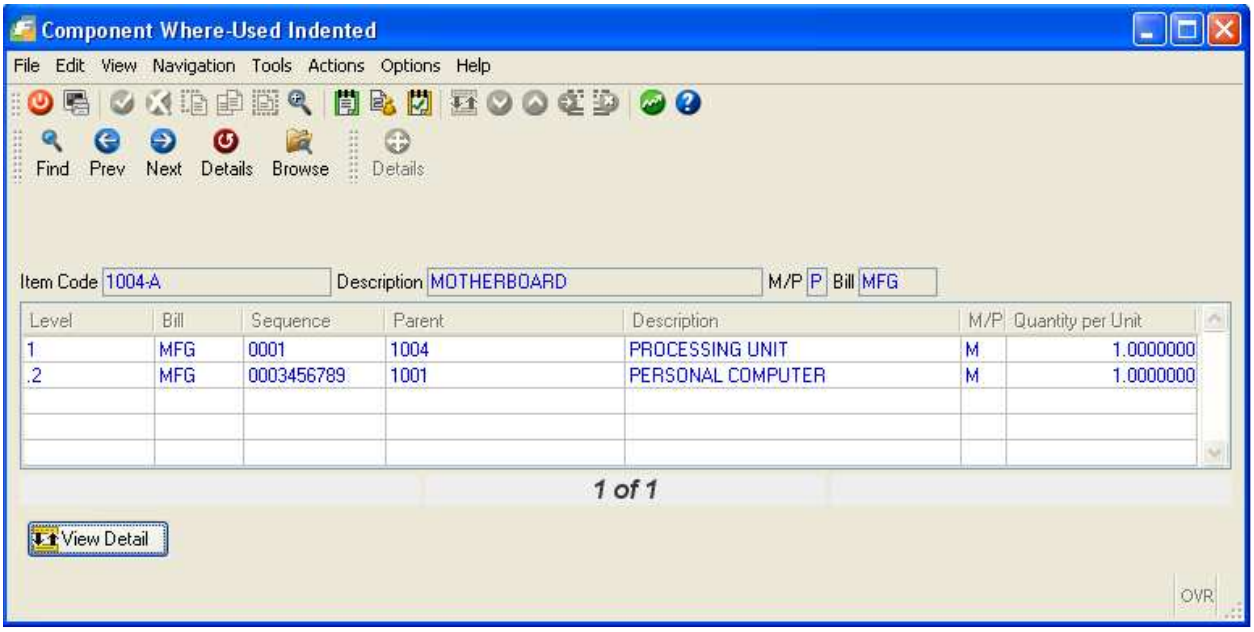


The fields displayed have already been defined earlier in the workbook

Component Where-Used Indented

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

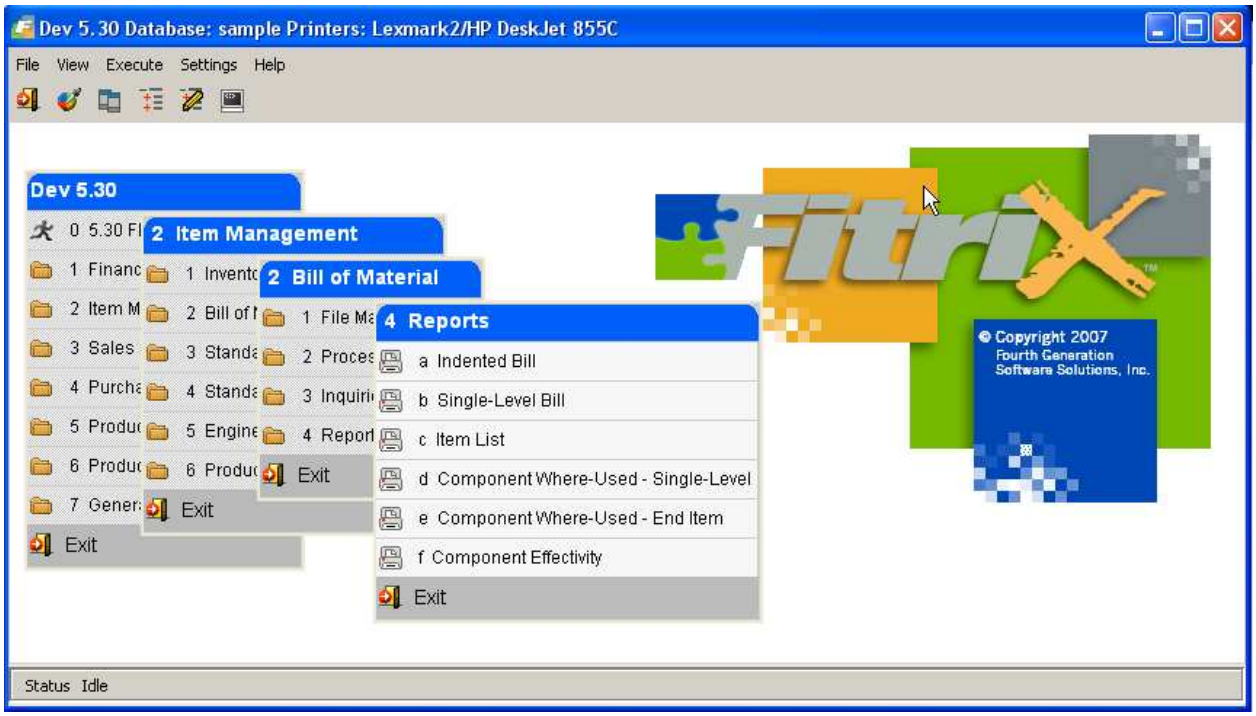
Select option d from the Inquiries menu. The following window displays:



The ‘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

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	Decide what account number you want to be posted to. 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	Decide what account number you want to be posted to. 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

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

1. **Item Code: use an item to be assembled**

   This item should be one of the O'Hair assembled panels

   It is in the FINISH product class

   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.

   Warehouse Detail

   This item will be in the ASSEMBLY and SHIPPING warehouses (or departments). First set up the new item in the SHIPPING Warehouse and then use the Copy Warehouse information to set up the ASSEMBLY Warehouse

   The standard order quantity is 1

   Determine the proper stocking unit of measure to be used

2. **Item Code: User one or more components to be used in assembly**

   These items should be O'Hair generic stile, O'Hair generic rail, O'Hair generic louver, O'Hair generic tilt rod, O'Hair hardware

   They are in the COMPS product class

   They are not serialized items

   The item types are Manufactured (hardware is Purchased)

   They are not phantoms

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

   Warehouse Detail

   These items will be in the COMPONENT (or MOLDING) and ASSEMBLY warehouses (or departments). First set up the new item in the COMPONENT/MOLDING Warehouse and then use the Copy Warehouse information to set up the ASSEMBLY Warehouse.

   The standard order quantity is 1.

   Determine the proper stocking unit of measure to be used

Update Inventory Item Information

1. Add the above items to their appropriate warehouses.

2. There are no beginning on-hand balances for any of the new items. You can create on-hand balances by receiving inventory either through the Inventory Control Transactions or through the Fitrix Purchasing Module.

Lab Exercise c: Bill of Material Maintenance and Inquiry

Enter Bill of Material Information

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

   Determine the proper quantity per unit to reflect any differences in units of measure between the assembled item and its components. If all components at this level are ‘EA’, this will be the number of units that is included in the assembly of the finished panel.

   Use Component Issue Method of ‘P’

2. Enter a bill of material for one of the component items as well. You may need to manually enter one or more of its components using Update Inventory Information first.

Review Bill of Material with Single Level and Indented Inquiries

Review the Component Where-Used Inquiries

Chapter 3 – Production Order Processing

Learning Objectives

To learn the type of information and tasks that are maintained and completed in Production Order Processing.

To learn the relationships of Production Order Processing to other modules in the Fitrix Accounting and Distribution System.

To learn the steps involved in setting up the module.

To learn the steps necessary to process a Production Order

To learn about transaction processing

To understand inquiries and reports in the module

Overview of Production Order Processing

What type of information is maintained in Production Order Processing?

Production Order processing stores the system information for processing orders tp produce and consume inventory, including:
Reference codes for filling orders including
Order types and hold codes
Orders for items to be produced
Component materials to be consumed in the production process
Dnd items being produced from orders
Due dates and quanties to be produced and consumed

What tasks or activities are performed in Production Order Processing?

Setting up the production order processing module
Entering and maintaining production orders
Issuing component materials to orders
Receiving items produced from orders
Checking status of orders via inquiries and reports
Closing orders and optionally archiving them to history

What relation does order entry have to other Fitrix Modules?

Production Order Processing is one of three manufacturing execution applications and is tightly integrated with four other Fitrix modules: General Ledger, Order Entry, Inventory Control and Purchasing.

Ledger information posts to the **General Ledger** activity table to update ledger account balances components issued and items produced.

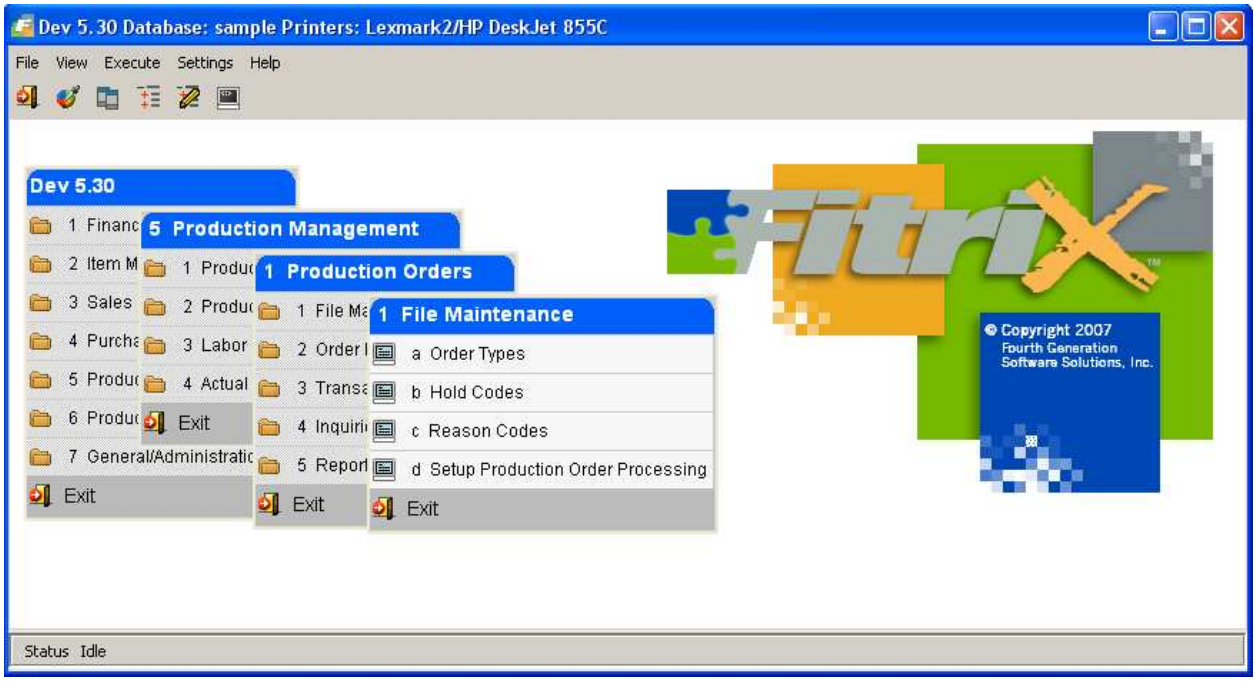
Order Entry has the ability to directly create production orders for orders with line type of MTO (make-to-order). Item quantity availability is expressed as the net of any commitments from Production Orders OR sales orders.

Inventory Control feeds the Production Order Processing system information about item availability.

Purchasing reports show components requirements from Production Orders for items received on Purchase Orders.

File Maintenance Menu

Options on the File Maintenance menu allow you to set up a number of reference files for production orders. To view this menu from the main menu select **Production Management > Production Orders > File Maintenance (option 1).**



The following options are available on this menu.

Order Types – Used to enter one or more types that control how the order is to be processed after it has been entered into the system.

Hold Codes – Used to define one or more hold codes that are used whenever a production order is placed on hold. It allows you to define multiple business reasons for holding an order (for example, material shortage, quality, scrap disposition, etc).

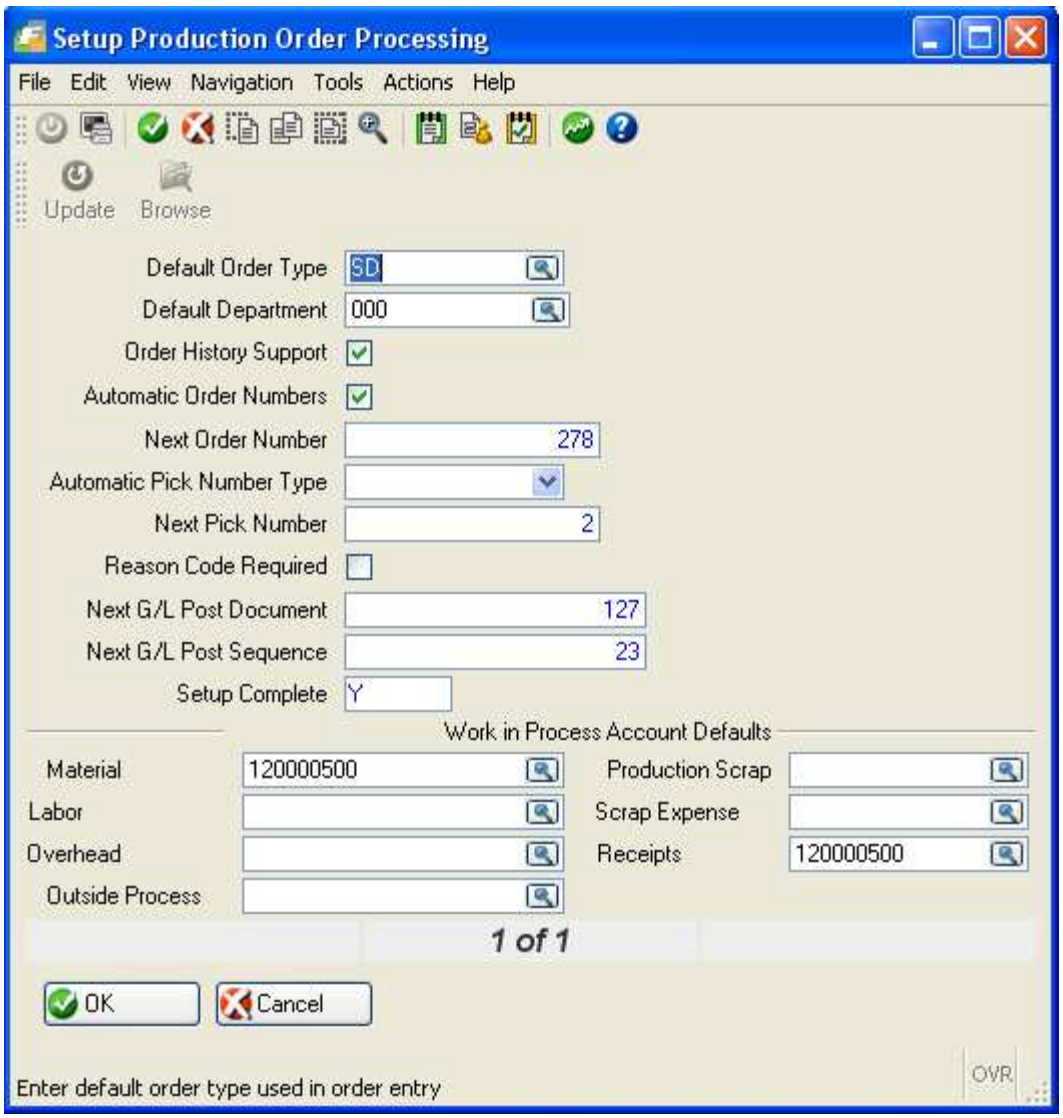
Reason Codes – Used when a Production Scrap transaction is entered, these codes define the reason for scrap.

Setup Production Order Processing – Used to enter the initial setup options for the module, as well as indicating that the module is ready for use.

Setup Production Order Processing

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

Select Setup Production Order Processing, from the File Maintenance menu **(option d).** The following window displays:



Select 'Update' to enter or change the defaults.

The following fields can be maintainted:

Field	Description
Default Order Type	Each production order must be assigned an order type. This type is validated against the Order Types reference table. The order type can be automatically filled in with the value entered here. The user can still change it to another valid order type.

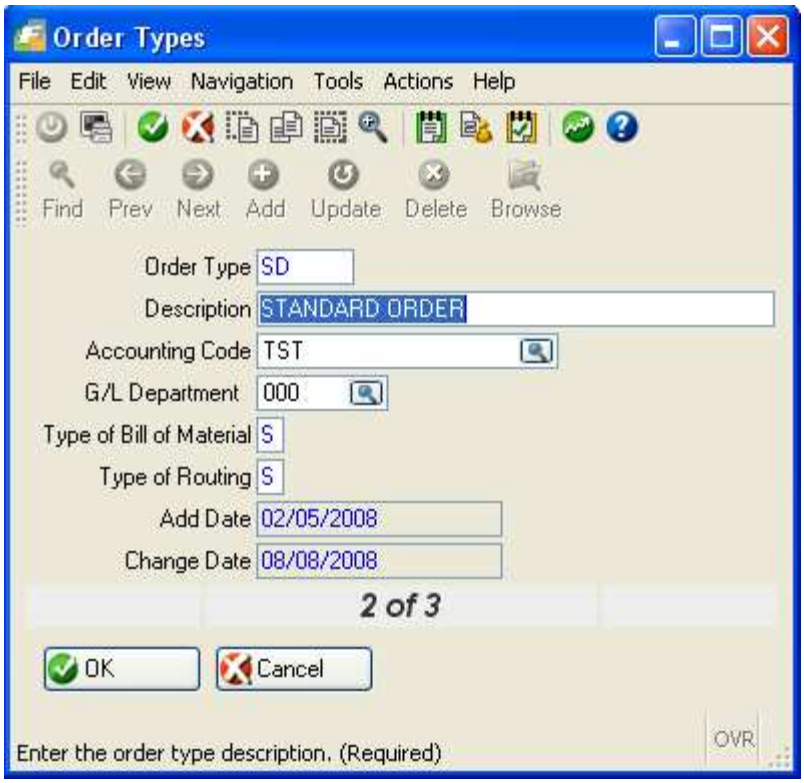
Field	Description
Default Department	Each order has a department code used to send transactions to Fitrix General Ledger. The value entered here will automatically fill in during Order Entry.
Order History Support	When production orders are closed, they can be archived to history files for later review via inquiries and reports. Check this box if you want orders to be archived when they are purged in the Order Closeout menu. If this box is unchecked, closed orders are removed when they are purged, and not copied to history.
Automatic Order Number	Check this box if you want to automatically assign production order numbers during Order Entry. You can still override the generated number if you wish.
Next Order Number	The next order number to be assigned, if you use Automatic Order Numbers
Automatic Pick Number Type	This option has two choices: • Unique per Order – The first pick list for a new order will be assigned number '1'. Reprints will increment from 1, to indicate the number of times a pick list has been printed for an order. • Sequential – Each pick list will be assigned a unique number, assigned from the entry in this setup screen
Next Pick Number	The next pick number to be assigned, when the Sequential option is selected for Automatic Pick Number Type
Reason Code Required	Check this box to require the entry of a reason code when an item is scrapped vi a the Production Scrap transaction
Next GL Post Document	The next document number to be assigned to transactions posted to Fitrix General Ledger
Next GL Post Sequence	The next posting sequence number to be assigned to transactions posted to Fitrix General Ledger
Setup Complete	Set this value to Y when you are ready to begin using production order processing.
WIP Default Account – Material	If accounting codes are not used for a Production Order, enter the account number to be debited when an item is issued to a production order with the Component Issue transaction
WIP Default Account – Labor	If accounting codes are not used for a Production Order, enter the account number to be debited when a labor transaction is posted to production order with the Labor Reporting transaction
WIP Default Account – Overhead	If accounting codes are not used for a Production Order, enter the account number to be debited when overhead for a labor transactions is posted to a production order with the Labor Reporting transaction
WIP Default Account – Outside Process	If accounting codes are not used for a Production Order, enter the account number to be debited when a transaction is posted to a production order for an Outside Process routing step, with the Labor Reporting transaction
WIP Default Account – Production Scrap	If accounting codes are not used for a Production Order, enter the account number to be credited when an end item is scrapped on a production order with the Production Scrap transaction.

Field	Description
WIP Default Account – Scrap Expense	If accounting codes are not used for a Production Order, enter the account number to be debited when an end item is scrapped on a production order with the Production Scrap transaction
WIP Default Account – Receipts	If accounting codes are not used for a Production Order, enter the account number to be credited when an end item is received to inventory on a production order with the Production Receipt transaction

Order Types

Order types must be entered before you can use them on a production order. In addition, at least one order type must be entered here before it can be selected as the default order type in the 'Setup Production Order Processing' menu option.

Select Order Types **(option a)**. The following window displays:



Below is a description of the fields which can be entered in the Order Types window

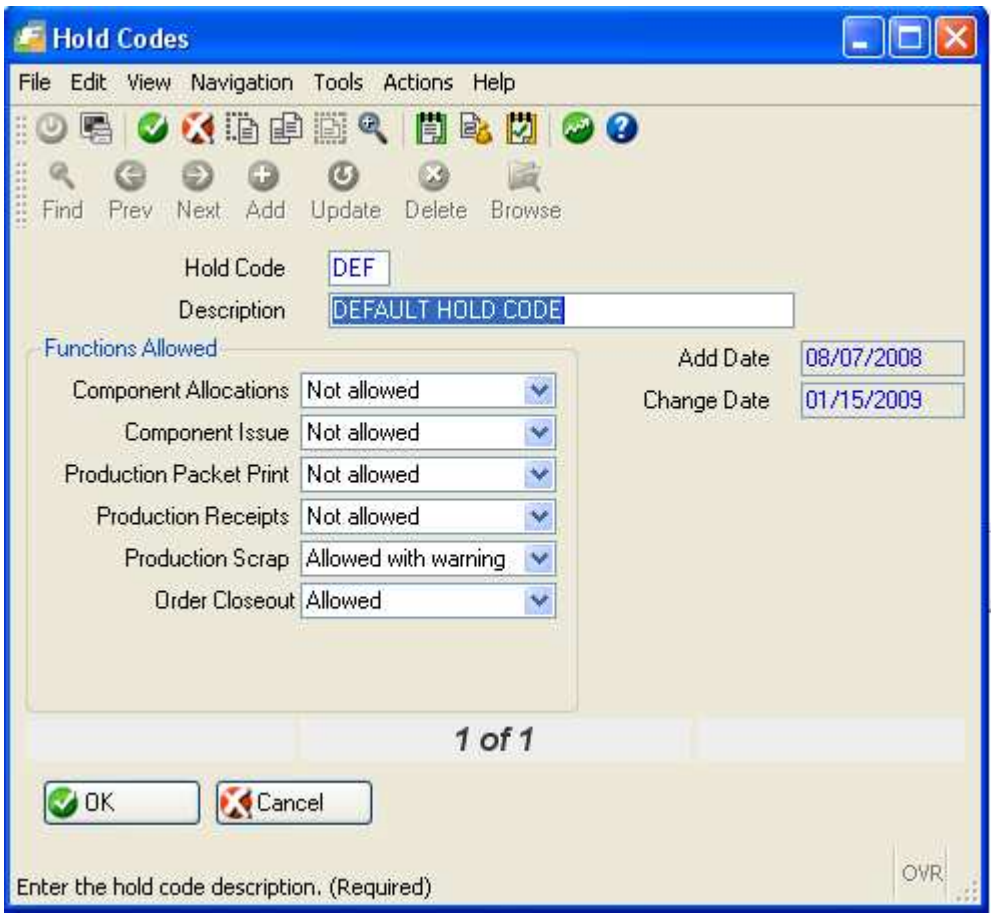
Field	Description
Order Type	Enter a unique 3-character identifier.
Description	Enter a description of the order type
Accounting Code	Enter a valid accounting code. This code will automatically fill in during Order Entry, when you select this order type.
G/L Department	Enter a valid Fitrix General Ledger Department. This code will automatically fill in during Order Entry, when you select this order type.

Field	Description
Type of Bill of Material	This value controls how a parent item's bill of material is processed during Production Order Entry. Select one of the following values: • S – Use the standard bill of material for the parent item entered, and DO NOT automatically display the components window • C - Use the standard bill of material for the parent item entered, and automatically display the components window before the order is saved • M – Do not use the standard bill of material for the parent item entered, but automatically display the components window before the order is saved
Type of Routing	This value controls how a parent item's standard routing is processed during Production Order Entry. Select one of the following values: • S – Use the standard routing for the parent item entered, and DO NOT automatically display the routing window • C - Use the standard routing for the parent item entered, and automatically display the routing window before the order is saved • M – Do not use the standard routing for the parent item entered, but automatically display the routing window before the order is saved
Next Order Number	The next order number to be assigned, if you use Automatic Order Numbers
Automatic Pick Number Type	This option has two choices: • Unique per Order – The first pick list for a new order will be assigned number '1'. Reprints will increment from 1, to indicate the number of times a pick list has been printed for an order. • Sequential – Each pick list will be assigned a unique number, assigned from the entry in this setup screen

Hold Codes

When you change the status of an active production order to 'H' (for hold), and hold code must also be entered to indicate a reason for the hold. This hold code is then used to control which types of transactions may or may not be processed while the order is held.

To view this screen, select Hold Codes **(option b)**. The following window displays:



Below is a description of the fields which can be entered in the Hold Codes window

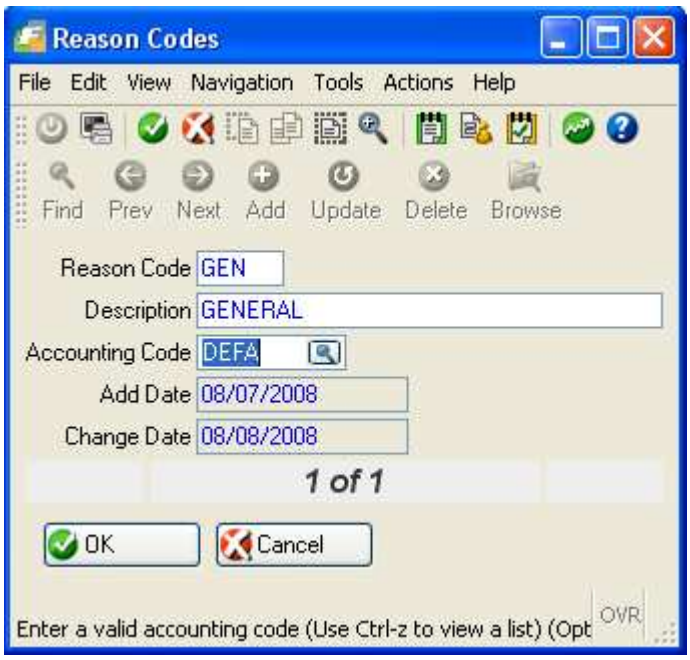
Field	Description
Hold Code	Enter a unique 3-character identifier.
Description	Enter a description of the hold code
Component Allocations	Select one of the following options: • Not allowed – the user will not be allowed to use this menu option for the held order • Allowed with warning – the user will be allowed to use this menu option, but a warning window will display reminding the user of the held status • Allowed – the user is allowed to use this menu option
Component Issue	Select one of the following options: • Not allowed – the user will not be allowed to use this menu option for the held order • Allowed with warning – the user will be allowed to use this menu option, but a warning window will display reminding the user of the held status • Allowed – the user is allowed to use this menu option

Field	Description
Production Packet Print	Select one of the following options: • Not allowed – the user will not be allowed to use this menu option for the held order • Allowed with warning – the user will be allowed to use this menu option, but a warning window will display reminding the user of the held status • Allowed – the user is allowed to use this menu option
Production Receipts	Select one of the following options: • Not allowed – the user will not be allowed to use this menu option for the held order • Allowed with warning – the user will be allowed to use this menu option, but a warning window will display reminding the user of the held status • Allowed – the user is allowed to use this menu option
Production Scrap	Select one of the following options: • Not allowed – the user will not be allowed to use this menu option for the held order • Allowed with warning – the user will be allowed to use this menu option, but a warning window will display reminding the user of the held status • Allowed – the user is allowed to use this menu option
Order Closeout	Select one of the following options: • Not allowed – the user will not be allowed to use this menu option for the held order • Allowed with warning – the user will be allowed to use this menu option, but a warning window will display reminding the user of the held status • Allowed – the user is allowed to use this menu option

Reason Codes

Use this option to enter one or more Reason Codes. When a Production Scrap transaction is entered, the user can enter a code indicating the reason for the scrap. The code must previously exist in the Reason Code table.

To view this screen, select Reason Codes **(option c)**. The following window displays:

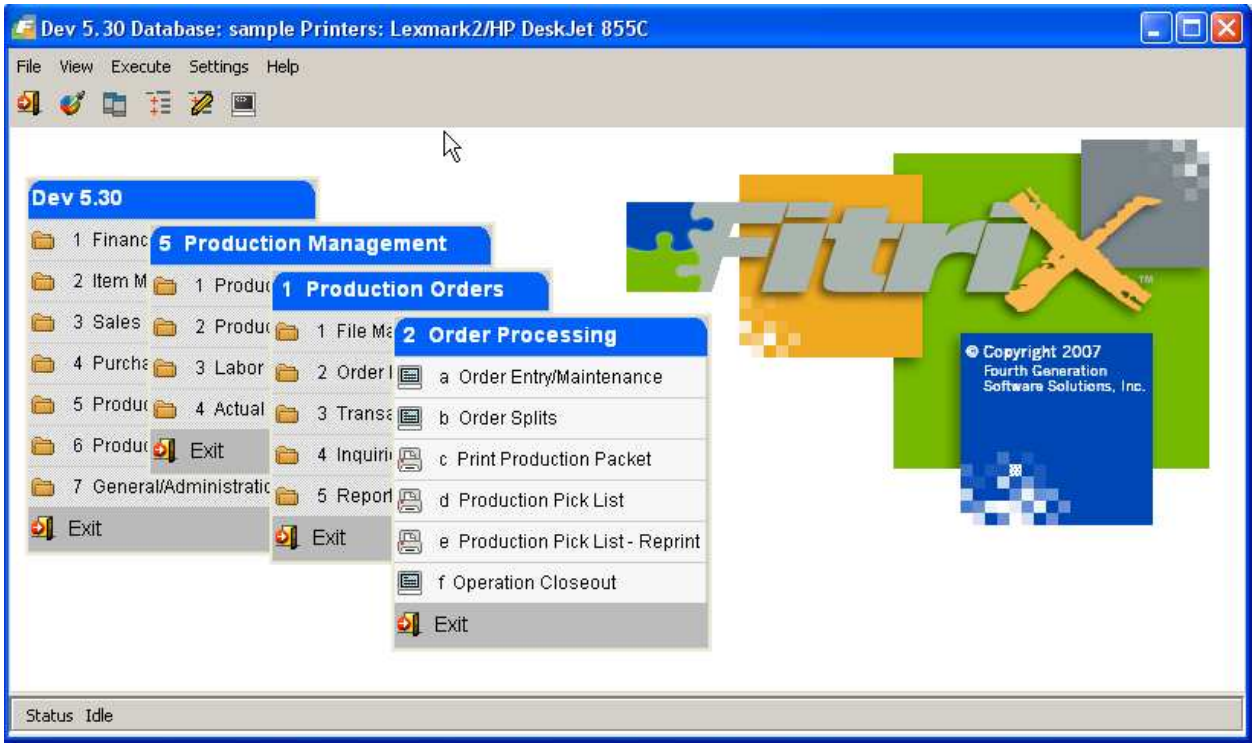


The following fields can be entered:

Field	Description
Reason Code	Enter a unique 3-character identifier.
Description	Enter a description of the reason code
Accounting Code	This field is reserved for future use

Order Processing Menu

Options on the Order Processing menu allow you to create and maintain production orders, print documents for the orders, and closeout the orders. To view this menu from the main menu select **Production Management > Production Orders > Order Processing (option 2).**



The following options are available on this menu.

Order Entry/Maintenance – Used to create or change production orders.

Order Splits – Used to split a base order into multiple releases.

Print Production Packet – Used to print a packet for the order, intended to be kept with the items being produced.

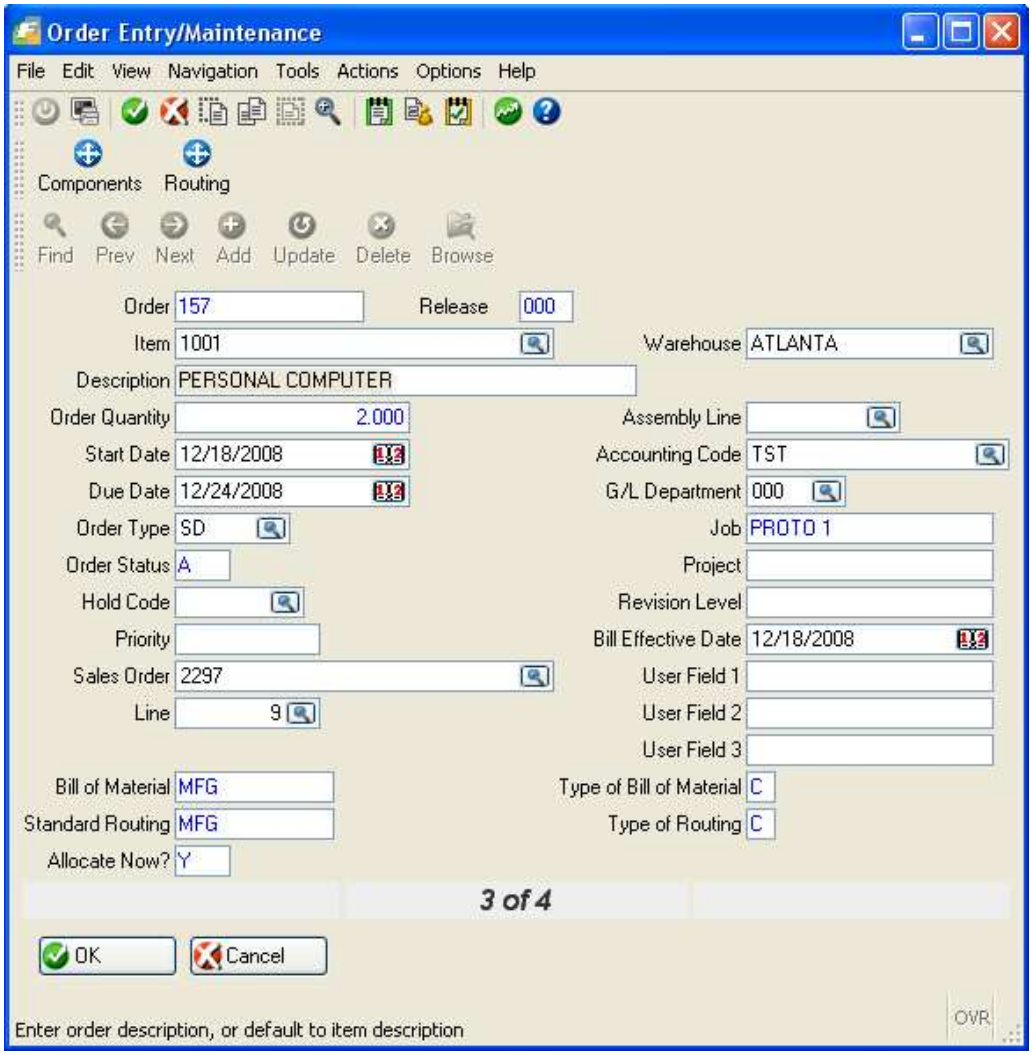
Production Pick List – Used to print a list of components to be picked from inventory for the production order.

Production Pick List - Reprint – Used to re-print a list of components to be picked from inventory for the production order.

Operation Closeout – Used to select routing step operations for closeout.

Order Entry/Maintenance

This menu option (a) is used to enter or change Production Orders. The following screen displays:



The following fields can be entered:

Field	Description
Order	The unique number assigned to this production order.
Release	The number of the release for this production order. This column is used when splitting orders. The value defaults to '000' for new orders. Values other than 000 indicate a split order (described later).
Warehouse	The identifier for the warehouse in which the item will be produced. Zoom for a list of valid warehouses. *The item and warehouse entered must already exist in the Update Inventory Information option in Inventory Control.*
Order Quantity	The number of units of the item being produced.

Field	Description
Start Date	The date this order is to be started. If the date is not a valid working day, a warning message will display. Zoom to display a calendar.
Due Date	The date the order is scheduled to be complete. If the date is not a valid working day, a warning message will display. Zoom to display a calendar.
Order Type	Enter a valid order type. The default is automatically assigned from the Setup window, but you can change it.
Order Status	This column can have one of the following values: • A – Active. This is the default value for a new order • H – Held. This indicates that the order is to be held from further processing
Hold Code	Enter a valid hold code. A hold code should only be entered if the status is changed to 'H'. Zoom for a list of valid hold codes.
Priority	Enter a user-defined priority, up to 4 characters, A-Z or 1-9.
Sales Order/Line	Enter an optional sales order and line item for the associated demand for this production order.
Assembly Line	This field is reserved for future use
Accounting Code	This field will be assigned automatically from the order type. You may change this to a different accounting code, if needed. Zoom to display a list of valid codes.
G/L Department	this field will be assigned automatically from the order type. You may change this to a different department, if needed. Zoom to display a list of valid departments.
Job	Enter an optional job identifier
Project	Enter an optional project identifier
Revision Level	Enter an optional engineering revision level for the item
Bill of Material Effectivity Date	enter an optional date to determine which components are to be used on this order. Components can have an effective start and end date in a bill of material. The date entered here is used to exclude components which have effective dates before or after the entered date. If no date is entered, component effective dates will be compared to the order start date, to determine if they should be used.
User Field 1	enter optional additional information
User Field 2	enter optional additional information
User Field 3	enter optional additional information
Bill of Material	The item's default bill of material code (from Update Inventory Information) will be assigned automatically. You may change this code to another valid bill of material for the produced item. Zoom to display a list of valid bill of material codes for the item being produced.
Standard Routing	The item's default routing code (from Update Inventory Information) will be assigned automatically. You may change this code to another valid routing for the produced item. Zoom to display a list of valid standard routing codes for the item being produced.

Field	Description
Type of Bill of Material	This field will be assigned automatically from the order type. It controls how an item's component list is to be processed when a new production order is entered. The allowed values are: • S – The manufactured item's standard bill of material is to be copied into the order's list of components, when the order is saved • C - The manufactured item's standard bill of material is to be copied into the order's list of components, and the components will be displayed, to allow for changes, before the order is saved. • M – No standard bill of material will be copied into the order's list of components, but the component list screen will be displayed
Type of Routing	This field will be assigned automatically from the order type. It controls how an item's routing list is to be processed when a new production order is entered. The allowed values are: • S – The manufactured item's standard routing is to be copied into the order's routing list, when the order is saved • C - The manufactured item's standard routing is to be copied into the order's routing list, and the list will be displayed, to allow for changes, before the order is saved. • M – No standard routing will be copied into the order's routing list, but the routing list screen will be displayed, to allow the user to enter a custom routing list, before the order is saved.

Component List screen

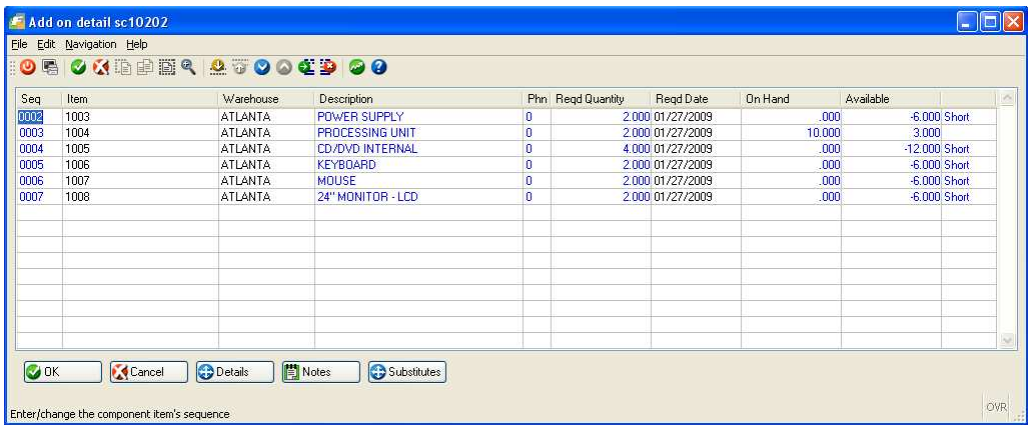
This screen displays when you take one of the following actions:

- If a value of C or M is entered in the Type of Bill of Material
- If the 

icon is clicked on the summary screen

The component list displays the standard components from the produced item's bill of material (if Bill of Material Type C or S was selected), or an empty list (if Bill of Material Type M was selected).

The following screen displays:

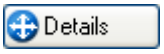


Review the list of components displayed. You may change the list by adding new components, changing existing components, or deleting components. The following fields can be entered for each component:

Field	Description
Seq	Enter a sequential identifier for the component. Components are sorted for display and print based on this sequence.
Item	Enter a valid item code for the component to be used. The combination of the 'Seq' and 'Item' must be unique for the line. Zoom to display a list of valid items.
Warehouse	Enter a valid warehouse from which this component will be used. Zoom to display a list of valid warehouses.. **NOTE:** The item and warehouse entered must already exist in the Update Inventory Information option in Inventory Control.
Description	The description for the component item displays automatically. It cannot be changed.
Phn (Phantom)	This field is assigned automatically from the item's master information. The possible values are: • 1 (Yes) – this item is a phantom. It is NOT used from inventory, but it's components ARE used from inventory. The phantom code is a convenient way to configure multiple items under a common item code. Then, wherever this common item code is referenced, the phantom value of 1 indicates that the components for the common item code should be used, NOT the common item itself. • 0 (No) – this item is NOT a phantom. It will be used from inventory directly.
Reqd Quantity (Required Quantity	The total units of the component item required to produce the number of units of the produced item. This value is typically computed from the quantity per unit in the standard bill of material,extended by the number of units of the produced item.
Reqd Date (Required Date)	The date when this component item is expected to be issued from inventory.

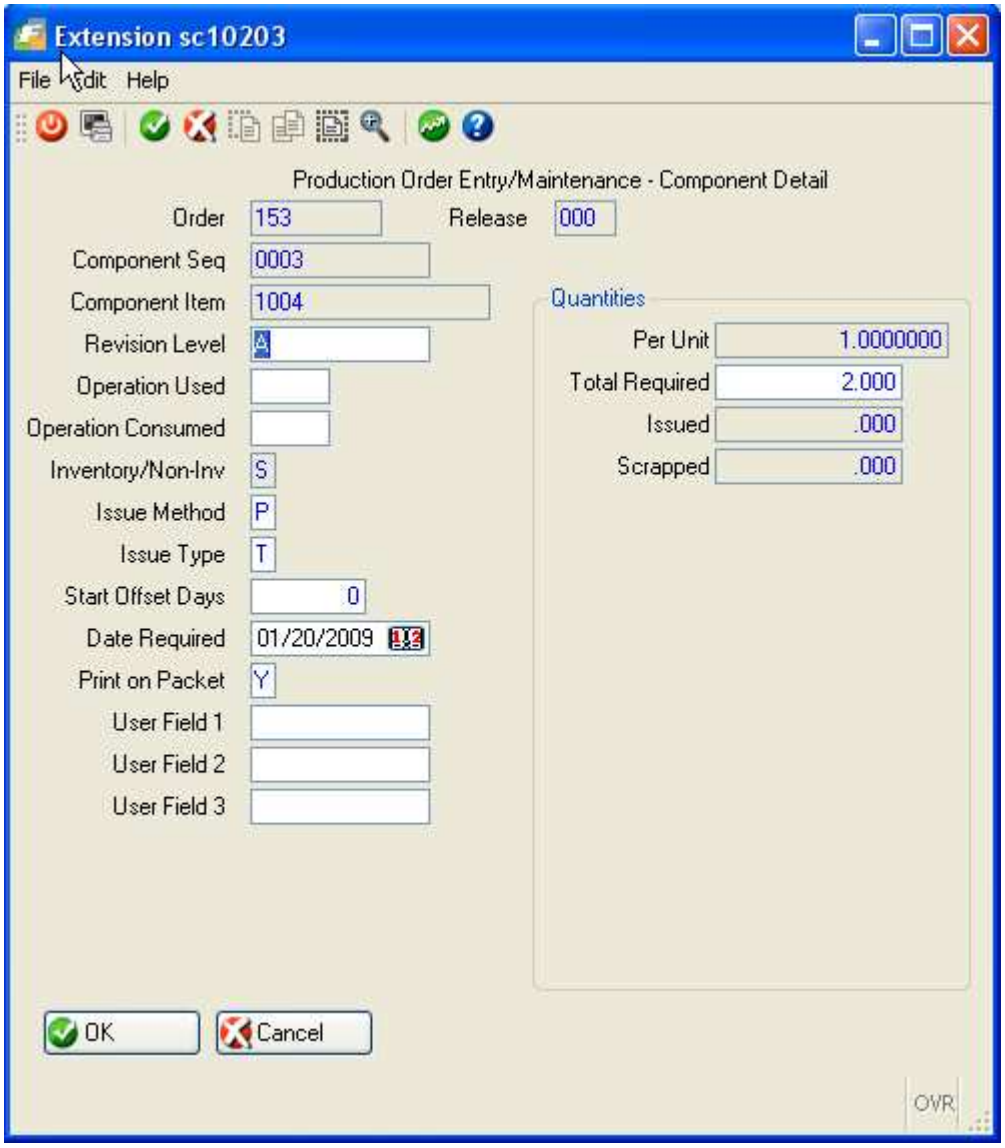
Field	Description
On Hand	The current on hand balance in inventory for the item. This is displayed as a reference to allow the user to determine if a sufficient quantity exists to be used on this order
Available	The current on hand balance, minus allocations to sales orders or other production orders. This is displayed as a reference to allow the user to determine if a sufficient quantity exists to be used on this order. *While the quantity on hand may indicate a sufficient balance exists to be used, the available quantity gives more information about additional requirements from other orders for this same component.*

Component Details screen

This screen displays when the cursor is positioned on a specific component on the Component List screen, and you click the 

button. It lets you review and/or enter additional detail for the selected component. Most of the values are loaded automatically from either the bill of material components table, or the Item Inventory Information table.

The following screen displays:



The following fields can be entered:

Field	Description
Revision Level	The current revision level of the item from the Item Inventory Information
Operation Used	The first step in the routing where this component item is used from inventory.
Operation Consumed	This field is reserved for future use.
Inventory/Non-Inventory	The possible values are: • S (stock) – this component is to be issued from stock • N (non-stock) – this component will not be issued from stock.

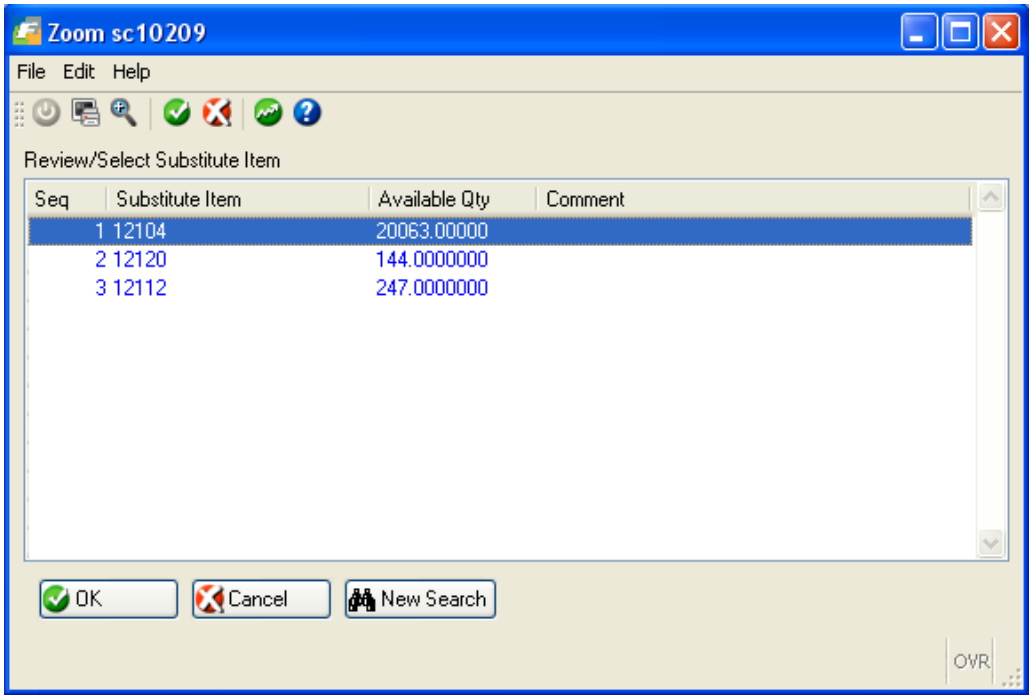
Field	Description
Issue Method	The possible values are: • C – the component will be issued from stock with the Component Issue transaction. This is typical when the production process involves a relatively long lead time (such as a week or more). • R – the component will be issued when the end item is received into inventory via the Production Receipt transaction. This is typical when the production process involves a short lead time (such as less than one week). • – the component will be issued from stock with the Issue by Operation transaction. Each component which has an 'Operation Used' equal to the Operation being issued will be issued from inventory. • N – the component will not be issued. This is typical of items which are sent to work in process in bulk, or for items which are needed in the production process, but are not stocked items (engineering drawings, tooling, etc).
Issue Type	The possible values are: • T – component is issued from inventory, and it's associated cost per unit is used with the quantity to create a transaction for G/L. • C – component is not issued from inventory, but it's cost per unit is used with the quantity to create a transaction for G/L.
Start Offset Days	The number of days after the order starts when this component needed. This offset if used to component the actual required date for the component.
Date Required	The date when this component is to be issued from inventory. The default value is the order date. If the component has a 'Start Offset Days' defined, this will be added to the order start date to computer a required date.
Print on Packet	Y will print the component on the Production Packet. N will not print the component on the Production Packet.
User Field 1	Enter optional additional information
User Field 2	Enter optional additional information
User Field 3	Enter optional additional information
Quantities – Per Unit	The number of units of the component to produce one unit of the end item.
Quantities – Total Required	The total number of units of the component needed to produce the total quantity of the end item.
Quantities – Issued	The total number of units already issued for the component
Quantities – Scrapped	The total number of units of this component already consumed by Production Scrap transactions

Substitutions screen

This screen displays when the cursor is positioned on a specific component on the Component List screen, and you click the 

button. It allows you to review and/or select a substitute item for the current component. This function is typically used when the component has an insufficient quantity of inventory for the order.

The following screen displays:



The following fields are displayed:

Field	Description
Seq	The sequential order for the component. Typically, the substitutes with lower sequence values are preferred over higher sequence values
Substitute Item	the item code for the substituting item
Available Qty	the on-hand balance, minus existing allocations, for the substitute.
Comment	a user-defined comment for how the substitute should be used.

To select a substitute, move the cursor the desired item, then click OK. The substitute item will be returned to the Components List window, and will replace the component.

Routing List screen

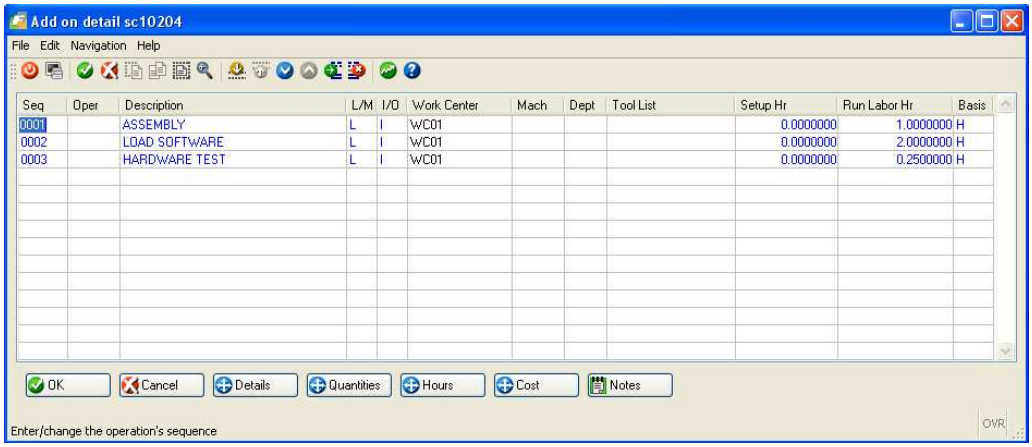
This screen will display when the user takes one of the following actions:

- If a value of C or M is entered in the Type of Routing
- If the 

icon is clicked on the summary screen

The routing list displays the routing from the produced item's standard routing (if Routing Type C or S was selected), or an empty list (if Routing Type M was selected).

The following screen is displayed:



One or more routing steps may be entered for the production order. For each routing step, the following fields can be entered:

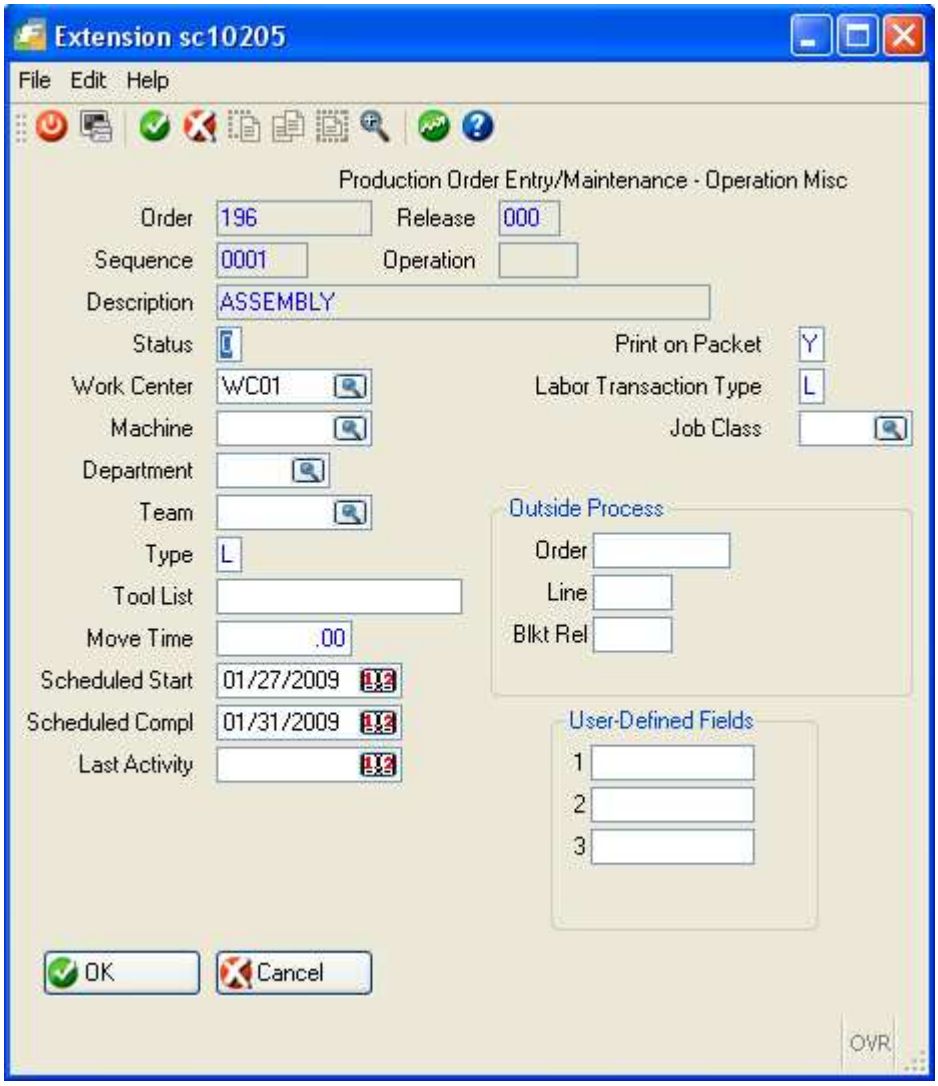
Field	Description
Seq	Enter a sequential identifier for the routing step. Steps are sorted for display and print based on this sequence.
Oper (Operation)	Enter an optional standard operation. Standard Operations can be defined in the Standard Routing module. Selecting an operation here can automatically fill in many of the remaining columns for the step (ie Work Center, Machine, Department, Tool List, Setup Hrs, Labor Hrs)
Description	a free-form description of the routing step
L/M – (Labor/Machine Constrained)	Indicate whether this routing step should be scheduled based on labor hours or machine hours
I/O (Inside/Outside Process)	Indicate if this step is performed within the company's production facilities, or if it is performed by an outside entity (such as a service provider).
Work Center	Enter a required work center at which this step will be performed. If a Work Center is selected, it's labor and overhead hourly rates are used to compute labor and overhead costs for the order
Mach (Machine)	Enter an optional machine at which this step will be performed
Dept (Department)	Enter an optional department at which this step will be performed.

Field	Description
Tool List	Enter an optional tooling identifier or list of tools required to be used at this step
Setup Hrs (Setup Hours)	Enter the number of hours required to prepare this step for the production process. If there is no setup time needed, enter 0.
Run Labor Hrs (Run Labor Hours)	Enter the number of hours associated with completing this step for the produced item. This field is used together with the basis code below. *If the labor time is less than 1 hour, the time must be entered as the decimal equivalent of an hour. For example, a run time of 5 minutes per piece must be entered as 0.0833333, or 5/60 of an hour.*
Basis	Enter one of the following values: H (Hours per piece) – the run labor hours above are expressed as the 'hours required to produce one unit of the end item' P (Pieces per hour) – the run labor hours above are expressed as the 'pieces completed within one hour'

Routing Detail screen

This screen displays when the cursor is positioned on a specific routing step on the Routing List screen, and you click the Details button.

The following screen displays:

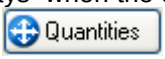


The following fields can be entered:

Field	Description
Status	Possible values are: • 0 – the packet has not yet been printed • 1 – no activity on this operation, and no activity on previous operation • 2 – no activity on this operation, and the previous operation has started • 3 – no activity on this operation, and the previous operation has been completed • 4 – some activity has been reported for this operation • 5 – this operation is completed • 7 – this operation is closed
Work Center	The required work center at which this operation is being performed. Zoom for a list of valid work centers
Machine	The optional machine at which this operation is being performed. Zoom for a list of valid machines.
Department	The optional production department in which this operation is being performed.
Team	The optional team performing the work at this operation
Type	Possible values are: • L – this operation is to be scheduled based on labor hours remaining • M – this operation is to be scheduled base on machine hours remaining
Tool List	The optional tooling list identifier for one more special tools required for this operation
Move Time	The optional move time in days after this operation is completed. The default value is zero.
Scheduled Start Date	The date this operation is scheduled to be started
Scheduled Compl (Schedule Completion Date)	The date this operation is scheduled to be completed.
Last Activity	The last date any labor activity was reported for this operation

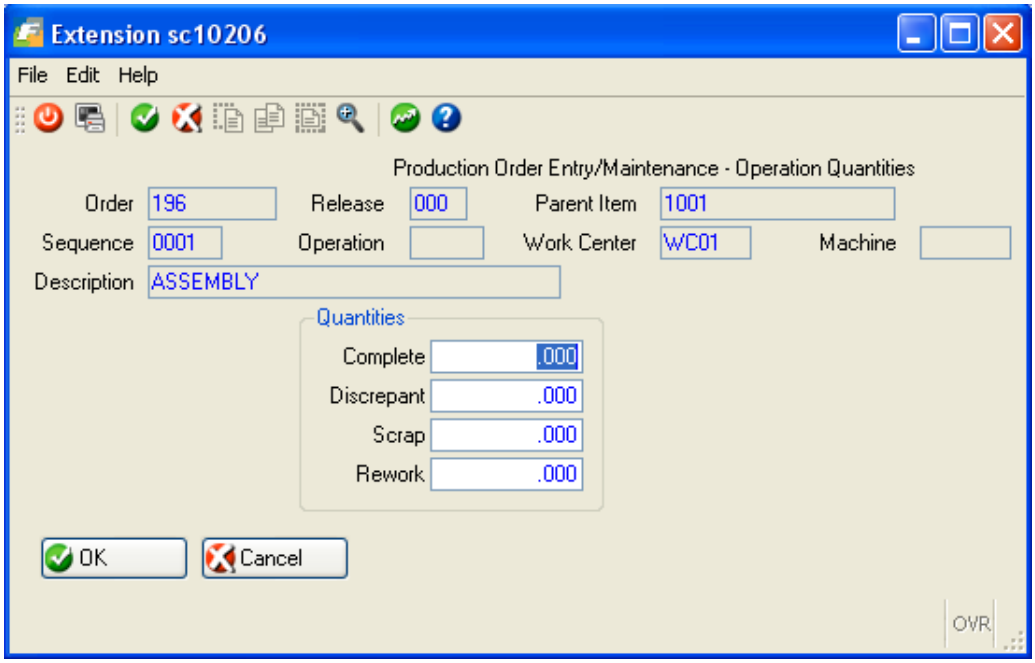
Field	Description
Print on Packet	Y for yes, N for no
Labor Transaction Type	This field is reserved for future use
Job Class	The optional default Job Class for this operation. Job classes can be used to set standard labor rates per hour which may override the Work Center standard labor rate.
Outside Process – Order	The purchase order number associated with this operation, if the Inside/Outside Process type is O.
Outside Process – Line	The purchase order line item
Outside Process – Blkt Rel (Blanket Release)	Field is reserved for future use.
User-Defined Field 1	Enter additional user-defined information
User-Defined Field 2	Enter additional user-defined information
User-Defined Field 2	Enter additional user-defined information

Routing Quantities screen

This screen displays when the cursor is positioned on a specific routing step on the Routing List screen, and you click the 

button.

The following screen displays:



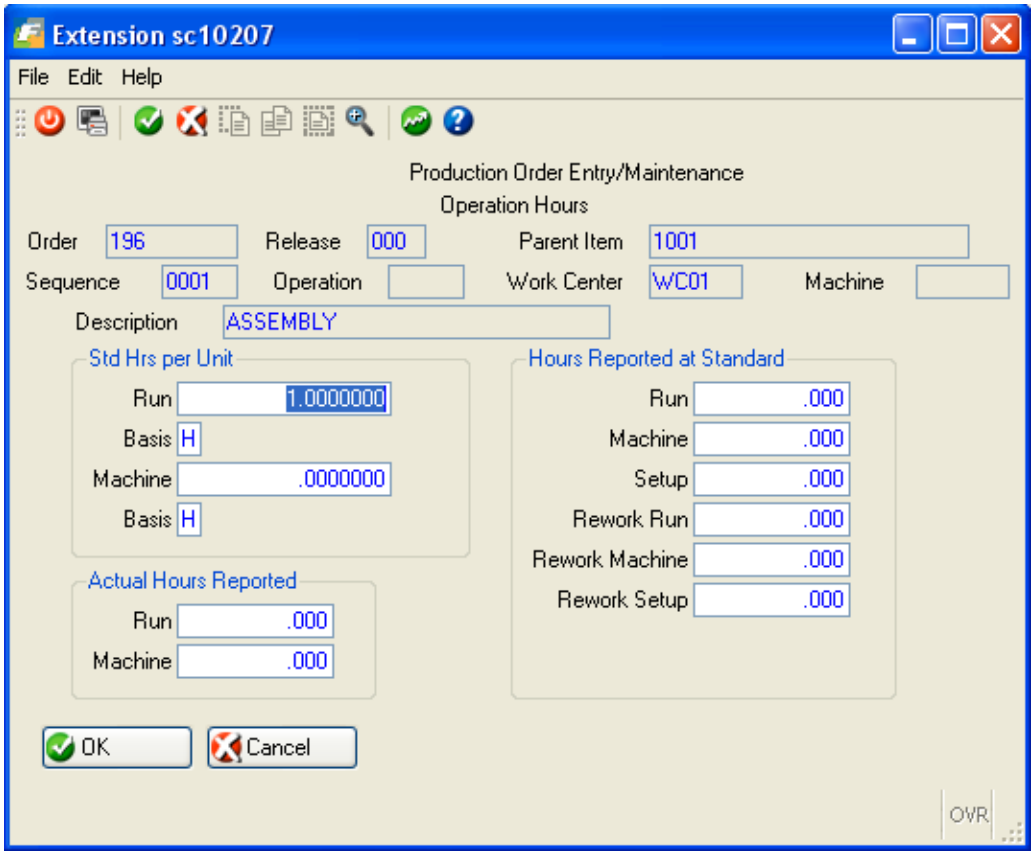
The following fields are displayed:

Field	Description
Quantities – Complete	The number of units completed through this operation
Quantity – Discrepant	This field is reserved for future use
Quantity – Scrap	The number of pieces reported scrapped at this operation
Quantity – Rework	This field is reserved for future use

Routing Hours screen

This screen displays when the cursor is positioned on a specific routing step on the Routing List screen, and you click the Hours button.

The following screen displays:



The following fields are displayed:

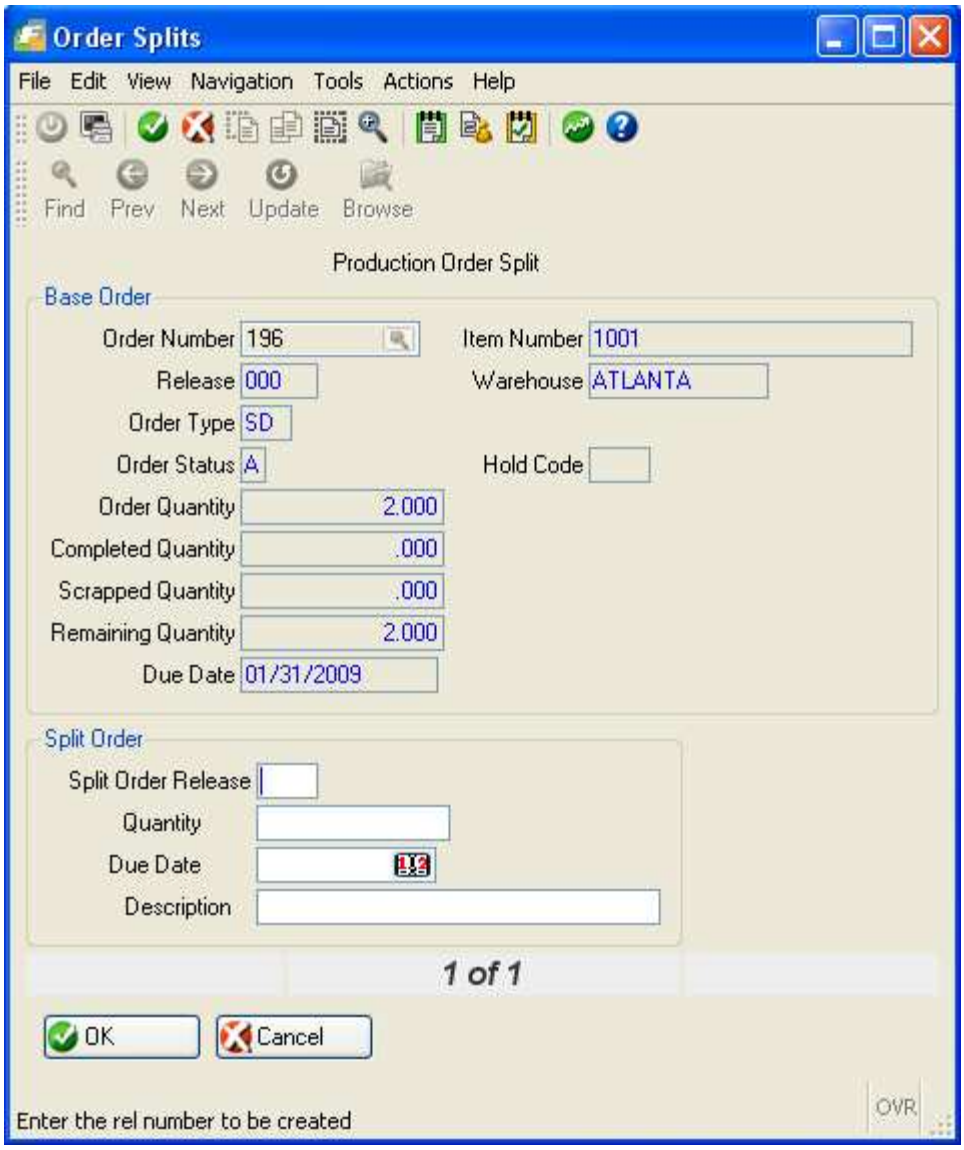
Field	Description
Std Hrs per Unit – Run	The number of labor hours required to complete the end item.
Std Hrs per Unit – Basis	Possible values are: H – Run hours are entered as 'Hours required to produce one unit' P – Run hours are entered as 'Number of units completed in one clock hour
Std Hrs per Unit – Machine	The number of machine hours required to complete the end item.

Field	Description
Std Hrs per Unit – Basis	Possible values are: H – Machine hours are entered as 'Hours required to produce one unit' P – Machine hours are entered as 'Number of units completed in one clock hour
Actual Hours Reported – Run	The number of labor hours reported to date for this operation
Actual Hours Reported – Machine	The number of machine hours reported to-date for this operation.
Hours Reported at Standard – Run	The number of units completed at this operated, times the Run Labor hours per unit
Hours Reported at Standard – Machine	The number of units completed at this operated, times the Machine Labor hours per unit
Hours Reported at Standard – Setup	If the operation has started the standard setup hours for this operation displays. If the operation has not started, zero will display here.
Hours Report at Standard – Rework Run	Field is reserved for future use.
Hours Reported at Standard – Rework Machine	Field is reserved for future use.
Hours Reported at Standard – Rework Setup	Field is reserved for future use.

Order Splits

This menu option is used to separate a base production order into multiple releases. This is useful when material or resource shortages exist on a base order, but enough material or resources exist to produce a smaller quantity. The production quantity can be 'split' from the base order into a new order that refers to the base order, but has its own release number.

Select the Order Splits option (b) from the Order Processing mentuu. The following window displays:



You must first click the Find button, then enter the Order Number and Release for the base order you wish to split, and click OK. After verifying the base order information, click the Update button to create a split order.

The following fields can be entered:

Field	Description
Split Order Release	Enter a new release number for the split order. The split order will retain the Order Number, but must have a unique release number
Quantity	Enter the quantity to be split into the new release
Due Date	Enter the due date for the new release
Description	Enter text describing the reason for the split.

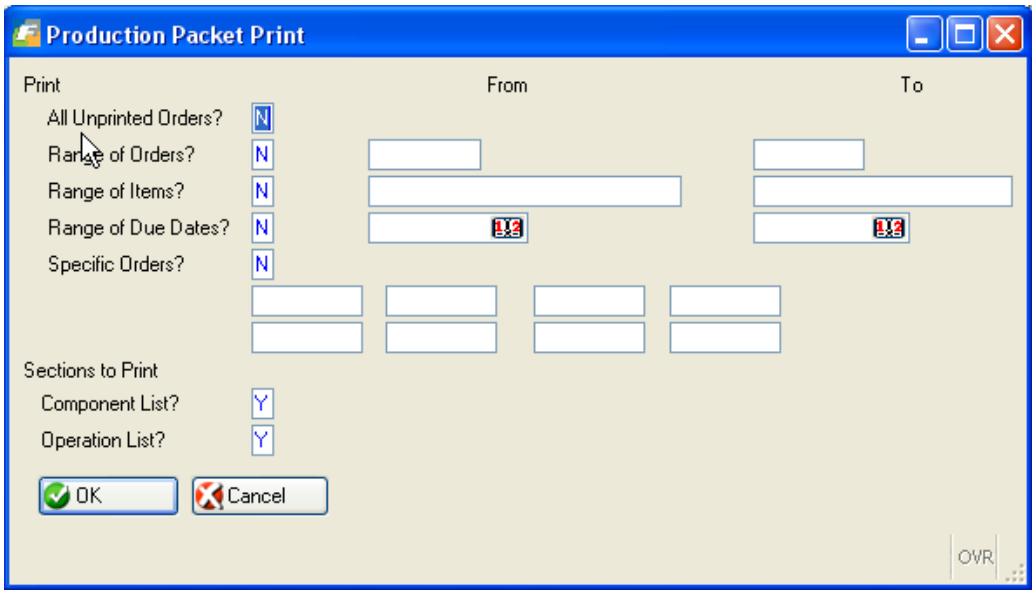
After entering the split order information, click OK to create the split order. The base order will remain as an active order, with the same due date, and a quantity which is the difference between the base order quantity and the split order quantity.

Print Production Packet

This menu option (c) is used to print or reprint production packets for orders entered through the Order Entry/Maintenance option. The Production Packet prints summary information about the order, such as item produced and warehouse, quantity and due date, and reference information and notes. In addition:

- Component List – the component items and descriptions, along with their required quantities and dates
- Routing List – the routing steps required to product the end item. Each step prints with description, setup and labor hour, and department, work center, machine and teams used to produce.

When you select this menu option, you must first indicate the destination of the report on the 'Select Printer' window (see Chapter 1). The following window then displays:



Enter the following fields to indicate which specific packets should print:

Field	Description
All Unprinted Orders?	If you select Y, all production orders which have not yet printed a Packet, will print.
Range of Orders?	If you select Y, you must also enter a range of order numbers
Range of Items?	If you select Y, you must also enter a range of item numbers
Range of Due Dates?	If you select Y, you must also enter a range of order due dates.
Specific Orders?	If you select Y, you must also enter individual order numbers (up to eight orders).
Print Component List	If you want the component list to print on the packet, select Y
Print Routing List	If you want the routing list to print on the packet, select Y

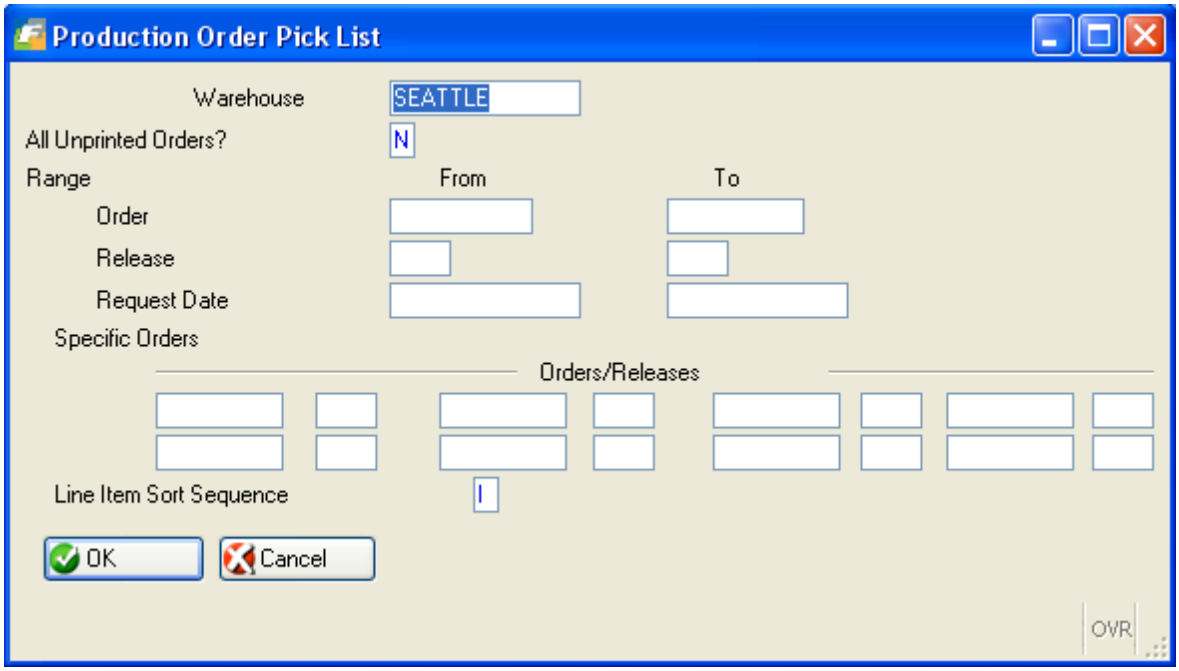
NOTE: You can only select Y for one of the 5 five choices in the 'Print' section above.

After entering the selection information, click OK to process the report.

Production Pick List / Production Pick List – Reprint

These menu options (d and e) are used to print or reprint component material pick lists for orders entered through the Order Entry/Maintenance option. The Production Pick List prints the inventoried components which are to be picked to begin the production process. For each component, the item and description are printed, along with the quantity required and required date. In addition, if the component(s) are either serialized or lot controlled (see the *Inventory Control User Guide)*, the serial or lot information is printed below the description.

When you select this menu option, you must first indicate the destination of the report on the 'Select Printer' window (see the *Getting Started with Fitrix* manual). The following window then displays:



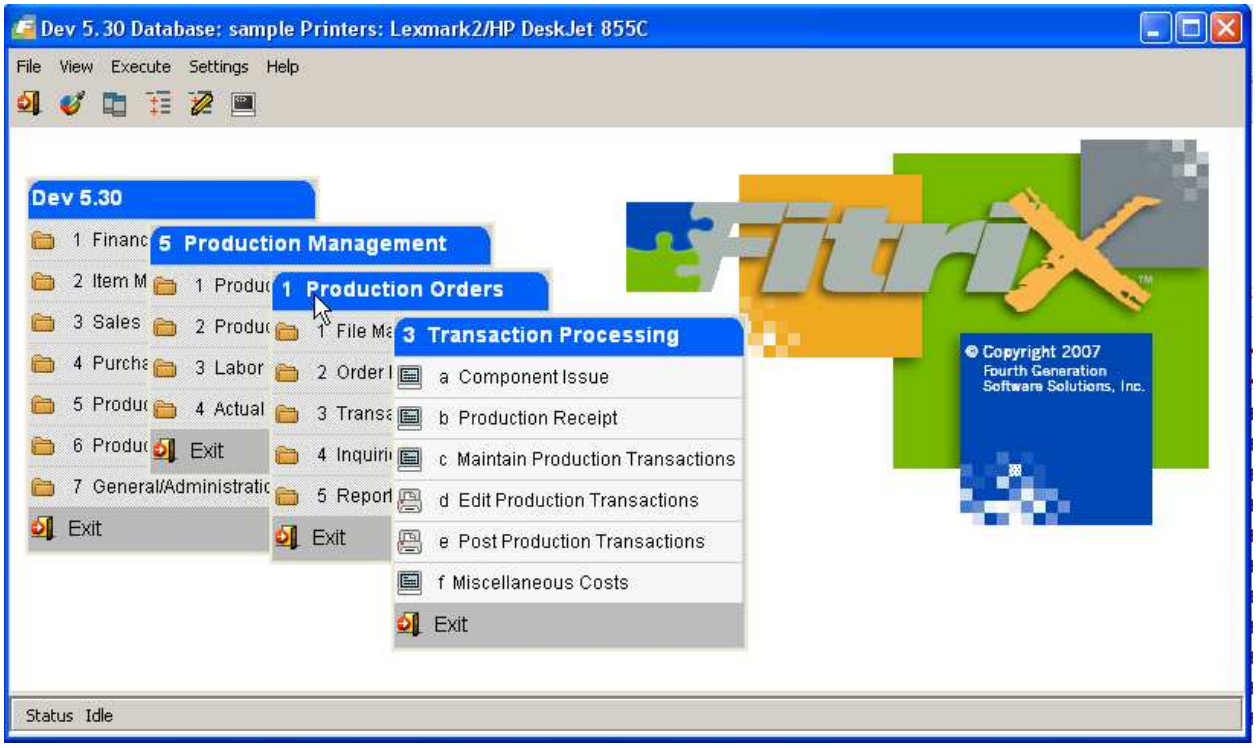
Enter the following fields to indicate which specific pick lists should print:

Field	Description
Warehouse	Enter the warehouse for the order(s) to be printed. If a production order requires components from multiple warehouses, a separate pick list must be printed from each warehouse.
All Unprinted Orders?	If you select Y, all production orders which have not yet printed a Pick List, will print. NOTE: if you select Y here, you cannot also select a Range, or Specific items
Range?	If you select Y, you must also enter a range of order numbers
Specific Orders?	If you select Y, you must also enter individual order numbers (up to eight orders). NOTE: you may enter a range, AND specific order numbers.
Line Item Sort Sequence	possible values are: • I – Sort by item number • L – sort by component sequence number • D – sort by default stock location
Print Routing List	If you want the routing list to print on the packet, select Y

After entering the selection information, click OK to process the report.

Transaction Processing Menu

Options on the Transaction Processing menu allow you to enter and process inventory and cost transactions related to production orders. To view this menu from the main menu select **Production Management > Production Orders > Transaction Processing (option 3).**



The following options are available on this menu.

Component Issue - Use this option to move component items from inventory to work in process via production orders

Production Receipts - Use this option to move component items from inventory to work in process, and to move completed items from work in process to finished inventory.

Maintain Production Transactions - Use this option to process inventory movement transactions in the General Ledger module, if they were not updated immediately during entry.

Edit Production Transactions - Use this option to print a validation report for transactions to be posted to General Ledger.

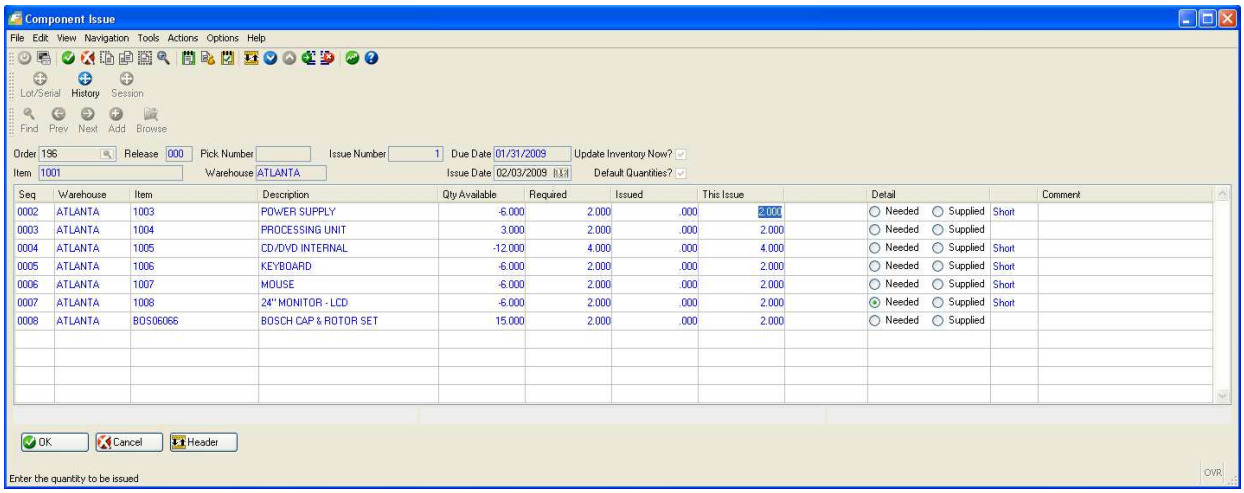
Post Production Transactions - Use this option to print a posting report for transactions being posted to General Ledger.

Miscellaneous Costs - Use this option to process additional production order costs not related to inventory items directly.

Component Issue

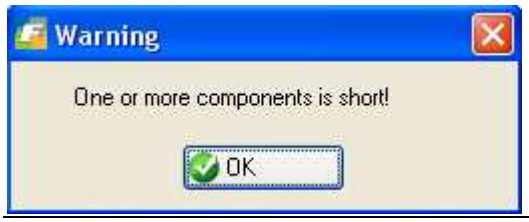
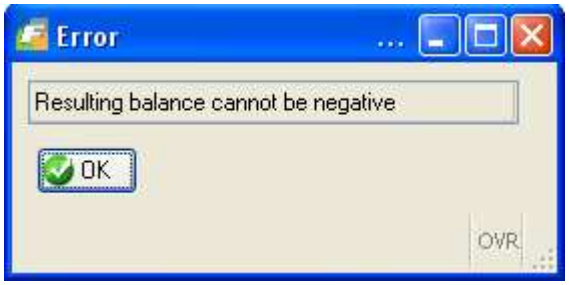
This menu option (a) is used to issue component inventory from stock, and add it to a production order's component material usage. This option is useful when a production order has a lead time that is long enough to require tracking of the value of work in process on a periodic basis. For example, of a production order requires a 2-week lead-time to complete, and if the material is needed at the start of the order, it is possible that the order might still be in progress at the end of an accounting period. If accounting practices specify that the value of any work-in-process be quantifiable at month-end, Component Issue supports this requirement.

When you select the menu option, the Component Issue window displays. To enter an issue transaction, click the Add button. The first time you select Add, the Session Default screen displays (see below). After you review/change the session defaults, enter the transaction information into the following screen:



The following fields can be entered:

Field	Description
Order	Enter the production order number for this transaction. Zoom for a list of valid production orders
Release	Enter the production order release number for this transaction. *When you press tab after entering the Release, other fields related to the order are automatically displayed*
Pick Number	If you want to issue from a specific pick list number, enter it here. If you leave this field blank, all components which are eligible to be issued will be included.
Issue Date	Enter the date to be recorded with the issue. The default is the Session Default Transaction Date.

Field	Description
Update Inventory Now?	Check if you wish to update the inventory immediately, or uncheck if to update later, via the Post Production Transactions menu option.
Default Quantities?	Check to automatically fill in the issue quantities with the expected issue quantities (you can still make changes if needed). Uncheck to fill in the quantities manually. *When you press tab after selecting the Default Quantities choice, the list of components which can be issued display automatically.* *Only components with an Issue Method of 'C' will be displayed.* *If one or more components has insufficient inventory for the issue, a warning window will display:* 
This Issue	Enter or verify the quantity issued for each component. *If you press tab while the cursor is in the 'This Issue' column, AND the 'Detail' column is highlighted as 'Needed', the Serial and Lot Selection screen will display automatically (See 'Detail' description below)* *If you press tab while the cursor is in the 'This Issue' column, and the on-hand balance is less than the issue quantity, the following error displays:*  *You must correct the inventory balance before you can issue the component.*

Field	Description
Sts (Status)	Possible choices are: Close – Change the issue status of this component to Closed. No further issues can be entered. Leave Open – The issue status will remain Open. Further issues can be entered later. Re-Open – For a component which was previously closed, change the issue status back to open. *The Status will be automatically set to Close, if the total quantity issued is equal to or greater than the quantity required, OR to Leave Open, if the total quantity issued is less than the quantity required*
Detail	The possible values are: Needed - If the component is serialized OR lot-controlled, this button will be turned on. This indicates that an additional window will display for you to selec t the serial numbers or lots to be selected. Supplied – If the component is serialized OR lot-controlled, and the serial or lots have been successfully selected, this button will be turned on. NONE – If the component is NOT serialized and NOT lot controlled, neither button will be turned on, and the serial or lot selection window will not display.
'Short'	This label will display automatically for any component with an on-hand balance less than the required quantity.
Comment	Enter an optional comment for the component being issued

Session Defaults Window

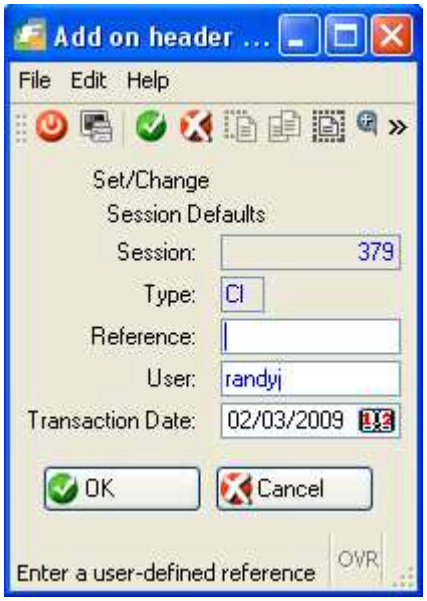
This screen displays:

1. The first time you click the Add button
2. When you click the 

button

You typically review or change these session defaults one time, then begin entering transactions.

The following screen displays:



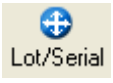
The following fields can be entered:

Field	Description
Reference	Enter a user-defined general reference to be saved with the transactions
User	Enter the user associated with this transaction
Transaction Date	Enter the date the transactions physically took place.

Click OK when finished

Serial and Lot Selection Screen

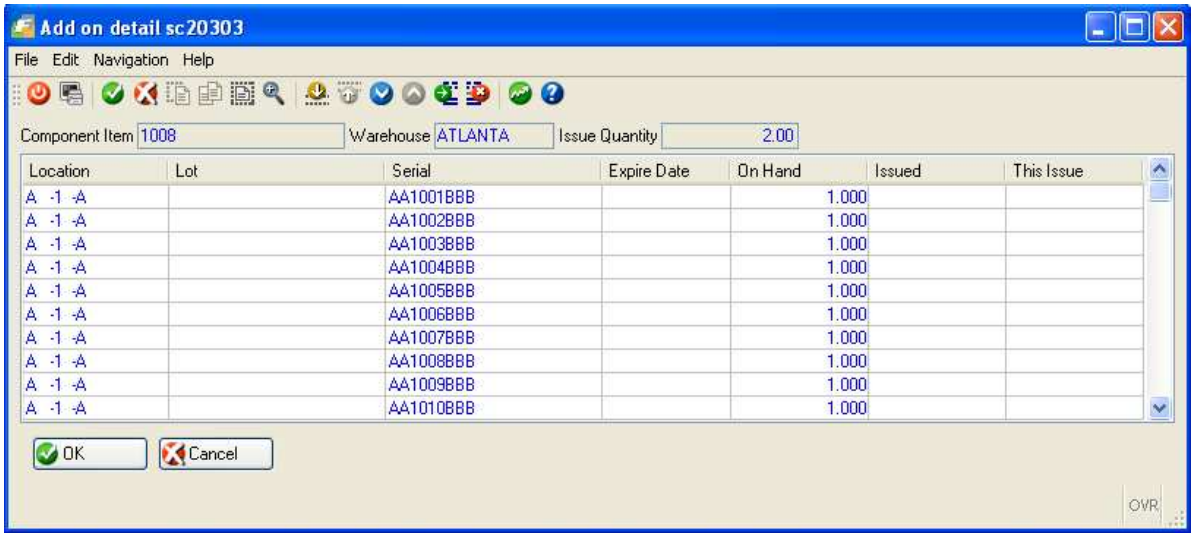
This screen displays when:

- You tab past 'This Issue', for a component where the Detail column was highlighted as 'Needed'.
- You click the 

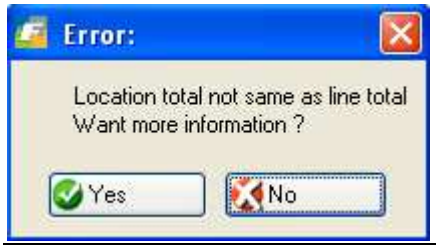
button when the cursor is positioned on a component where the 'Detail' column is highlighted as 'Needed' or 'Supplied'

You must select serial numbers or lots with a total quantity that matches the issue quantity.

The following screen displays:



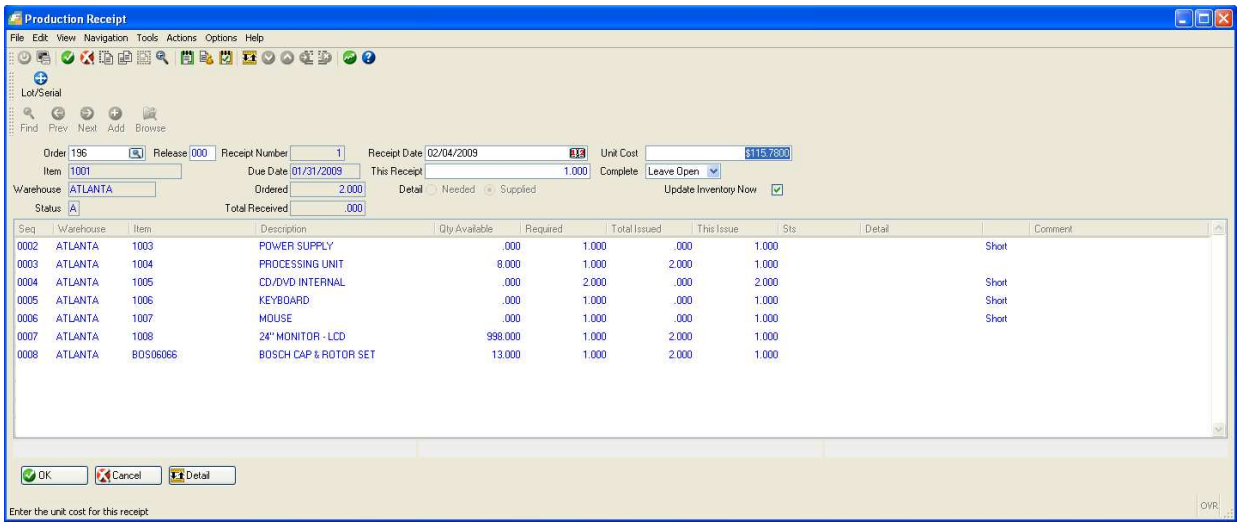
The following fields can be entered:

Field	Description
This Issue	Enter a quantity of the serial number or lot issued *The issue quantity for each selected serial or lot is summed and compared to the issue quantity for the component. If the sum does not match, an error is displayed:* 

Production Receipt

This menu option (b) is used to complete the production order cycle. The end item defined on a production order is received into finished inventory. Optionally, for components defined with a Component Issue Method of 'P', quantities are issued from inventory and added to the usage quantities. It is useful to define components with this issue method when there is a relatively short lead time. In these cases, this function can save keystrokes, and offer a higher level of accuracy, as both component issue and production receipt happen simultaneously.

When you select the menu option, the Production Receipt window displays. To enter a receipt transaction, click the Add button. The first time you select Add, the Session Default window displays (see below). After you review/change the session defaults, enter the transaction information into the following screen:



The following fields can be entered:

Field	Description
Order	Enter the production order number for this transaction. Zoom for a list of valid production orders
Release	Enter the production order release number for this transaction. *When you press tab after entering the Release, other fields related to the order are automatically displayed*
Receipt Number	This number is automatically generated, to indicate the number of receipt transactions entered for the current production order.
Receipt Date	Enter the date to be recorded with the receipt. The default is the Session Default Transaction Date.

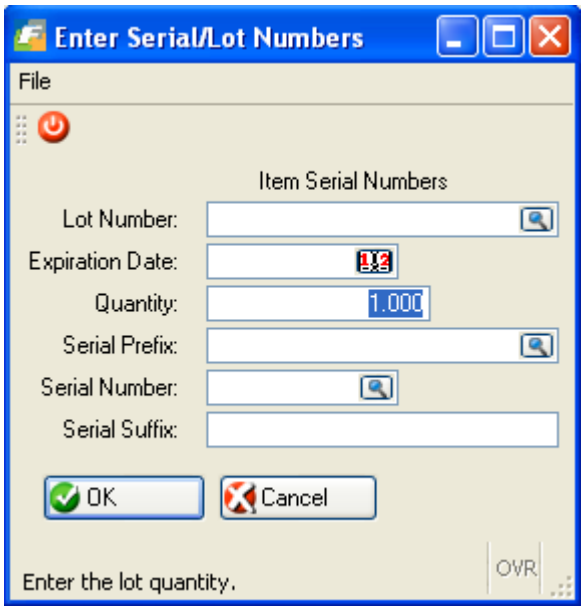
Field	Description
Receipt Quantity	enter the quantity to receive. *If the end item is either serial or lot controlled, the Enter Serial/Lot Numbers screen will display when you click tab from the Receipt Quantity (see below)* *When you click tab, if any associated components have an on-hand balance which is less than the required quantity, the following window displays:*  *When you click tab after entering the receipt quantity, the list of components which can be issued displays automatically. Only components with a Component Issue Method of 'P' will display.*
Unit Cost	The unit cost for the end item will be automatically calculated, from the costs associated with the components issued. You can change this value. *WARNING: If you change the calculated unit cost, you may cause the work in process balance for this order to be incorrect.*
Complete	The possible values are: Leave Open – Do not set the order status to Closed Close – Set the order status to close. Further receipts wil not be allowed. This value will be automatically computed based on the Receipt Quantity entered. If the total received quantity equals or exceeds the order quantity, it will be set to Close. If less, it will be set to 'Leave Open'.
Update Inventory Now?	Check if you wish to update the inventory immediately, or uncheck if to update later, via the Post Production Transactions menu option. *When you click tab after selecting the Update Inventory Now choice, the cursor will move to the first component. If no components display, click OK to complete the receipt.*

Field	Description
This Issue	Enter or verify the quantity issued for each component. *If you press tab while the cursor is in the 'This Issue' column, AND the 'Detail' column is highlighted as 'Needed', the Serial and Lot Selection screen will display automatically (See 'Detail' description below)* *If you press tab while the cursor is in the 'This Issue' column, and the on-hand balance is less than the issue quantity, the following error displays:*
Status	Possible choices are: Close – Change the issue status of this component to Closed. No further issues can be entered. Leave Open – The issue status will remain Open. Further issues can be entered later. Re-Open – For a component which was previously closed, change the issue status back to open. *The Status will be automatically set to Close, if the total quantity issued is equal to or greater than the quantity required, OR to Leave Open, if the total quantity issued is less than the quantity required*
Detail	Possible values are: Needed - If the component is serialized OR lot-controlled, this button will be turned on. This indicates that an additional window will display for you to selec t the serial numbers or lots to be selected. Supplied – If the component is serialized OR lot-controlled, and the serial or lots have been successfully selected, this button will be turned on. NONE – If the component is NOT serialized and NOT lot controlled, neither button will be turned on, and the serial or lot selection window will not display.
'Short'	This label will display automatically for any component with an on-hand balance less than the required quantity.
Comment	Enter an optional comment for the component being issued

Enter Serial/Lot Numbers screen

This screen displays when the end item is either serialized or lot controlled (See the *Inventory Control User Guide)*. You must enter the required information to receive the item into inventory.

The following screen is displayed:



The following fields can be entered:

Field	Description
Lot Number	Can only enter into this field if the item is Lot Controlled (the serialized value for the item must be L or B)
Expiration Date	This is an optional field if the item is NOT lot controlled *If you do not enter a date here, and the item IS lot controlled, a warning will display when you click OK:*  *If you click No, you will return to the Serial/Lot Numbers screen*
Quantity	Enter the total quantity to be received
Serial Prefix	You can only enter into this field if the item is Serialized. It indicates a value that will be pre-pended to each serial number

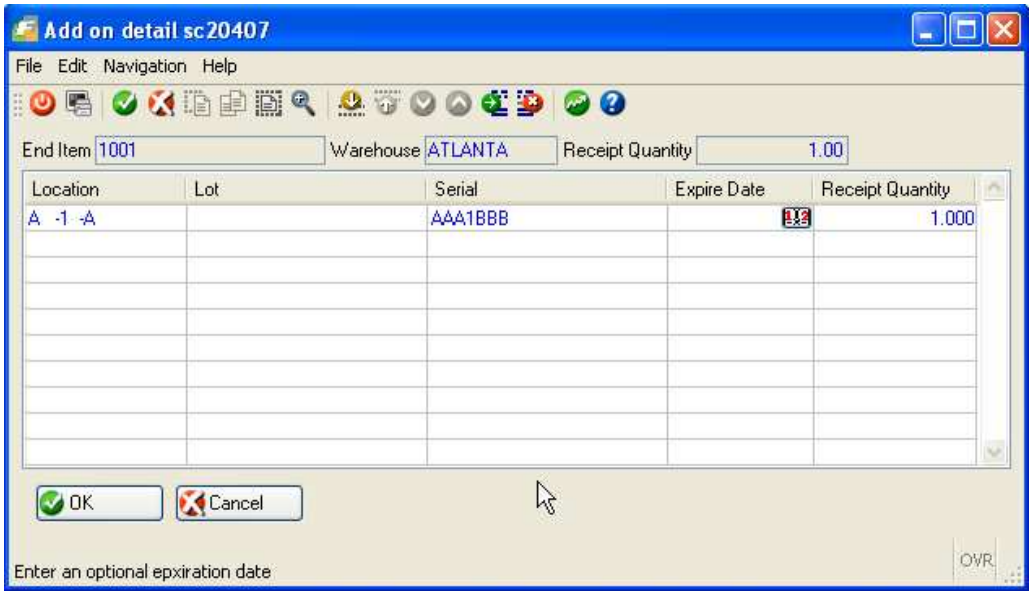
Field	Description
Serial Number	You can only enter into this field if the item is Serialized. It is a sequential value to be assigned to each unit of the item being received
Serial Suffix	You can only enter into this field if the item is Serialized. It indicates a value that will be appended to each serial number

Serial/Lot Number Verification screen

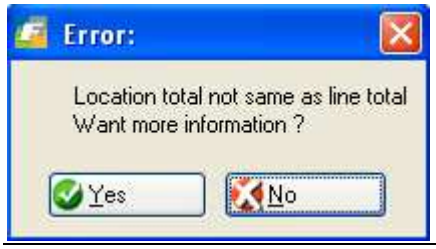
This screen displays:

- After you finish entering the required information on the 'Enter Serial/Lot Numbers' screen.
- You click the Lot/Serial button, when the cursor is located on the Header portion of the screen.

The following screen displays:



The following fields can be entered:

Field	Description
Receipt Quantity	Verify or change the received quantities. *The sum of the receipt quantities must equal the quantity received on the Production Receipt screen. If they do not equal, the following window will display:* 

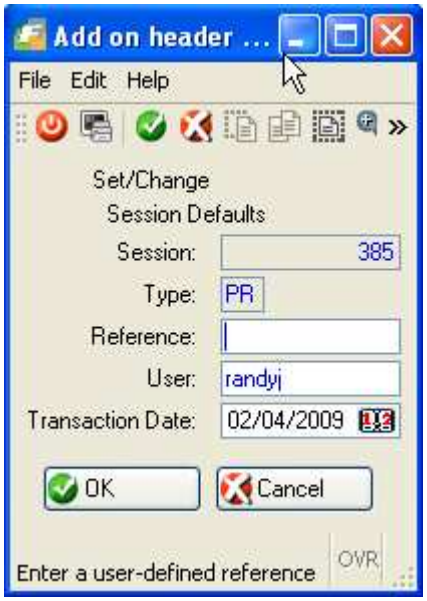
Session Defaults screen

This screen displays:

- The first time you click the Add button
- When you click the  button

You typically review or change these session defaults one time, then begin entering transactions.

The following screen displays:



The following fields can be entered:

Field	Description
Reference	Enter a user-defined general reference to be saved with the transactions
User	Enter the user associated with this transaction
Transaction Date	Enter the date the transactions physically took place.

Click OK when finished

Serial and Lot Selection screen

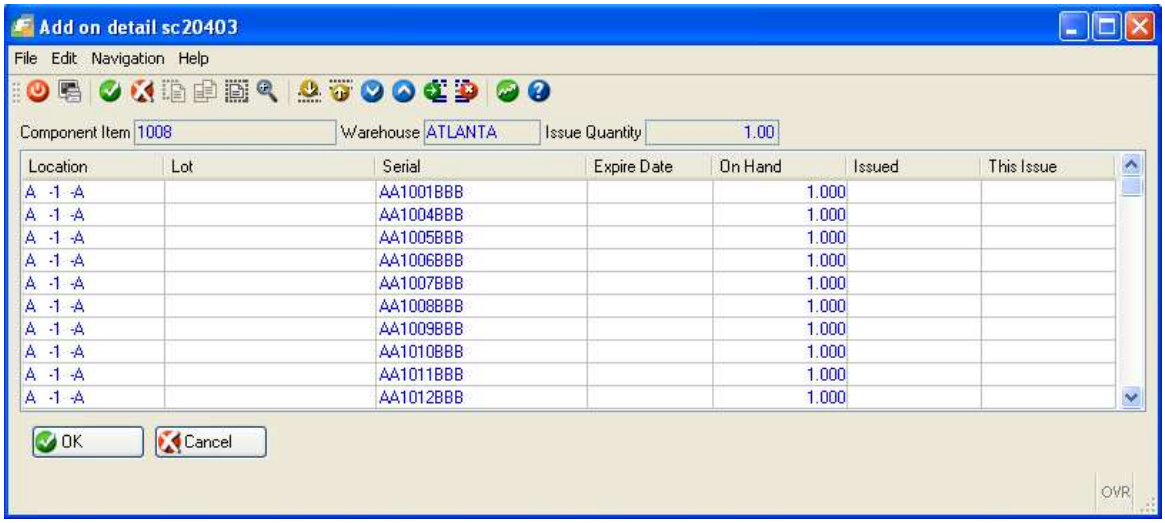
This screen displays when:

- You tab past 'This Issue', for a component where the Detail column was highlighted as 'Needed'.
- You click the 

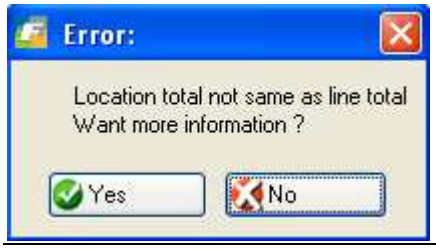
button when the cursor is positioned on a component where the 'Detail' column is highlighted as 'Needed' or 'Supplied'

You must select serial numbers or lots with a total quantity that matches the issue quantity.

The following window displays:



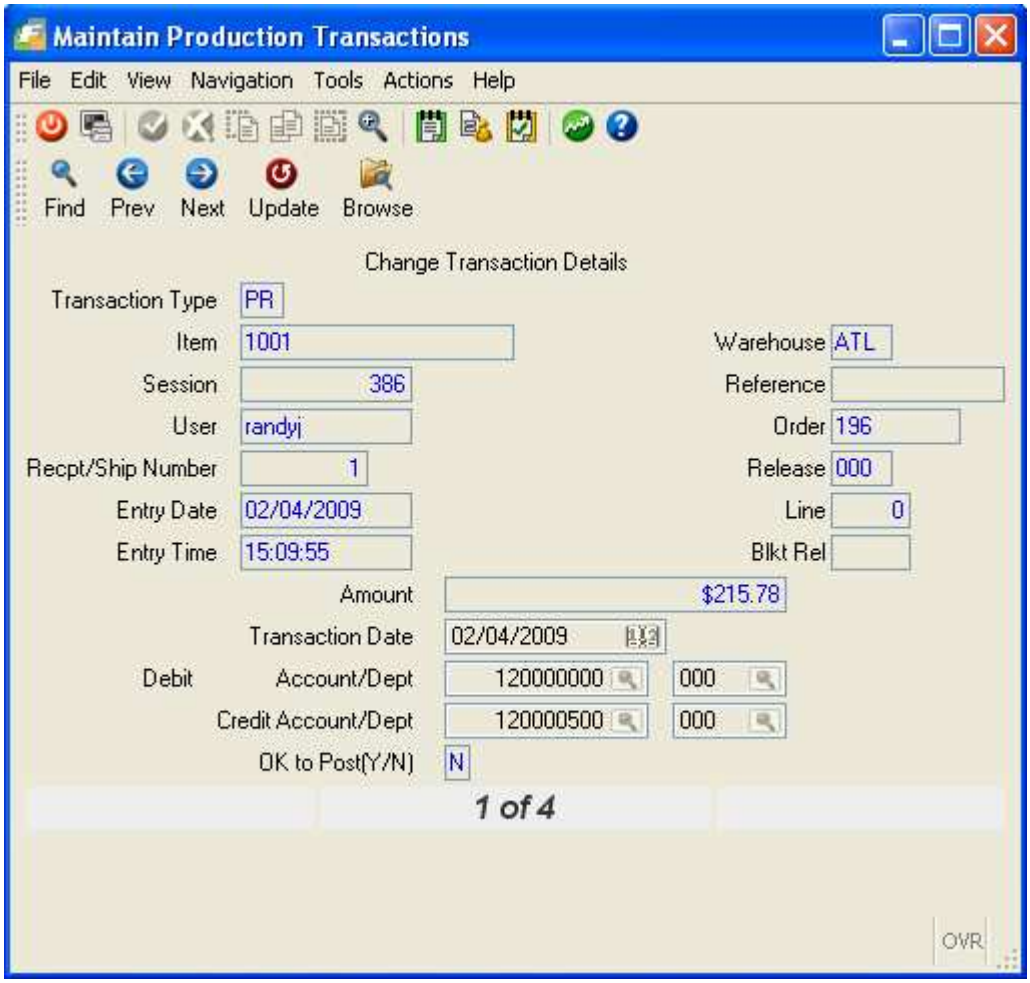
The following fields can be entered:

Field	Description
This Issue	Enter a quantity of the serial number or lot issued *The issue quantity for each selected serial or lot is summed and compared to the issue quantity for the component. If the sum does not match, an error is displayed:* 

Maintain Production Transactions

This menu option (c) is used to work with production inventory transactions which were NOT processed with the 'Update Inventory Now' choice. You can make changes to the Transaction Date, and Account Numbers/Departments, before posting them to Inventory Control and General Ledger.

The following window displays:



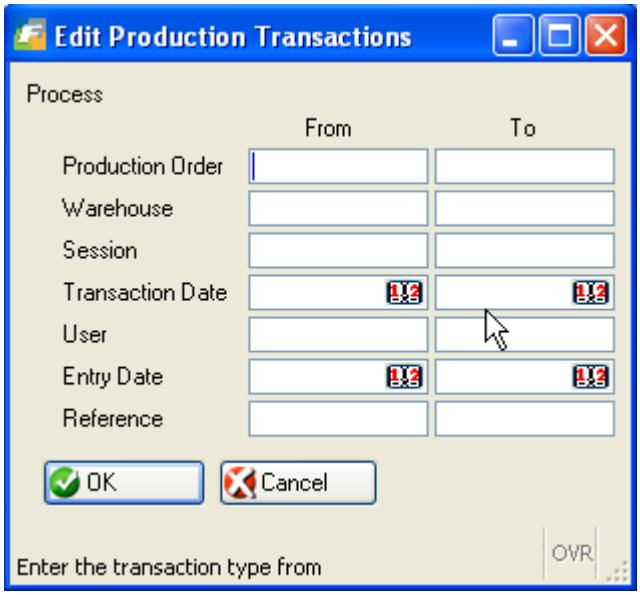
Enter into the following fields:

Field	Description
Transaction Date	The date to be recorded in the General Ledger
Debit Account/Dept	Enter the user associated with this transaction
Credit Account/Dept	Enter the date of the transactions
OK to Post (Y/N)	Enter Y to allow posting to Inventory Control and General Ledger or N to prevent posting.

Edit Production Transactions

Use this menu option (d) to print an edit listing of production inventory transactions which were NOT processed with the 'Update Inventory Now' choice.

When you select this menu option, you must first indicate the destination of the report on the 'Select Printer' window (see the *Getting Started with Fitrix* manual). The following window will then display:

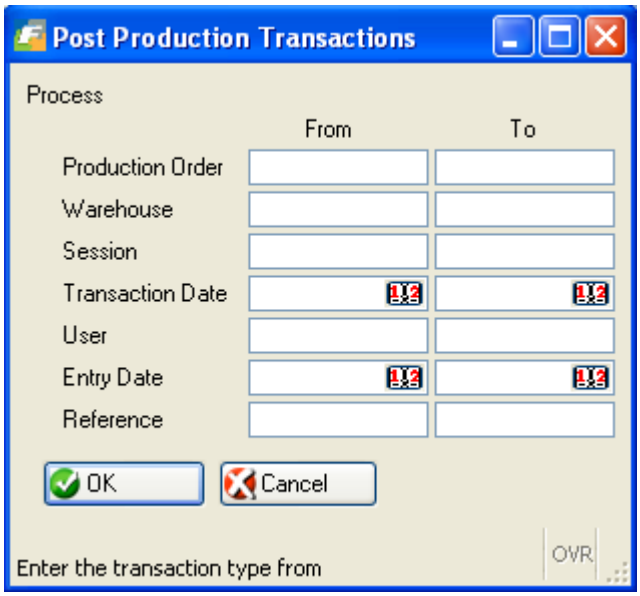


Enter From- and To- ranges for any of the available fields, then Click OK to process the edit listing.

Post Production Transactions

Use this menu option (e) to print a posting list of production inventory transactions which were NOT processed with the 'Update Inventory Now' choice. The posting updates inventory on hand balances, and posts accounting entries to the General Ledger transaction tables.

When you select this menu option, you must first indicate the destination of the report on the 'Select Printer' window (see the *Getting Started with Fitrix* manual). The following window will then display:



Enter From- and To- ranges for any of the available fields, then Click OK to process the posting list.

Section Summary

Production Order Processing maintains information about production orders, and supports inventory transactions related to those orders.

Setting up Production Order Processing includes:
Defining Order Types, Hold Codes and Reason Codes
Completing the Production Order Processing Setup option and setting the Setup Complete flag to “Y”.

The main tasks which are performed in Production Order Processing include:

Entering and maintaining Production Orders
Entering inventory-related transactions for production orders:
- Component Issue
- Production Receipt

Optionally posting transactions to General Ledger
Closing orders and moving them to the Order History archive

Lab Exercise a: Set Up Production Order Processing

In this lab you will be setting up production order processing defaults and reference files and adding to the Database.

1. Set up new Order Types (option a on File Maintenance menu)

Order Type	Description	Accounting Code	GL Department	Type of Bill	Type of Routing
MTO	Make To Order	DEFAULT	000	C	S
STD	Standard to Stock	DEFAULT	000	S	S

2. Set Up Hold Codes (option b on File Maintenance menu):

Decide if you want to use hold codes. If so, add as many as you will need to support the types of production order hold situations you will encounter (for example Material Short, QC Problems, machine down, etc)

3. Set Up Reason Codes (option c on File Maintenance menu):

This task will be deferred, as the Production Scrap transaction is not yet available.

4. Set Up Production Order Processing (option d on File Maintenance menu):

Decide which of the Order Types already set up should be the default

Decide if you want Order History Support

Decide it you want automatically generated order numbers

Decide what type of pick number you want to use

Decide on default work in process account numbers

Lab Exercise b: Production Order Entry/Maintenance

Order Entry/Maintenance (option a on the Order Processing menu):

1. Add a new order

Use the item defined as the assembled item in the Bill of Material exercises

Warehouse should be ASSEMBLY

Use order type MTO

Enter a quantity and due date

Verify that the Bill of Material and Routings are both 'MFG'

Verify that the type of Bill of Material is C, and type of Routing is S

Accept the order by selecting OK. What screen displays next?

Verify that component quantities are correct. Select OK

Select OK to save the order.

You will be prompted to create purchase orders for any short components. Select NO.

NOTE: O'Hair will in most cases use the C3 to Fitrix Web Service to create Production Orders automatically. It is helpful though, to understand how to use Order Entry/Maintenance, in case any changes must be made to these orders.

Print Production Pick List (option d on the Order Processing menu)

2. Select the specific order you just entered

Verify that the content is consistent with your needs.

Lab Exercise c: Transaction Processing

Enter Production Receipt Transaction

Run the Inventory Valuation report for the ASSEMBLY warehouse

Select Add option to enter a new transaction

Select OK on the Session Defaults screen

Enter the Production Order number from Lab Exercise B.

Skip pick number

Enter quantity produced; components should then display with quantities filled in.

Check the box for ‘Update now’

Select OK to process the receipt

Verify that inventory balances were updated in Inventory Information Maintenance

Run the Inventory Valuation report and compare to the earlier run of the report.

Chapter 4 – Material Planning

Learning Objectives

To learn the type of information and tasks that are maintained and completed in Material Planning.

To learn the relationship of the Material Planning module to other modules in the Fitrix Accounting and Distribution System.

To learn the steps involved in setting up the module.

To learn the steps necessary to process a Full Generation.

To learn about reviewing and acting on full generation Recommendations

To understand inquiries and reports in the module

Overview of Material Planning

What type of information is maintained in Material Planning?

Material Planning stores the system information for processing demand for manufactured and purchased items, including:

Demand from sales orders

Planned demand from a sales forecast

Comparing demand to on-hand inventory and scheduled receipts from production and purchasing

Creating planned orders to satisfy demand beyond available inventory and scheduled receipts

Creating recommendations for scheduled receipts to meet quantities and date of demand

What initial tasks or activities are performed in Material Planning?

Setting up the module

Deciding which planned items are purchased vs. manufactured

Deciding on order policies to be used when creating planned orders

Deciding what source of demand is appropriate for saleable items

Setting up sourcing options for planned items

Deciding how often to execute a Material Planning run

What periodic tasks or activities are performed in Material Planning?

Executing a Material Planning run

Run Planning Reports and Review Material Requirements Inquiry

Reviewing and accepting Order Recommendations

Review and releasing planned orders

What relation does order entry have to other Fitrix Modules?

Material Planning (MRP) is one of three manufacturing planning applications and is tightly integrated with four other Fitrix modules: Inventory Control, Production Order Processing, Order Entry and Purchasing.

Inventory Control provides item on-hand balances and availability to MRP.

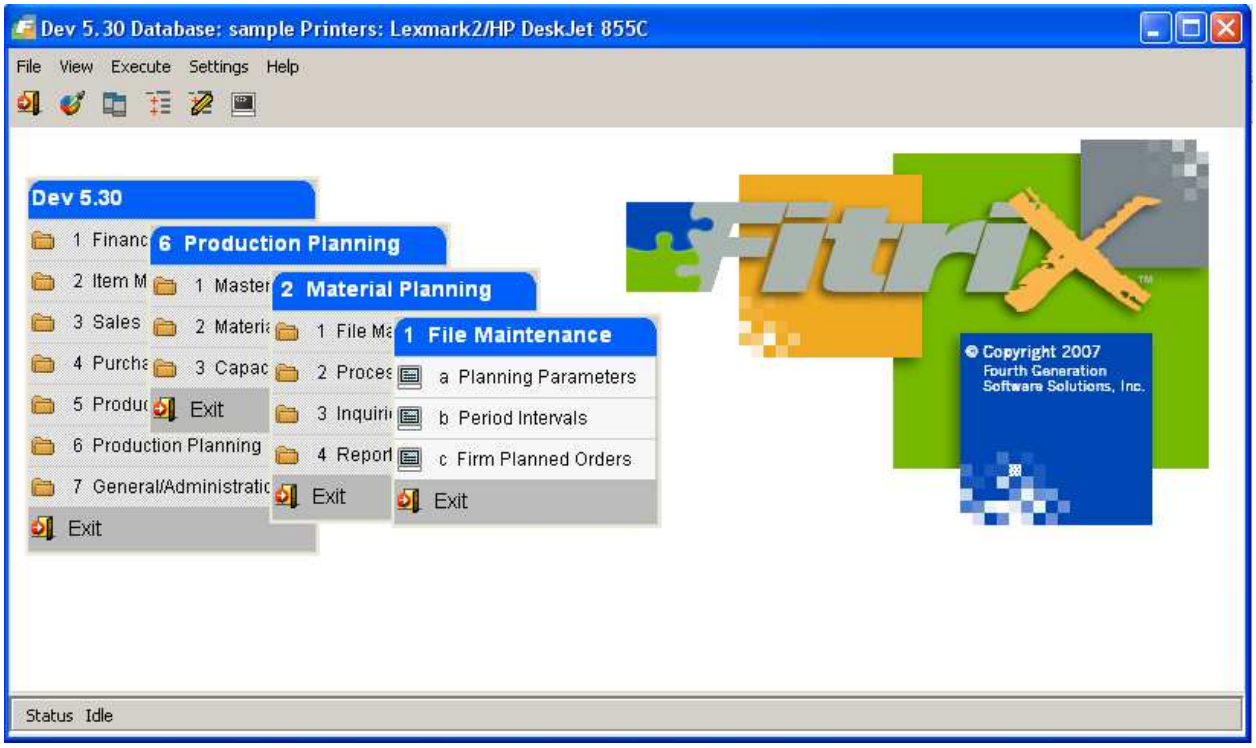
Production Order Processing provides open production orders, including scheduled receipts for manufactured items, and component requirements, to MRP. In addition, MRP's planned orders can be released to create new production orders, for items configured as purchased.

Order Entry provides demand from unshipped sales orders, including requirement dates and quantities, to Material Planning.

Purchasing provides open purchase orders, including scheduled receipts for purchased items, to MRP. In addition, MRP's planned orders can be released to create new purchase orders for items configured as purchased.

File Maintenance Menu

Options on the File Maintenance menu allow you to set up a number of reference files for use in other functions within MRP. To view this menu from the main menu select **Production Planning > Material Planning > File Maintenance (option 1).**



The following options are available on this menu.

Planning Parameters – Used to enter the default planning parameters to be used whenever a planning run is executed.

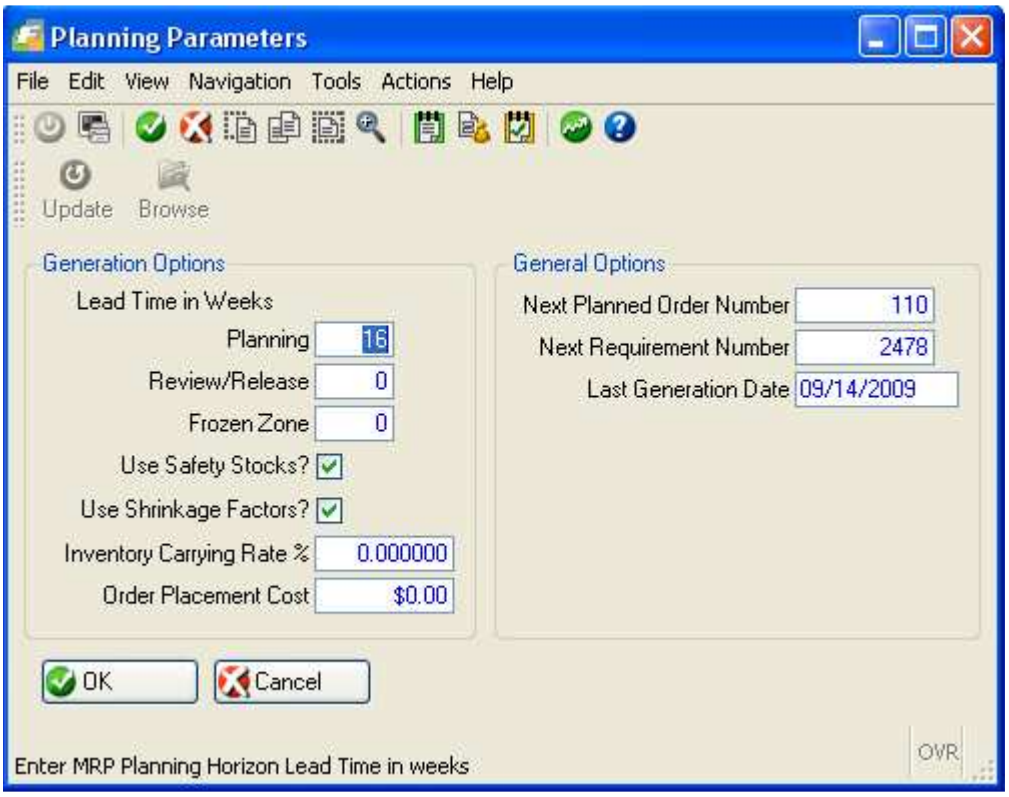
Period Intervals – Used to enter one or more planning intervals. These intervals are used by multiple reports to show how future activity is to be collected under user-defined time periods.

Firm Planned Orders – Used to convert planned orders (create by a Material Planning run) into firm planned orders, which prevents them from being re-planned later.

Planning Parameters

Planning Parameters defines the default settings to be used when a Material Planning run is executed. These parameters can also be overridden when a material plan is executed.

Select Planning Parameters **(option a)**. The following window displays:



Below is a description of the fields which can be entered in the Planning Parameters window

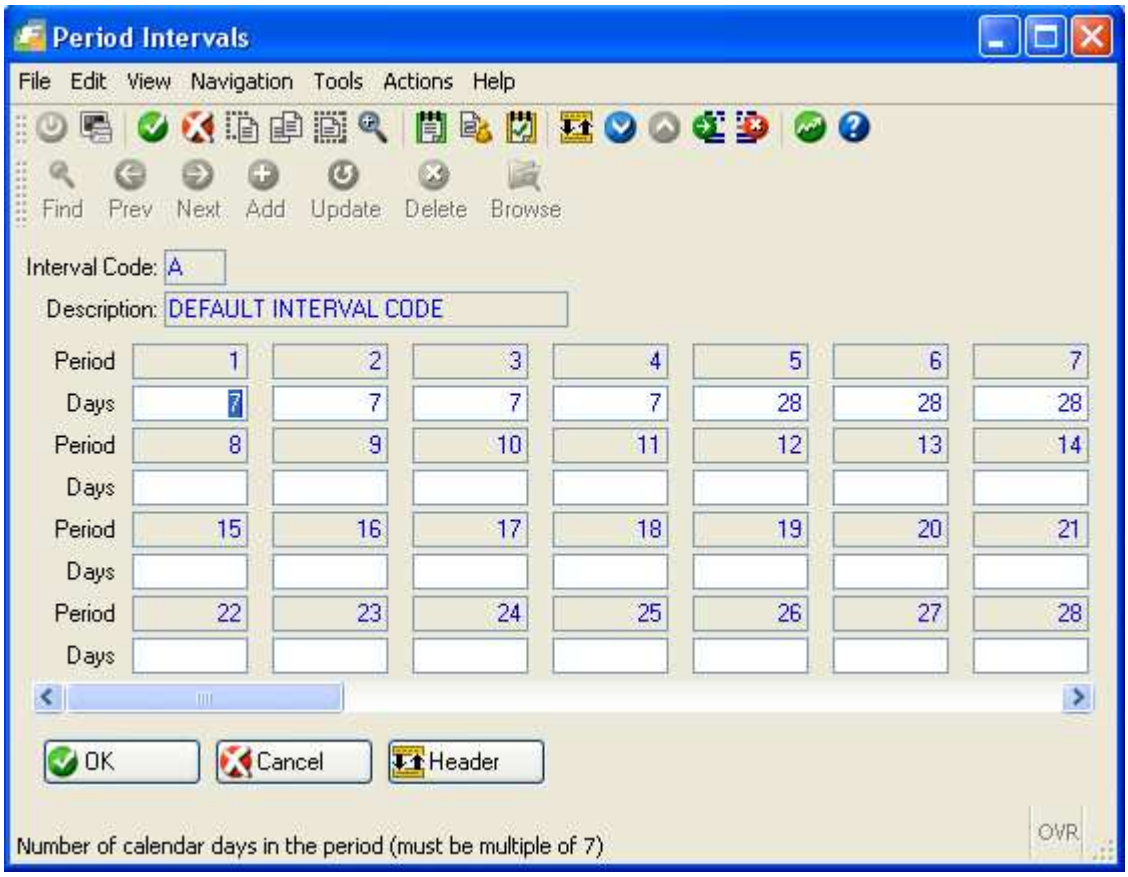
Field	Description
Lead Time in Weeks - Planning	This field controls how far into the future planned orders will be created during a Material Planning run
Lead Time in Weeks – Review/Release	This field is reserved for future use
Lead Time in Weeks – Frozen Zone	This field is reserved for future use
Use Safety Stocks?	Enter Y to use an item's safety stock during a Material Planning Run. Enter N to use an item's on-hand balance instead.
Use Shrinkage Factors?	Enter Y to use a component item's shrinkage factor during a Material Planning Run. Enter N to all shrinkage factors are zero.
Inventory Carrying Rate%	This field is used when calculating Economic Order Quantities for items
Order Placement Cost	This field is used when calculating Economic Order Quantities for items

Field	Description
Next Planned Order Number	All planned orders are generated with a unique sequential value. This is the next number to be assigned the next time a Material Planning run occurs.
Next Requirement Number	All requirements are generated with a unique sequential value. This is the next number to be assigned the next time a Material Planning run occurs.
Last Generation Date	The date of the last Material Planning Run.

Period Intervals

Period Intervals allow future production and purchase activity to be summarized into user-defined time periods for reporting purposes. A period interval has an unlimited number of time periods which can be included. Each time period is assigned a number of days.

Select the Period Intervals menu option **(option b)**. The following window displays:



In the example above, interval code ‘A’, is assigned 4 periods of 7 days per period, then 3 more periods of 28 days per period. So this interval code will display planning reports that span a total of 16 weeks, the first 4 of which will be printed weekly, and the next 12 in 4-week time periods.

You can enter into the following fields:

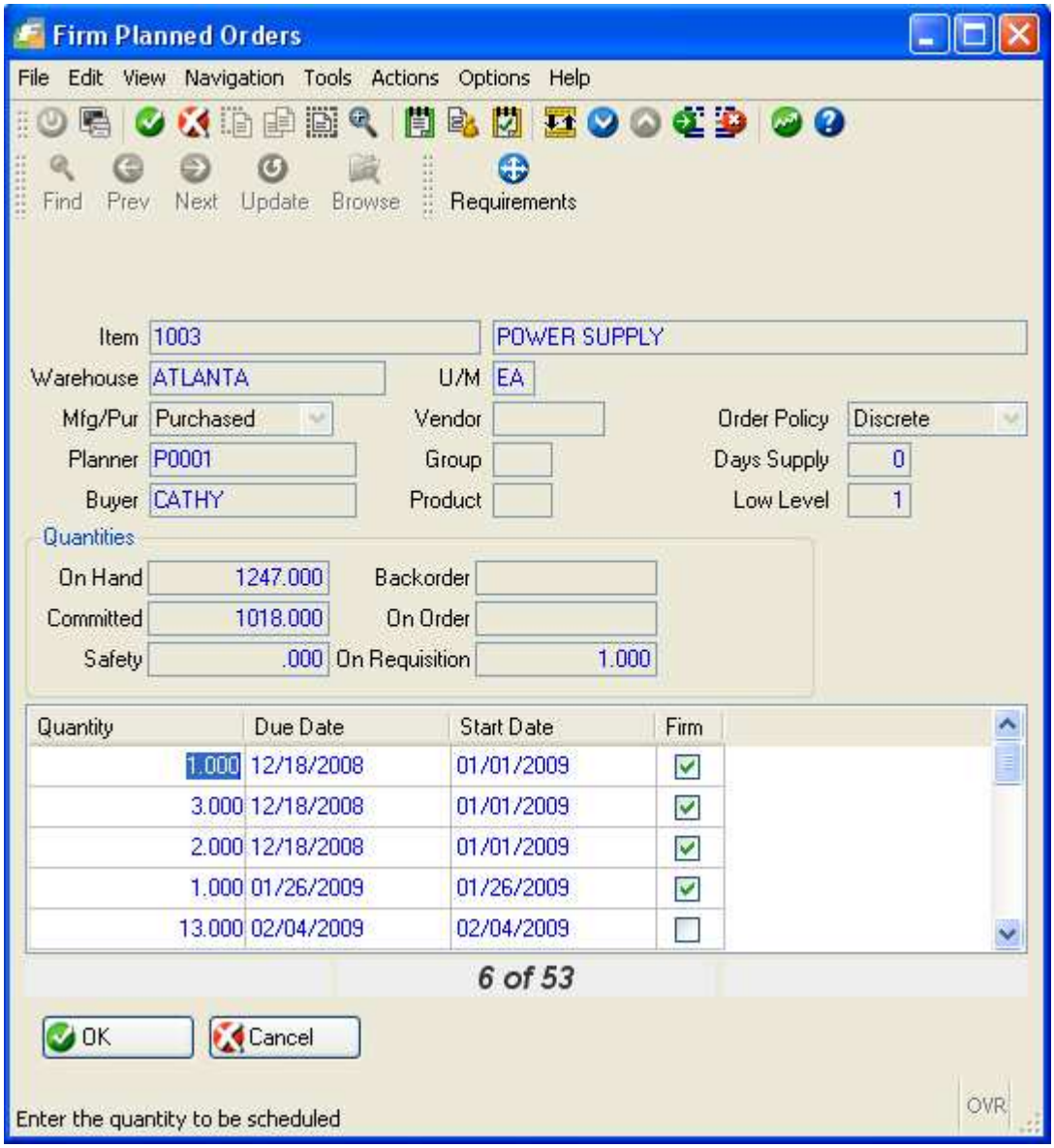
Field	Description
Interval Code	Enter a 3-character value for this interval code
Description	Enter a description for this interval code
Period	This value is displayed automatically. You cannot change it
Days	Enter the number of days for the period. It is recommended that this number be either 1 (for daily time periods) or a multiple of 7 (for weekly or multi-weekly periods)

Enter as many time periods as you need, but be aware that the more periods you enter, the longer content of the planning reports will be. It is generally desirable to use a number of periods which will consume one printed page per item being planned.

Firm Planed Orders

Firm Planned Orders allows you to change a generated Planned Order into a Firm Planned Order. Generated planned orders will be dropped and re-generated during each Material Planning run. After a review of a Planning run, you may decide that one or more Planned Orders have release dates that are near enough to begin other physical planning activities, and you do not want its quantity or date to be changed. Use this option to retain the order quantity and dates in an unchanged state for the next Planning run. Select the Firm Planned Orders menu option **(option c)**.

The following window displays:



The upper portion of the window displays information already described earlier, for the item/warehouse, including planning values and current quantities.

The lower portion displays planned orders generated by the latest Material Planning run. When you select 'Update', you can change the following information for each planned order:

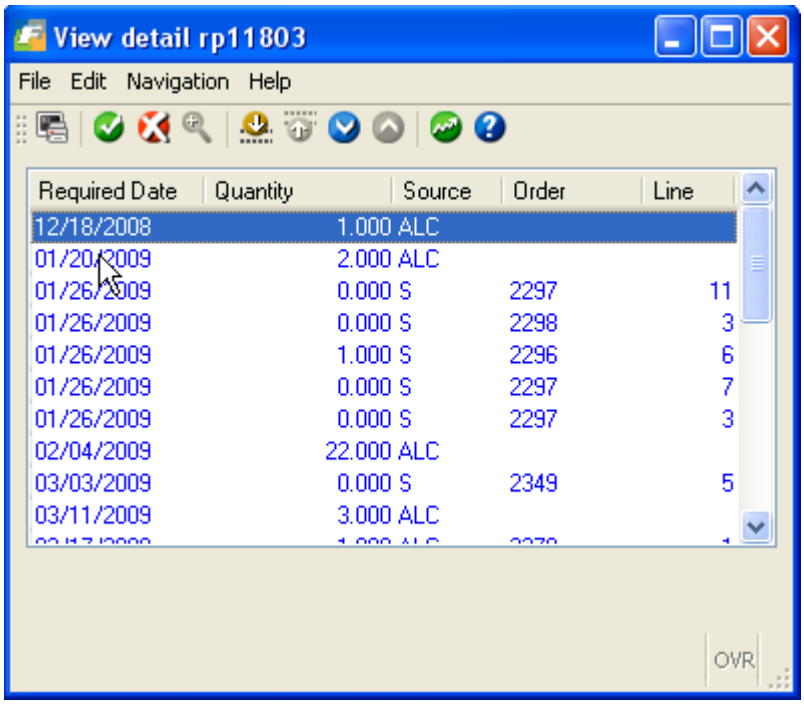
Field	Description
Quantity	The quantity generated for the planned order
Due Date	The generated due date
Start Date	The generated start date, based on due date less total lead time
Firm	Check the order if you want its status changed to Firm, or uncheck to leave it as a planned order which can be regenerated.

Requirements

The Requirements window is displayed when you select the 

button while in Update mode on an item/warehouse.

The following window displays:



All requirements for the item/warehouse being reviewed are displayed as additional reference.

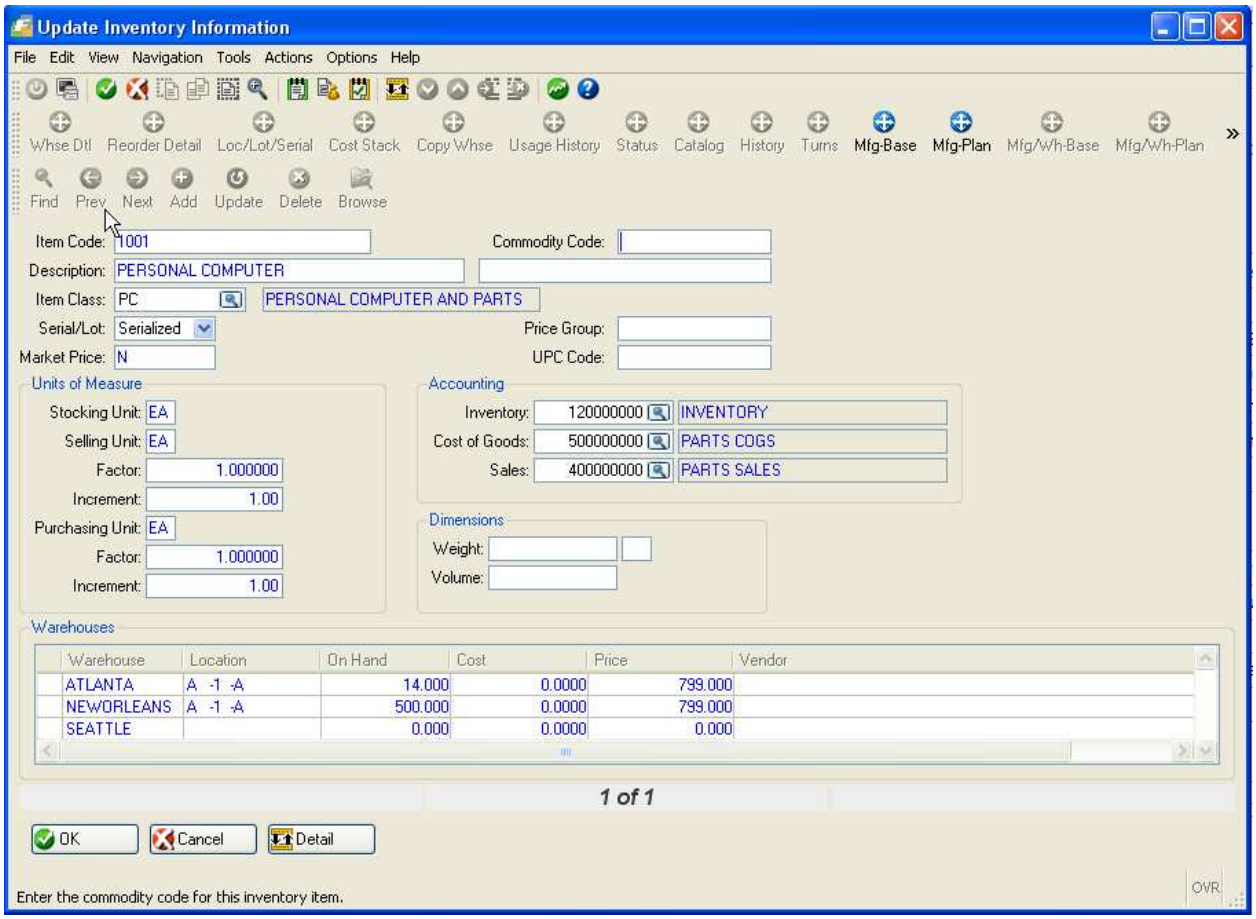
The following fields are displayed:

Field	Description
Required Date	The date of the requirement
Quantity	The quantity required
Source	One of the following is displayed: ALC – An open allocation from a production order S – A commitment from an open sales order FCST – A sales forecast.
Order	For ALC and S, the associated production or sales order
Line	For Source = S, the sales order line item

Item and Item/Warehouse Planning Information

Options on the Inventory Control /Update Inventory Information menu option allow you to access additional windows used to set up planning information for all manufactured and purchased items which should be included in the Material Requirements Plan. Planning information must be entered for items and item/warehouses. To view this menu from the main menu select **Item Management > Inventory Control > Item Maintenance > Update Inventory Information.**

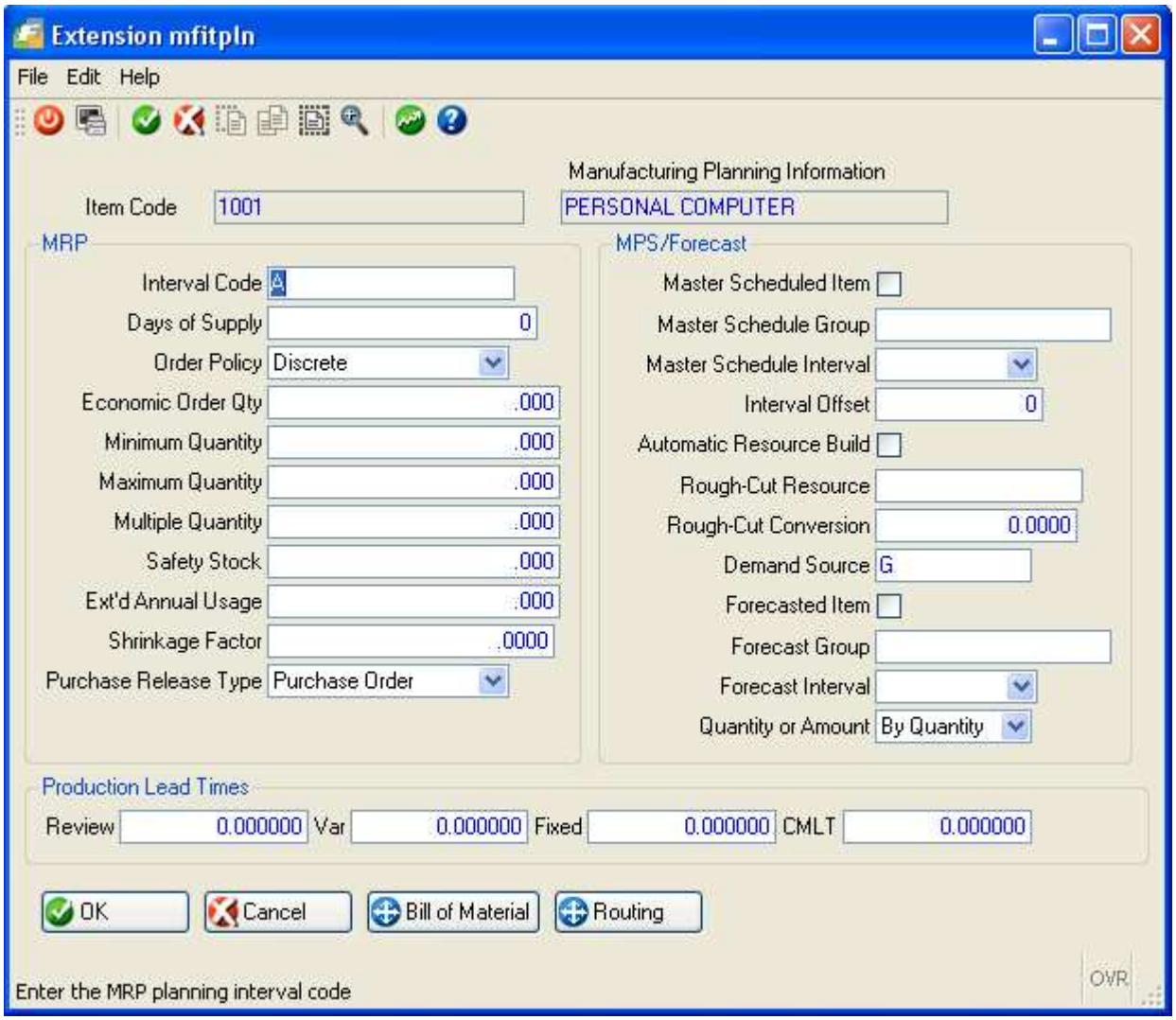
The following window displays:



Item Planning Information

For each purchased or manufactured item to be included in Material Planning, perform a 'Find' and 'Update', then select the Mfg-Plan button.

The following window displays:



The following fields can be entered:

Field	Description
Interval Code	Enter a valid Period Interval code. Planning reports for this item will use this interval code as a default when loading planning activity into future time periods for analysis.

Field	Description
Days of Supply	This field is only used with Order Policy 'Days of Supply'. Enter the number of days to represent the length of the time period for which demand should be collected to create planned orders. For example, a value of 30 would tell Material Planning to sum up the requirements for the next 30 days for an item to determine the quantity and date for a planned order.
Order Policy	Select one of the following choices: Discrete – Material Planning will create planned orders for each individual requirement from sales forecast, sales order, or production order component. This policy provides the best detail for an item when planning, but also generates more detail information. No Orders – Do not create planned orders for this item. This policy assumes an alternate planning approach will be used, if necessary (for example, planned via a re-order point external to MRP). Std Order Quantity – creates planned orders with Standard Order Quantity (see the Mfg-Base window, in the Bill of Material box). EOQ Qty – creates planned orders with Economic Order Quantity Days Supply – creates planned orders where the quantity is the sum of demand for time period intervals equal to the Days of Supply entered.
Economic Order Quantity	An order quantity which can be calculated by the Bill of Material/Processing/EOQ calculator option, or can be entered manually. This quantity typically represents the result of a standardized formula for calculating an item's EOQ based on estimated annual usage, order placement cost, and a company's inventory carrying cost percent.
Minimum Quantity	Reserved for future use
Maximum Quantity	Reserved for future use
Multiple Quantity	Reserved for future use
Safety Stock	Enter a quantity representing the lowest on-hand balance allowed before the Material Plan should plan to produce or purchase more units.
Est'd Annual Usage	Enter the estimated annual usage for the item. This value is used to calculate the EOQ.
Shrinkage Factor	Enter the estimated loss for this item when it is used as a component on a bill of material.
Production Lead Time – Review	Enter an optional number of days needed to review this item before placing an order to produce or purchase
Production Lead Time – Fixed	Enter an optional number of days needed to produce or purchase this item, independent of the order quantity
Production Lead Time – Variable	Enter an optional number of days needed to produce or purchase this item, for the Standard Order Quantity entered on the Mfg-Base window, in the Bill of Material box. For example, if the variable lead time is 5 days to produce a Standard Order Quantity of 500, then this lead time segment would be 25 days to produce 2500 units.

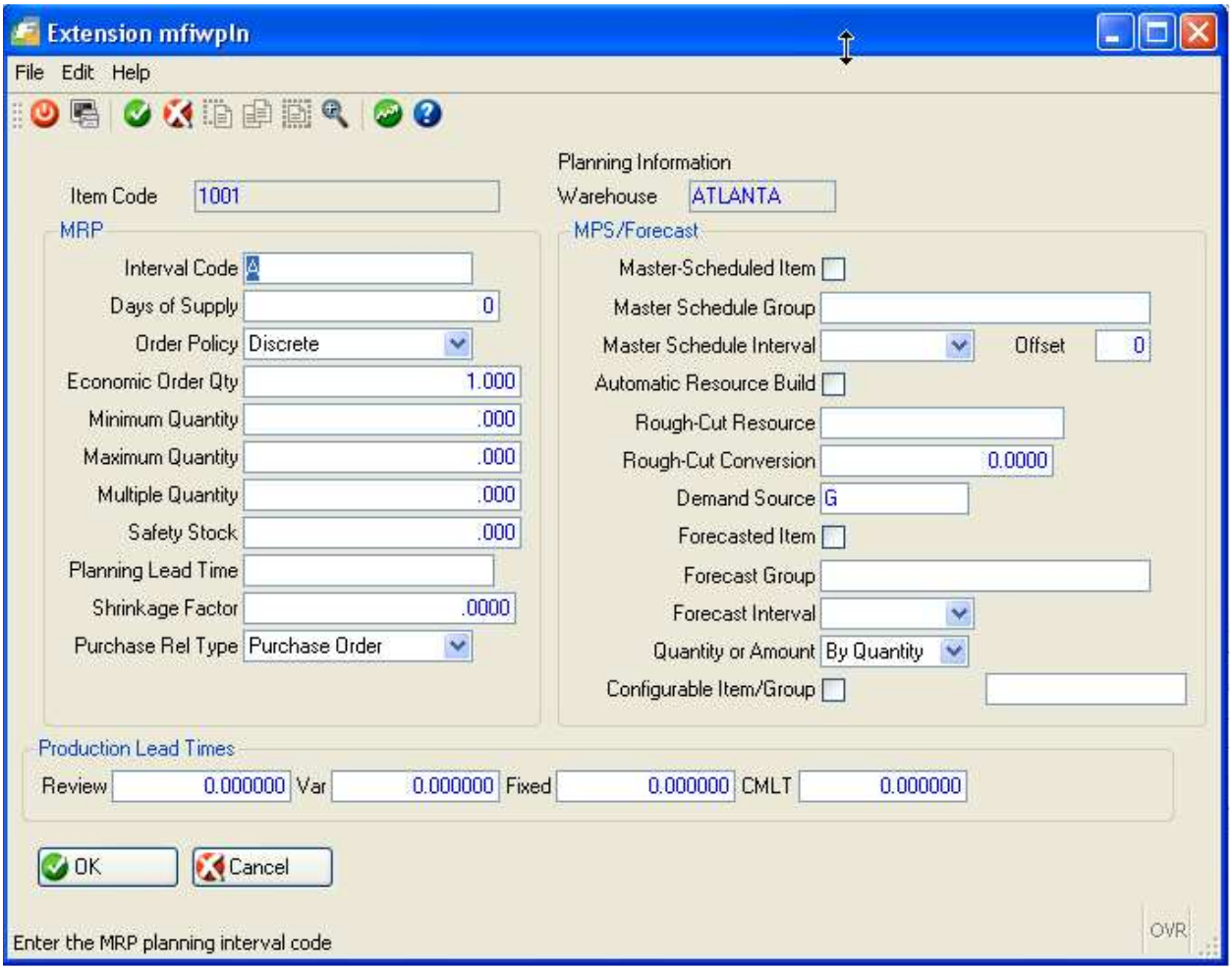
Field	Description
CMLT	This cumulative material lead time cal be calculated by summing the item's lead times above (Review + Fixed + (Variable * (Order Qty/Std Order Qty)). If the item also has a bill of material, the components lead times will also be included in this value.
MPS/Forecast fields	These fields will be described in the Master Schedule Planning module.

Item/Warehouse Planning Information

While updating an item from above, select the warehouse you wish to view or change, then select the 

button.

The following window displays:



When you add a new warehouse for an item in Update Inventory Information, the planning information for the item is copied to the item/warehouse information. After adding a new warehouse, the item/warehouse information is independent of the item (if you change any planning fields for an existing item, the changes are NOT copied to the item/warehouse row(s).

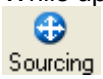
The following fields can be entered:

Field	Description
Interval Code	Enter a valid Period Interval code. Planning reports for this item will use this interval code as a default when loading planning activity into future time periods for analysis.

Field	Description
Days of Supply	This field is only used with Order Policy 'Days of Supply'. Enter the number of days to represent the length of the time period for which demand should be collected to create planned orders. For example, a value of 30 would tell Material Planning to sum up the requirements for the next 30 days for an item to determine the quantity and date for a planned order.
Order Policy	Select one of the following choices: Discrete – Material Planning will create planned orders for each individual requirement from sales forecast, sales order, or production order component. This policy provides the best detail for an item when planning, but also generates far more detail information. No Orders – Do not create planned orders for this item. This policy assumes an alternate planning approach will be used, if necessary (for example, planned via a re-order point external to MRP). Std Order Quantity – creates planned orders with Standard Order Quantity (see the Mfg-Base window, in the Bill of Material box). EOQ Qty – creates planned orders with Economic Order Quantity Days Supply – creates planned orders where the quantity is the sum of demand for time period intervals equal to the Days of Supply entered.
Economic Order Quantity	An order quantity which can be calculated by the Bill of Material/Processing/EOQ calculator option, or can be entered manually. This quantity typically represents the result of a standardized formula for calculating an item's EOQ based on estimated annual usage, order placement cost, and a company's inventory carrying cost percent.
Minimum Quantity	Reserved for future use
Maximum Quantity	Reserved for future use
Multiple Quantity	Reserved for future use
Safety Stock	Enter a quantity representing the lowest on-hand balance allowed before the Material Plan should plan to produce or purchase more units.
Est'd Annual Usage	Enter the estimated annual usage for the item. This value is used to calculate the EOQ.
Shrinkage Factor	Enter the estimated loss for this item when it is used as a component on a bill of material.
Production Lead Time – Review	Enter an optional number of days needed to review this item before placing an order to produce or purchase
Production Lead Time – Fixed	Enter an optional number of days needed to produce or purchase this item, independent of the order quantity
Production Lead Time – Variable	Enter an optional number of days needed to produce or purchase this item, for the Standard Order Quantity entered on the Mfg-Base window, in the Bill of Material box. For example, if the variable lead time is 5 days to produce a Standard Order Quantity of 500, then this lead time segment would be 25 days to produce 2500 units.

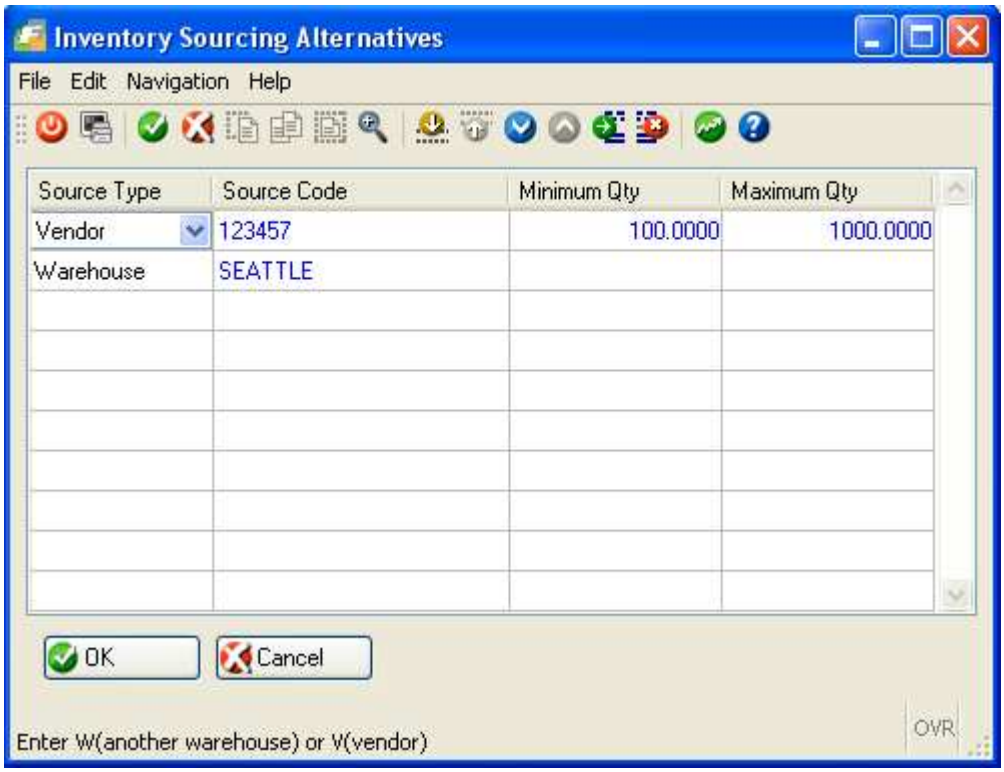
Field	Description
CMLT	This cumulative material lead time cal be calculated by summing the item's lead times above (Review + Fixed + (Variable * (Order Qty/Std Order Qty)). If the item also has a bill of material, the components lead times will also be included in this value.
MPS/Forecast fields	These fields will be described in the Master Schedule Planning module.

Inventory Sourcing Alternatives

While updating an item from above, select the warehouse you wish to view or change, then select the 

button.

The following window displays:



This window allows you to specify the source or sources from which you expect requirements to be filled for a given item/warehouse. If you make no entries in this window, and the item is:

- Manufactured – Planned production orders will be created in the same warehouse
- Purchased – Planned purchase orders will be created to be received in the same warehouse

If you make entries in this window, and the item is:

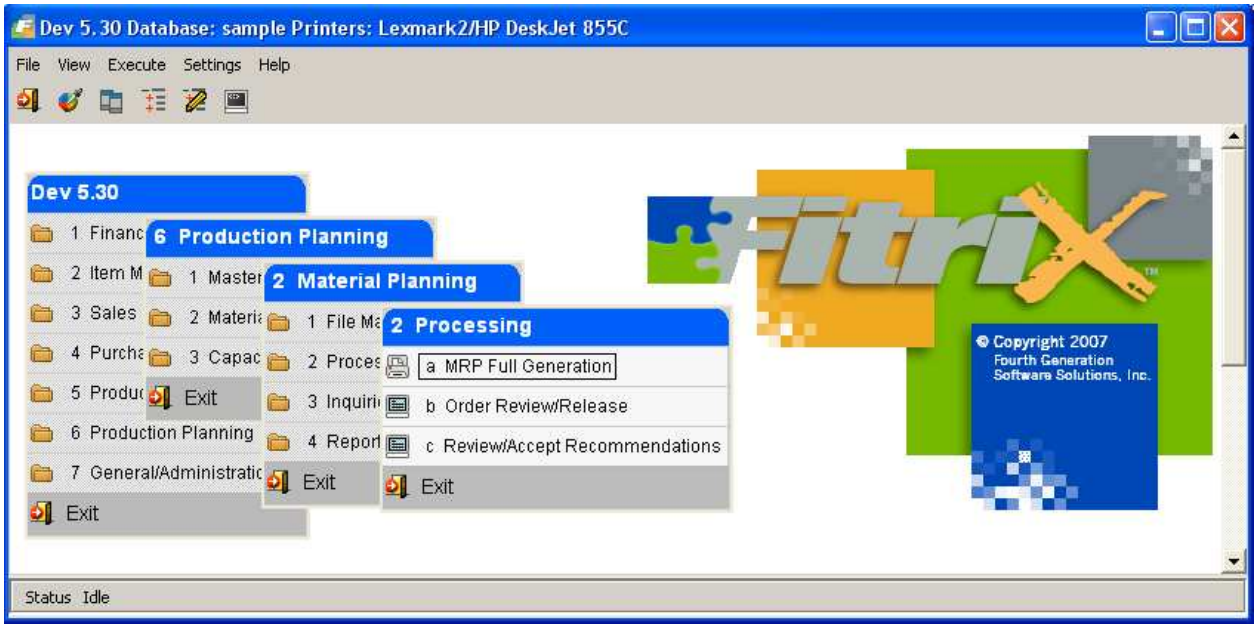
- Manufactured – Planned production orders will be created in the warehouse identified as the Source Code, with Source Type of Warehouse
- Purchased – Planned purchase orders will be created to be received in the same warehouse, for the vendor specified under Source Code with Source Type of Vendor.

The following fields can be entered in this window:

Field	Description
Source Type	Select one of the following choices: Vendor – Indicates the sourcing entry will be based on a vendor code Warehouse – Indicates the sourcing entry will be base on a different warehouse
Source Code	This field should be one of the following: If Source Type = 'Vendor' – must be a valid Vendor code If Source Type = 'Warehouse' – must be a valid Warehouse code
Minimum Quantity	The minimum required quantity for this vendor to be used. This allows multiple warehouses or vendors to be included as sources, with the most appropriate warehouse or vendor being selected based on order size.
Maximum Quantity	The maximum required quantity for this vendor to be used. This allows multiple warehouses or vendors to be included as sources, with the most appropriate warehouse or vendor being selected based on order size.

Processing Menu

Options on the Processing menu allow you to execute a Material Planning run, and to review and act on the results. To view this menu from the main menu select **Production Planning > Material Planning > Processing (option 2).**



The following options are available on this menu.

MRP Full Generation – Used to execute a Material Planning run. A one page report prints indicating that the run was completed.

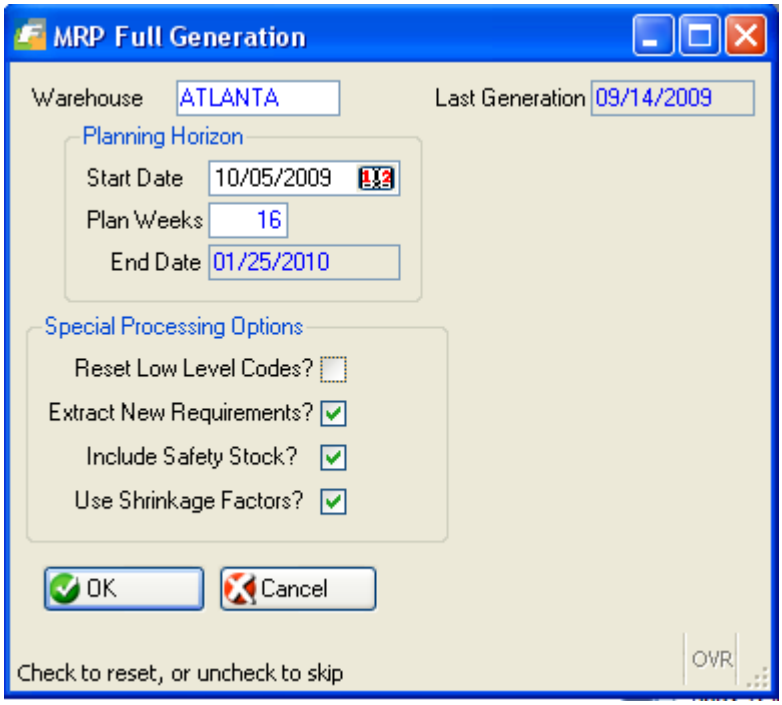
Order Review/Release – Used to review and release planned orders created by the planning run. Releasing an order converts it into a production/purchase order

Review/Accept Recommendations – Used to review and/or accept recommendations made by the planning run to change open production/purchase orders base on changes in demand.

MRP Full Generation

This menu option (a) performs a Full Generation of the material planning information.

The following window is displayed:



The following fields can be entered:

Field	Description
Warehouse	Enter a valid warehouse. The default warehouse displayed is based on the Default Warehouse set in the Sales Order Management/SalesOrder/Setup Order Entry/Update Order Entry Defaults
Planning Horizon – Start Date	This field will default to today's date. All planning reports will use this date as the beginning of the first time period when printing planning activity be period interval. Any activity with dates earlier than this date (ie orders with dates that are past due) will print in a time period called 'Past Due'
Planning Horizon – Planning Weeks	The horizon is used with the Start Date to create a 'Plan Nnd date'. Any demand later than this date will be ignored. This prevents the Planning Run from processing demand too far into the future to be meaningful for the purposes of scheduling production or purchases.

Field	Description
Reset Low Level Codes	Every item in the Inventory Information master has a field call the 'Low Level Code', the lowest level in any bill of material the item can be found. Higher level saleable items, which are not used as components in any bill of material, have a low-level code of 0 (zero). Alternatively, some component items may be used in multiple parents, at different relative levels in their bills of material. They must be analyzed to determine their lowest level in any bill, so that the planning run will wait until all requirements are processed and/or generated, before attempting to generate planned orders. This low-level code is updated automatically during bill of material maintenance, but after sessions where multiple bills of material have been maintained, it is a good practice to reset the low-level codes to guaranty accuracy. Checking this box will execute the reset before the planning run executes. You can also run a Low Level Code reset in Bill of Material/Processing/Set Low Level Codes
Extract New Requirements	Check this box if you want the generation to re-extract requirements from sales orders, forecasts, and component requirements. If you are certain no new requirements have been added since the last generation, you can uncheck this box to make the planning run faster.
Include Safety Stock?	Uncheck this box if you want to ignore safety stock levels. When checked, the generation will analyze inventory availability based on the safety stock level, not the on-hand balance.
Include Shrinkage Factors?	Uncheck this box if you want to ignore any shrinkage factors previously entered for components in bills of material. If you use shrinkage factors, there is a risk that the generation will not create orders for sufficient component inventory.

When you select OK, the generation will process in multiple phases:

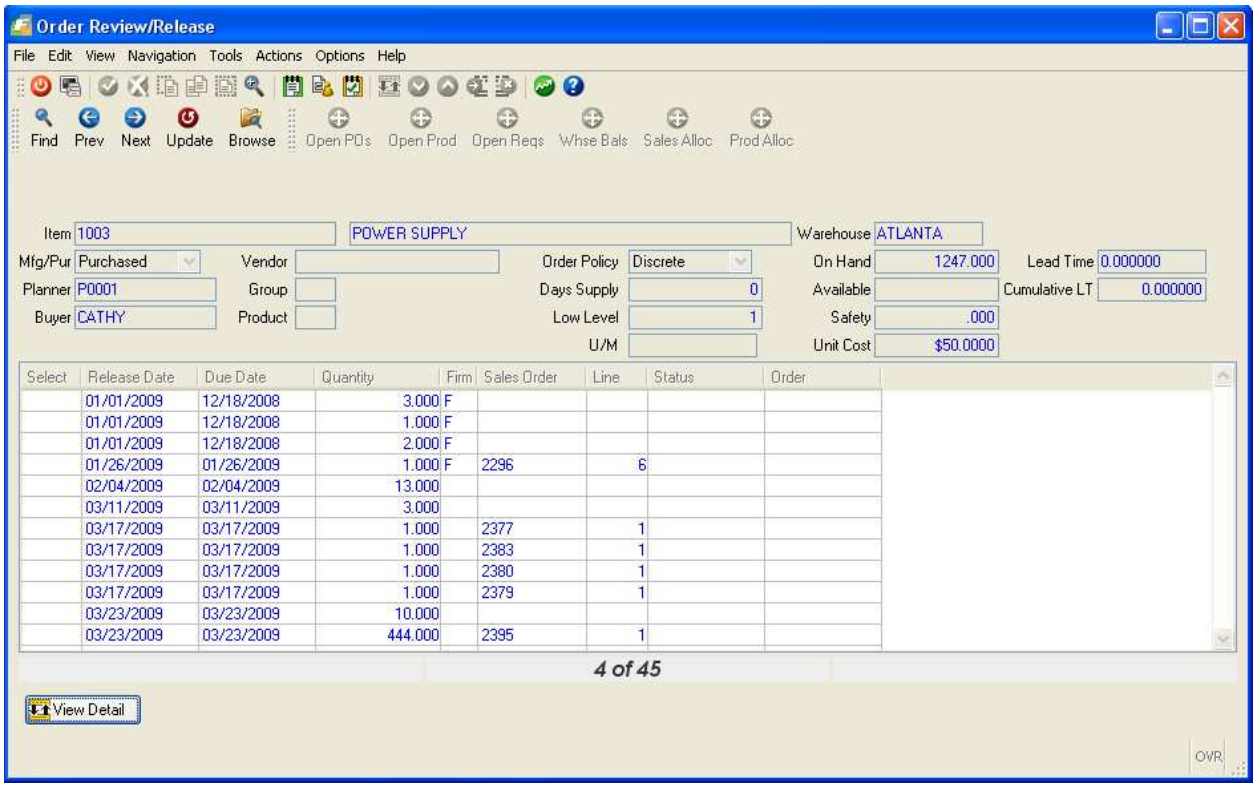
- Extracts demand from:
    - Sales order line items
    - Sales forecast
    - Component requirements from open production orders
- Extracts open orders for scheduled receipts from:
    - Production Orders
    - Firm Planned Orders
    - Purchase Orders
- Executes material plan generation starting with items at the highest levels of all bills of material
- For each level in the bill of material:
    - Summarizes demand for an item/warehouse
    - Compares demand to on-hand balance and schedule receipts
    - In cases where the on-hand balance satisfies demand, continues to the next item
    - In cases where scheduled receipts satisfy demand:
        - If date of the scheduled receipt is too early, creates a DEFER recommendation

        - If the date of the scheduled receipt is too late, creates an EXPEDITE recommendation
    - In cases where the on-hand balance and scheduled receipts do not satisfy demand, creates planned orders, with due dates and quantities based on the order policy for the item/warehouse. This in turn creates additional requirements for the components of this item.
    - Moves to the next level in the bill of material
- After all levels in the bill of material have been analyzed, processes any scheduled receipts where no demand was found, and creates a CANCEL recommendation.
- A one page report will print indicating the date/time of completion of the generation for the selected warehouse. If any of the items processed were sourced from other warehouses (see *Inventory Sourcing Alternatives)*, the generation will automatically switch to the sourcing warehouse and execute a full generation as well. This process continues until all sourcing warehouses have been processed.

Order Review/Release

This menu option (b) allows you to view planned orders created by the Full Generation, and optionally release them as production or purchase orders.

The following window displays:



The upper portion of the window displays general planning information for the item/warehouse being reviewed. The lower portion contains the planned orders generated. If you wish to release any of the orders, select the 'Update' option.

The following fields are available:

Field	Description
Select	Enter a number to place the order in a 'group' for release. You can release each order in the list as an individual production or purchase order, by entering a different Select number on each line (1 through 99). If you wish to combine multiple lines into a combined order, enter the same select number on the lines to be combined (the combined order will have the total quantity of the lines, with a due date of the earliest line)
Release Date	The recommended date this order should be released to satisfy the demand from the Generation. You cannot change this date in this window.
Due Date	The due date for this recommended order. You cannot change this date in this window.
Quantity	The recommended quantity needed to satisfy the demand from the Generation. You cannot change the quantity in this window.

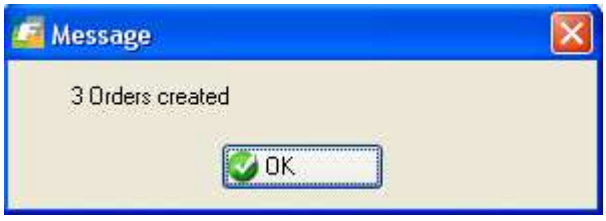
Field	Description
Firm	If the planned order was converted to Firm, displays an F
Sales Order/Line	If the planned order was generated from demand of a Sales Order, the order number and line displays
Status	This field is initially blank. If it is released, the status changes to 'Released'
Order	This field is initially blank. If it is released, it changes to the order number created by the release.

If one or more orders are released, and you select OK, the following window displays:

The list contains the orders to be released:

Field	Description
Confirm	Leave the order checked to release it, or uncheck to skip it.
M/P	Indicates if the order being created is Production or Purchased
Order	You can enter an order number, or leave blank to allow the system to assign the order.
Item/Warehouse	You cannot change these values
Due Date	You can accept the recommended due date, or override it
Quantity	You can accept the recommended quantity, or change it
Vendor	If the order is for Purchase, enter the Vendor to whom the order will be assigned
Buyer	If the order is for Purchase, enter the Buyer responsible for the order
Unit Cost	Enter the expected unit cost

When you select OK, the orders will be created, and a window will display the results:

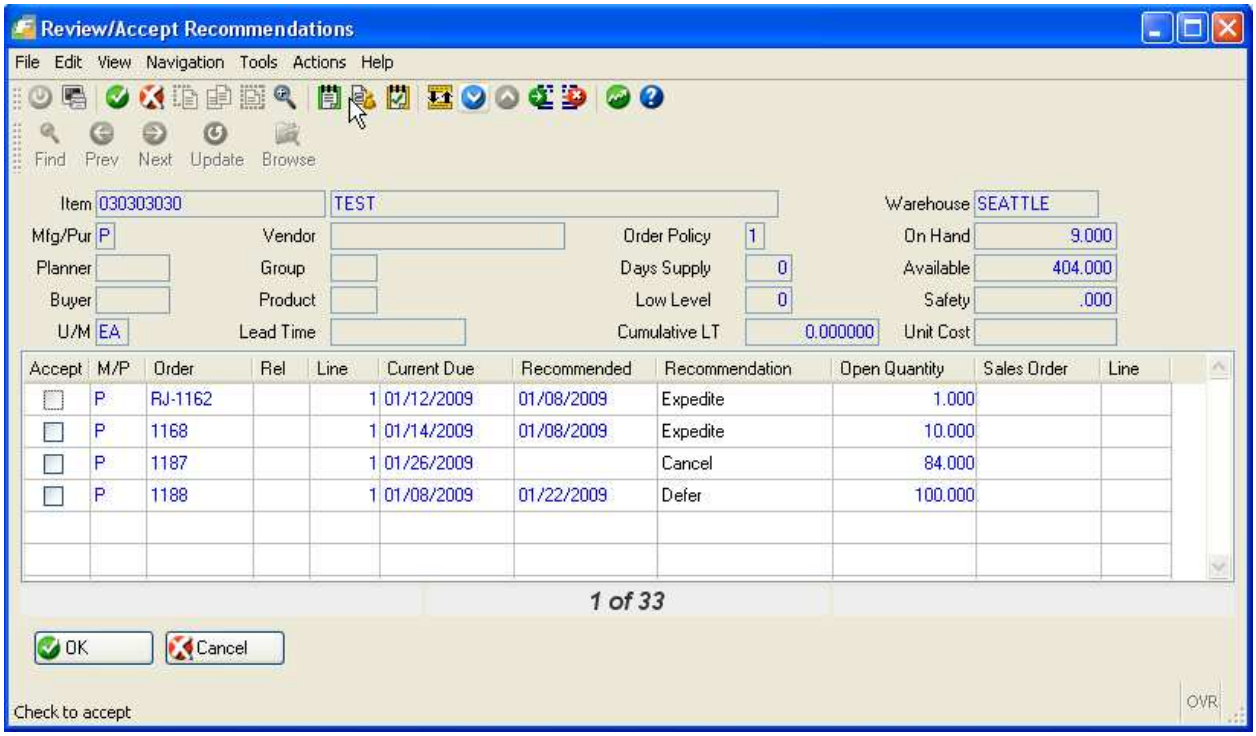


The main window will re-display, with Status and Order columns changed to reflect the releases.

Review/Accept Recommendations

This menu option (c) allows you to view recommendations created by the Full Generation, related to open production and/or purchase orders, and optionally accept the recommended changes.

The following window displays:



The upper portion of the window displays general planning information for the item/warehouse being reviewed. The lower portion contains the recommendations generated. If you wish to accept any of the order recommendations, select the 'Update' option.

The following fields are available:

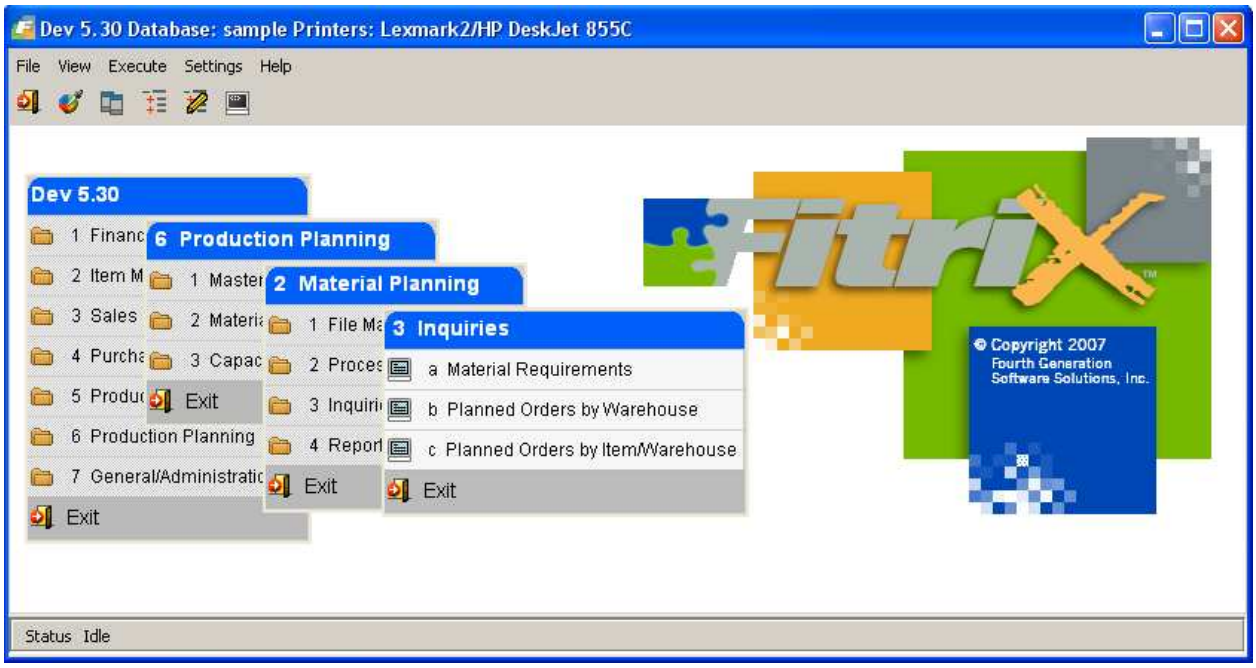
Field	Description
Accept	Check the box to accept the recommendation. Uncheck to ignore
M/P	Indicates if the order is: M = Production Order P=Purchase Order
Order	The order number
Rel	For a Production Order, the order number
Line	For a Purchase Order, the line number
Current Due	The order's current due date
Recommended	The recommendation's new due date

Field	Description
Recommendation	One of the following values: Expedite – move the due date to an earlier date. This occurred because a requirement exists for this item that can be satisfied by this order, but the due date is too late to satisfy the required date. Defer - move the due date to an later date. This occurred because a requirement exists for this item that can be satisfied by this order, but the due date is too early to satisfy the required date. Cancel – no demand exists for the item on this order. Cancel to avoid carrying excess inventory.
Open Quantity	The quantity remaining on the order
Sales Order/Line	If the order is directly related to a Sales Order/Line, it is displayed here.

If you check one or more boxes, and select OK, the recommended changes will be processed immediately, and the window will redisplay with the checked items.

Inquiries Menu

Options on the Inquiries menu allow you to review the results of the Generation on display windows. To view this menu from the main menu select **Production Planning > Material Planning > Inquiries (option 3).**



The following options are available on this menu.

Material Requirements – Used to review a time-phased list of planning activity by item/warehouse. The current balance on-hand is a starting point for reviewing pending receipts and issues/shipments, with projected on-hand balances for each future transaction.

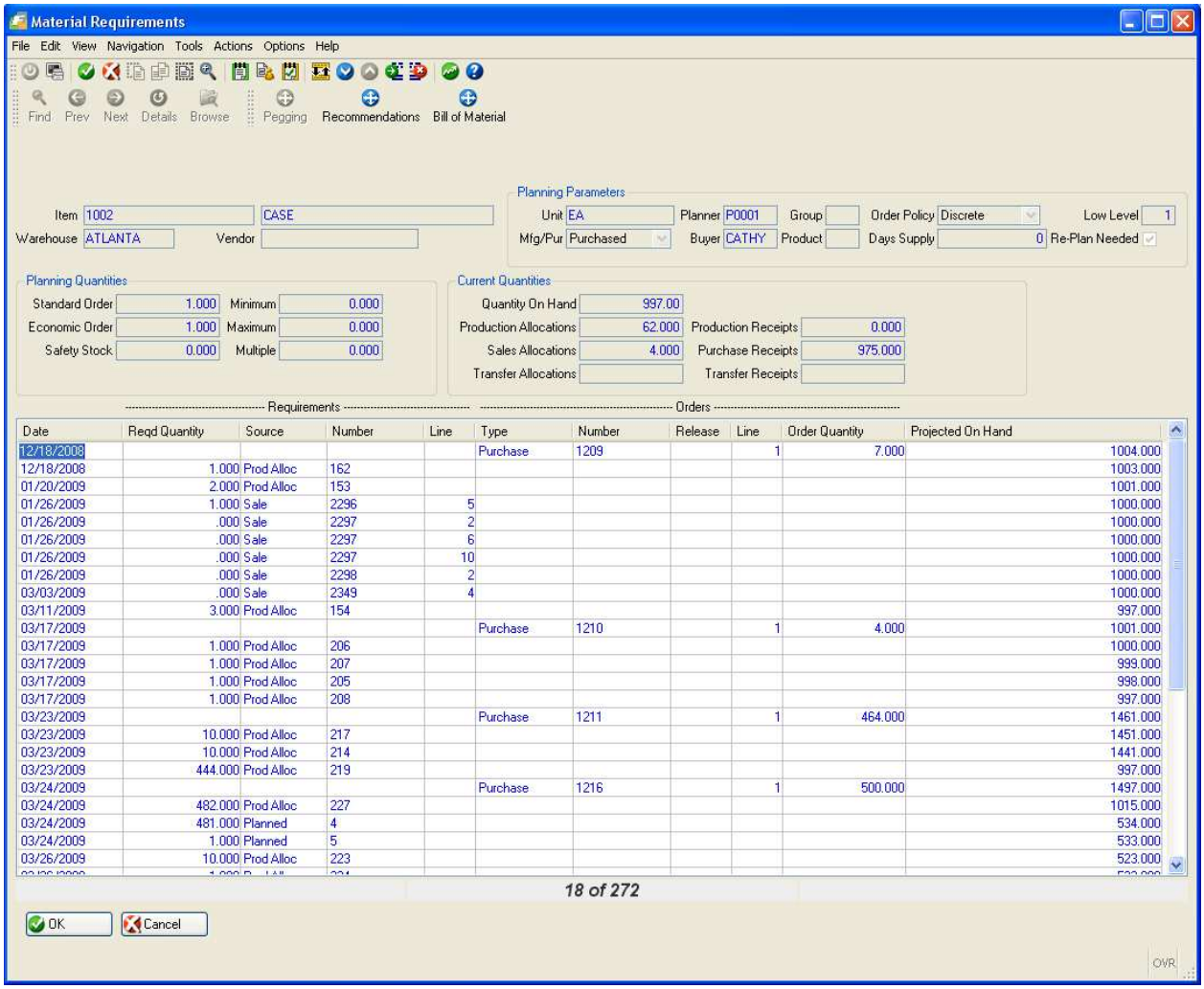
Planned Orders by Warehouse – Used to review planned orders created within a planning warehouse. Planned order are sorted by item and release date.

Planned Orders by Item/Warehouse – Used to review planned orders created for a specific item/warehouse. Planned order are sorted by release date.

Material Requirements

This menu option (a) allows you to view pending activity for open and planned orders, by item/warehouse.

The following window is displayed:



The upper portion of the window displays general planning information for the item/warehouse being reviewed. The lower portion contains the pending activity for the item/warehouse.

The activity on the lower portion is sorted by date, and is divided into 3 sections horizontally:

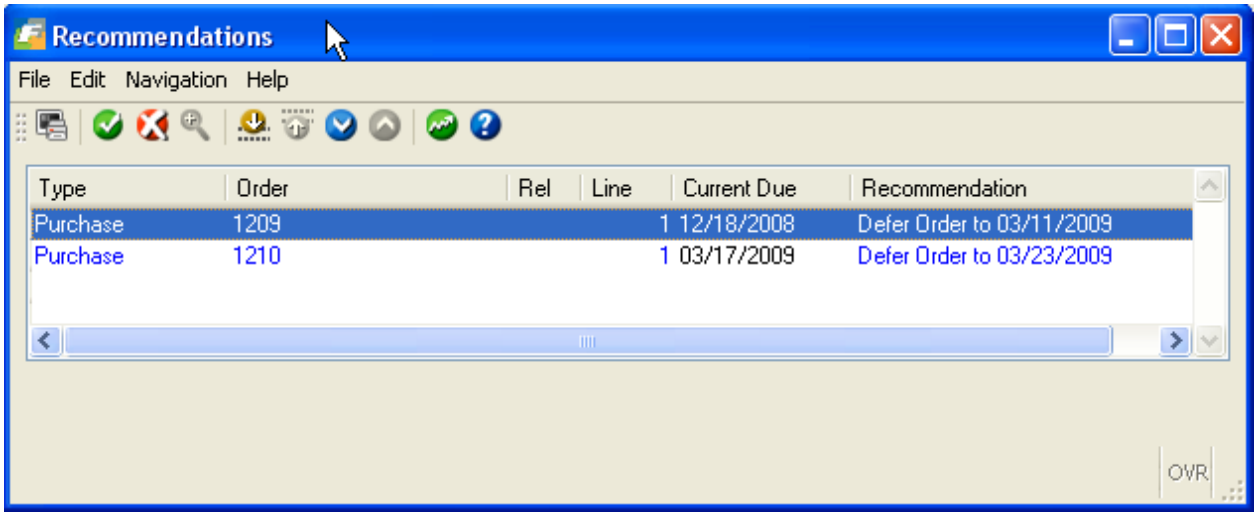
- Requirements – displays individual requirements, with quantities and source of requirement. Quantities in this sections reduce the on-hand balance to compute a projected balance.
- Orders – displays open and planned orders, with quantities and order types. Quantites in this section increase the on-hand balance to compute a projected balance.
- Projected On Hand – the net effect of the Requirements/Orders on the On Hand balance. This balance starts with the current Quantity On Hand (from the upper portion of the window), and reduces/increases the value with each pending activity.

The following fields are displayed:

Field	Description
Date	The date of the pending activity. In cases where orders were created to increase the on hand balance to the safety stock level, the date will be the Production Calendar's beginning date.
Requirements	
Req'd Quantity	The quantity of the requirement
Source	One of the following values: Prod Alloc – Component allocation from and open production order Sale – Commitment from an unshipped sales order Planned – A requirement from a planned order for a parent item Forecast – Sales Forecast
Number	Associated with the open order or requirement number
Line	For open sales orders, the order line number
Orders	
Type	One of the following: Purchased Production Planned
Number	For Purchased or Production, the order number
Release	For Production Orders, the release number
Line	For Purchase Orders, the line number
Order Quantity	The order quantity
Projected on Hand	Calculated from Quantity on Hand, reduced by requirements, and increased by orders.

Recommendations

To view recommendations for the item/warehouse, select the Details button, then select the Recommendations button. The following window displays:



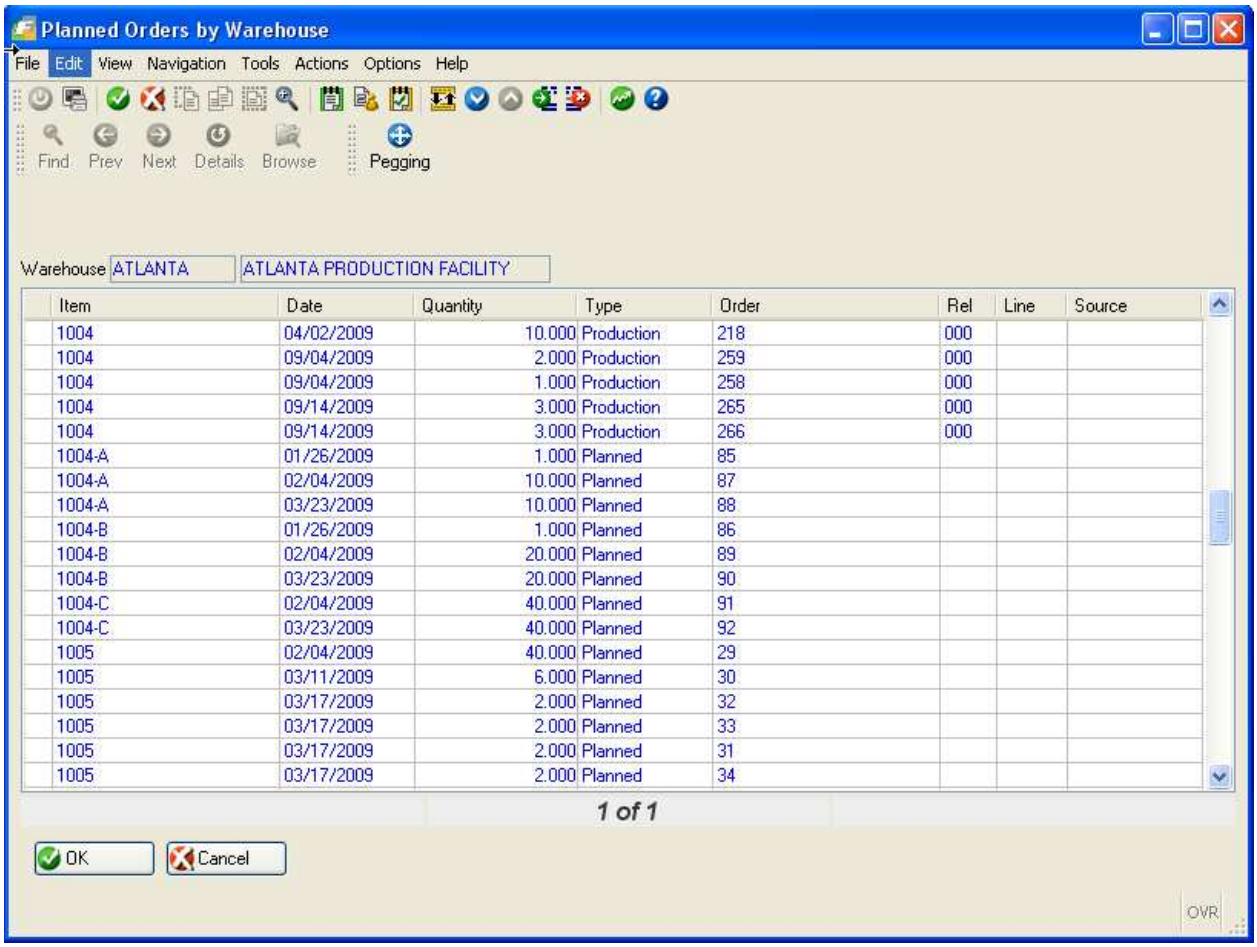
The Following fields for the recommendations are displayed:

Field	Description
Type	Purchase or Production
Order	The associated order number
Rel	For Production Orders, the release number
Line	For Purchase Orders, the line number
Current Due	The open orders current due date
Recommendation	The Recommendation and associated date

Planned Orders by Warehouse

This menu option (b) allows you to view all planned orders for a specific warehouse. For planners interested in viewing all pending planned orders for a warehouse, this provides a concise, consolidated view.

The following window is displayed:



The following fields are displayed:

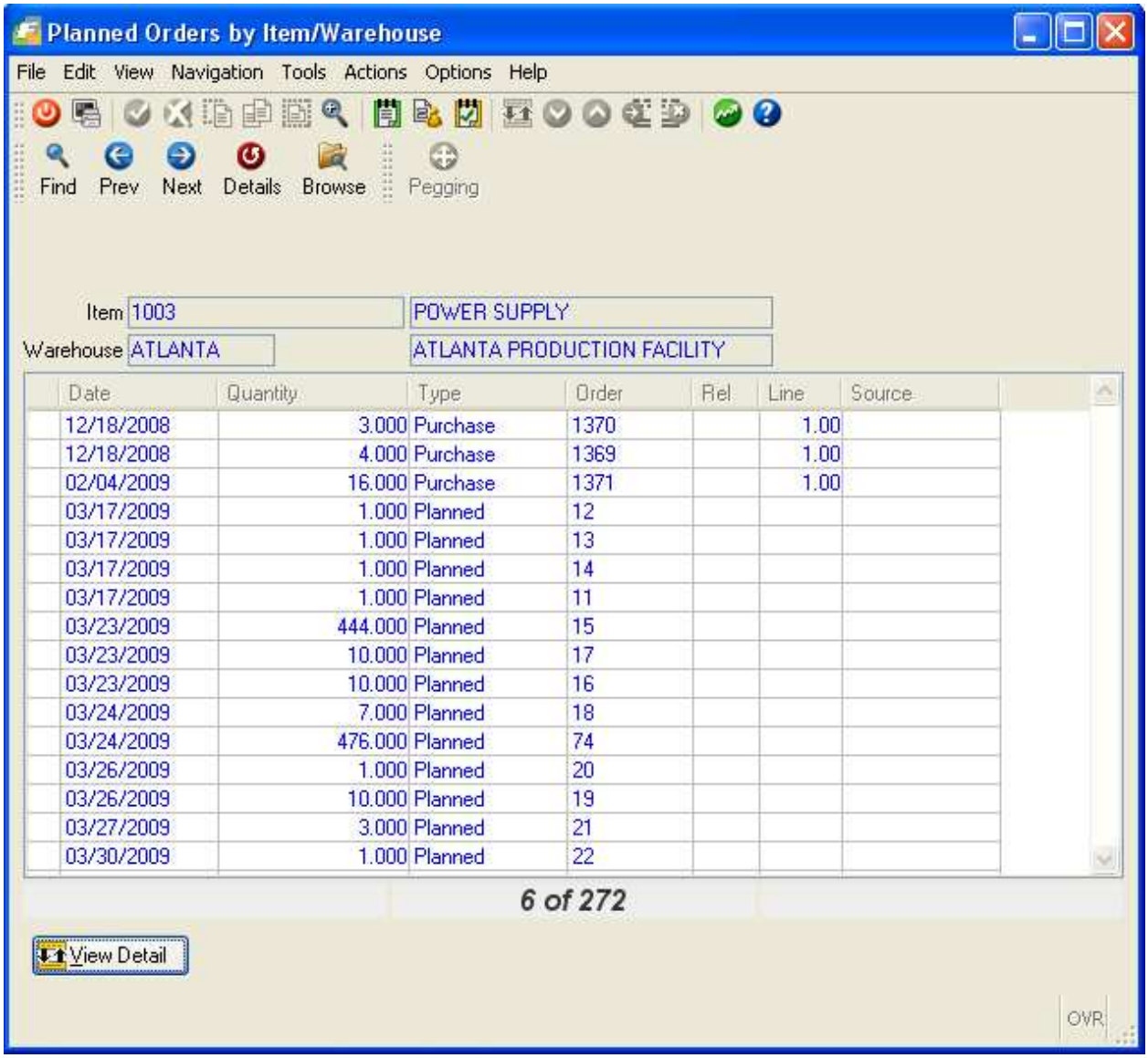
Field	Description
Item	The Item Number
Date	The open or planned order due date
Quantity	The open or planned order quantity
Type	One of the following values: Production Purchase Planned
Order	For open orders, the order number

Field	Description
Rel	For Production Orders, the order release number
Line	For Purchase Orders, the order line number
Source	This field is reserved for future use

Planned Orders by Item/Warehouse

This menu option (c) allows you to view all planned orders for a specific item and warehouse.

The following window is displayed:



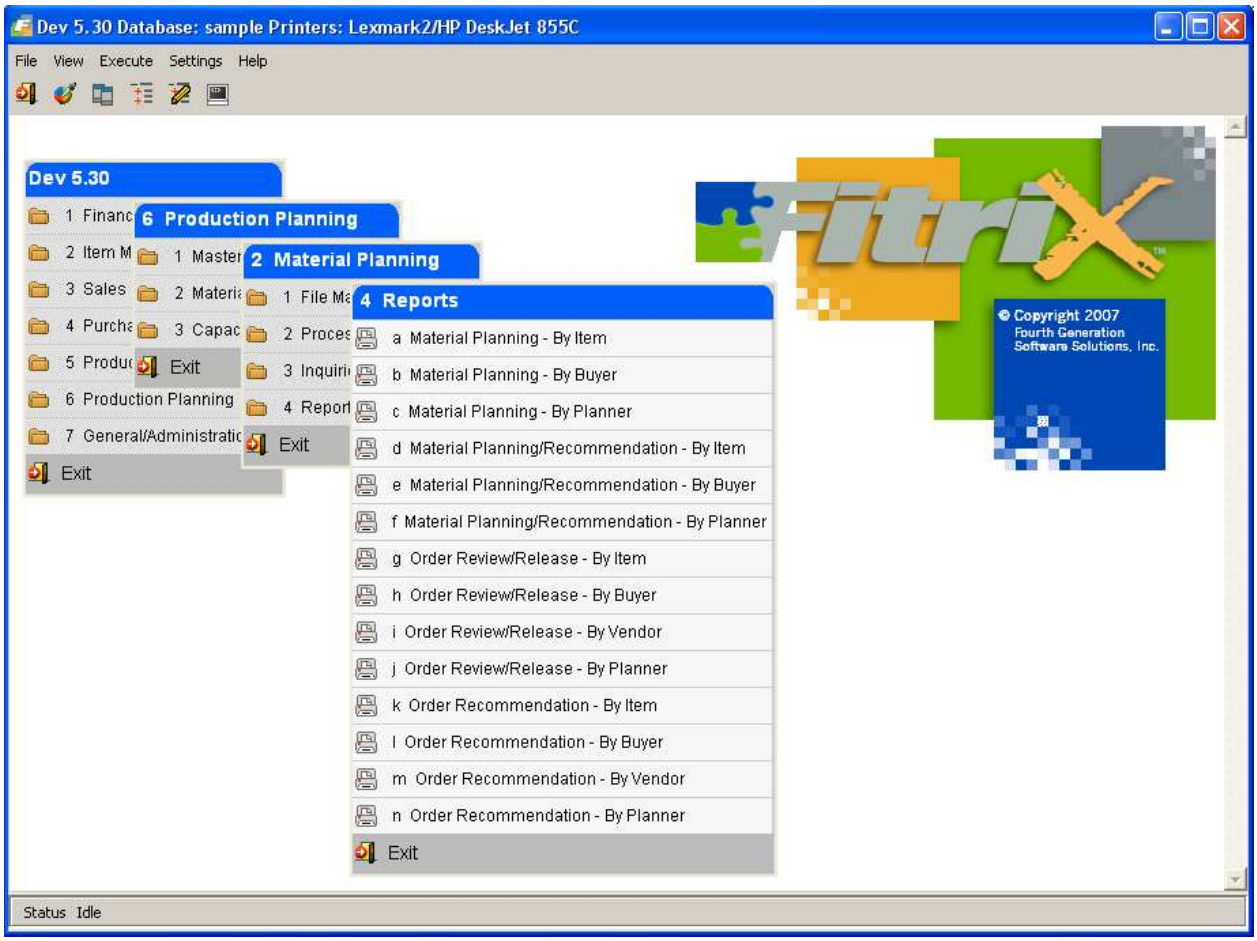
The following fields are displayed:

Field	Description
Date	The open or planned order due date
Quantity	The open or planned order quantity

Field	Description
Type	One of the following values: Production Purchase Planned
Order	For open orders, the order number
Rel	For Production Orders, the order release number
Line	For Purchase Orders, the order line number
Source	This field is reserved for future use

Reports Menu

Options on the Reports menu allow you to review the results of the Generation on a display or printer. To view this menu from the main menu select **Production Planning > Material Planning > Reports (option 4).**



The following options are available on this menu.

Material Planning – By Item – Used to review a time-phased list of planning activity by item/warehouse. The current balance on-hand is a starting point for reviewing pending receipts and issues/shipments, with projected on-hand balances at the end of each future time period. The future time periods printed are based on the selected period interval.

Material Planning – By Buyer – Used to review a time-phased list of planning activity by item/warehouse within buyer code. The current balance on-hand is a starting point for reviewing pending receipts and issues/shipments, with projected on-hand balances at the end of each future time period. The future time periods printed are based on the selected period interval.

Material Planning – By Planner – Used to review a time-phased list of planning activity by item/warehouse within planner code. The current balance on-hand is a starting point for reviewing pending receipts and issues/shipments, with projected on-hand balances at the end of each future time period. The future time periods printed are based on the selected period interval.

Material Planning/Recommendation – By Item – Used to review a time-phased list of planning activity and order recommendations, by item/warehouse. The current balance on-hand is a starting point for

reviewing pending receipts and issues/shipments, with projected on-hand balances at the end of each future time period. The future time periods printed are based on the selected period interval. Order recommendations and details for open order and requirements are also included.

Material Planning/Recommendation – By Buyer – Used to review a time-phased list of planning activity and order recommendations, by item/warehouse within buyer code. The current balance on-hand is a starting point for reviewing pending receipts and issues/shipments, with projected on-hand balances at the end of each future time period. The future time periods printed are based on the selected period interval. Order recommendations and details for open order and requirements are also included.

Material Planning/Recommendation – By Planner – Used to review a time-phased list of planning activity and order recommendations, by item/warehouse within planner code. The current balance on-hand is a starting point for reviewing pending receipts and issues/shipments, with projected on-hand balances at the end of each future time period. The future time periods printed are based on the selected period interval. Order recommendations and details for open order and requirements are also included.

Order Review/Release – By Item – Used to review a list of planned orders by item/warehouse. It is typically printed after a Material Planning run, to be reviewed by inventory planners or master schedulers to determine when to release new orders for production or purchase

Order Review/Release – By Buyer – Used to review a list of planned orders by item/warehouse within buyer code. It is typically printed after a Material Planning run, to be reviewed by inventory planners or purchasing staff to determine when to release new orders for purchase

Order Review/Release – By Vendor – Used to review a list of planned orders by item/warehouse within vendor code. It is typically printed after a Material Planning run, to be reviewed by inventory planners or purchasing staff to determine when to release new orders for purchase

Order Review/Release – By Planner – Used to review a list of planned orders by item/warehouse within planner code. It is typically printed after a Material Planning run, to be reviewed by inventory planners or master schedulers to determine when to release new orders for production or purchase

Order Recommendation – By Item – Used to review a list of order recommendations by item/warehouse. It is typically printed after a Material Planning run, to be reviewed by inventory planners or master schedulers to determine what recommendations should be accepted, and to notify production, purchasing and vendors of order changes.

Order Recommendation – By Buyer – Used to review a list of order recommendations by item/warehouse within buyer code. It is typically printed after a Material Planning run, to be reviewed by inventory planners or purchasing staff to determine what recommendations should be accepted, and to notify production, purchasing and vendors of order changes.

Order Recommendation – By Vendor – Used to review a list of order recommendations by item/warehouse within vendor code. It is typically printed after a Material Planning run, to be reviewed by inventory planners or purchasing staff to determine what recommendations should be accepted, and to notify production, purchasing and vendors of order changes.

Order Recommendation – By Planner – Used to review a list of order recommendations by item/warehouse within planner code. It is typically printed after a Material Planning run, to be reviewed by inventory planners or master schedulers to determine what recommendations should be accepted, and to notify production, purchasing and vendors of order changes.

Lab Exercise a: Set Up Material Planning

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

1. **Set up new Assembly as the default Warehouse**
   Use Sales Order Management/Sales Orders/Setup Order Entry/Update Order Entry Defaults
   Change the Warehouse to SHIPPING

2. **Set Up Period Intervals**
   Create a new period interval ‘A’, which has 4 periods of 7 days each, and 3 periods of 28 days each

3. **Set Up Sourcing Alternatives**
   For the item selected in the Bill of Material module as the O’Hair assembled panel, maintain its Inventory Information, select its SHIPPING warehouse, then select ‘Sourcing’. Add an entry for the ASSEMBLY warehouse. This tells MRP that any demand for the item in the SHIPPING warehouse will create planned orders in the ASSEMBLY warehouse

   For the items selected in the Bill of Material module as the O’Hair components, maintain their Inventory Information, select the ASSEMBLY warehouse, then select ‘Sourcing’. Add an entry for either the COMPONENT or MOLDINGS warehouse. This tells MRP that any demand for these items in the ASSEMBLY warehouse will create planned orders in the COMPONENT or MOLDINGS warehouse.

Lab Exercise b: MRP Full Generation

1. **Enter a new sales order (Sales Order Management/Sales Orders/Order Maintenance/Update Customer Orders:**
   Use customer 12, for the item defined in Bill of Material as the O'Hair assembled panel, with a required date of 10/31/2009 and a quantity of 10, in warehouse SHIPPING.

2. **Execute MRP Full Generation (Production Planning/Material Planning/Processing/MRP Full Generation):**
   Use a start date of the current date, planning horizon of 12 weeks, leave other values as defaulted

3. **Review Planned Orders by Warehouse (Production Planning/Material Planning/Inquiries/Planned Orders by Warehouse)**
   Select 'Find' for warehouse ASSEMBLY. See if new planned orders were created
   Select 'Find' for warehouse COMPONENTS and/or MOLDINGS. See if new planned orders were created for components

Lab Exercise c: Experimenting with Order Policies

Make changes to the component items' Order Policy Codes in the Item/Warehouse table, to see how the planned order quantities and due dates are affected:

1. Execute 'Update Inventory Information', tab to the warehouse rows, and select Mfg/Wh–Plan. Change the Order Policies of components to try all policies (Discrete, No Orders, Std Order Qty, EOQ, Days Supply)
2. Execute another MRP Full Generation, using today's date and Warehouse ASSEMBLY
3. Execute the Inquiry Planned Orders by Warehouse, to see the changes in order quantities