MFG/PRO®

User Guide
PRO/PLUS

CUMULATIVE SHIPPED RESET
SELF-BILLING
SUPPLIER PERFORMANCE
GLOBAL REQUISITION SYSTEM
SUPPLIER SHIPPING SCHEDULES

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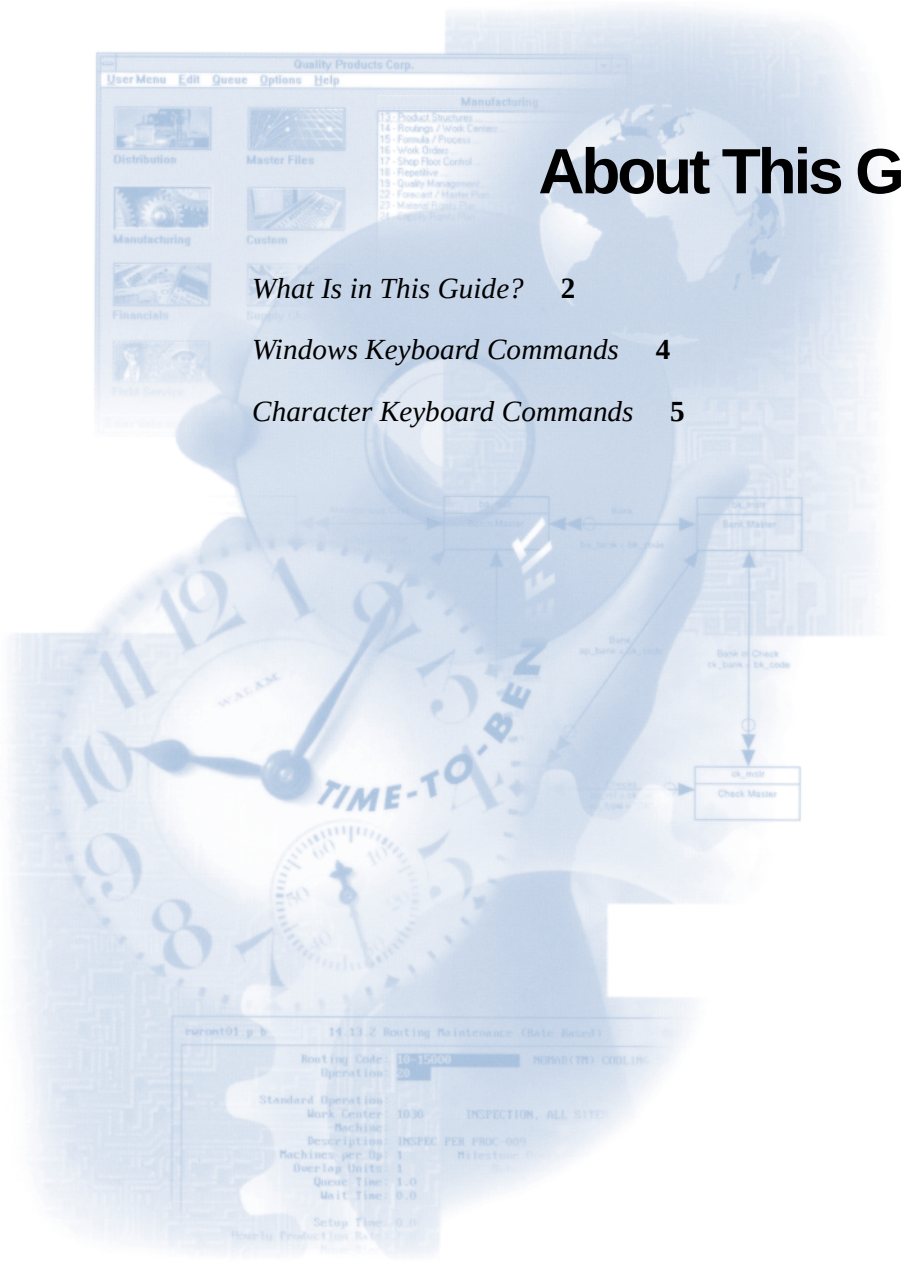
Contents



About This Guide

What Is in This Guide?

This guide presents the features of the MFG/PRO PRO/PLUS package. Use this guide to learn and to begin using the software. The following modules make up the PRO/PLUS package. Each module's user guide begins on the corresponding page.

- "Cumulative Shipped Reset," on page 7
- "Self-Billing," on page 13
- "Supplier Performance," on page 51
- "Global Requisition System (GRS)," on page 95
- "Supplier Shipping Schedules," on page 167

Other 9.0 Documentation

- For an overview of new features and software updates, see the *9.0 Release Bulletin*.
- For software installation instructions, refer to the *9.0 Installation Guides*.
- For instructions on navigating the MFG/PRO environment, refer to the *9.0 User Interface Guide*.
- For information on using MFG/PRO, refer to the *9.0 User Guides*.
- For technical details, refer to the *9.0 File Relationships* and *9.0 Database Definitions.*
- To review MFG/PRO program screens, refer to the *Screen Book, Volumes 1–3*.
- To view documents online in PDF format, see the *9.0 Documents on CD*.

Online Help

MFG/PRO has an extensive online help system. Help is available for most fields found on a screen. Procedure help is available for most programs that update the database. Most inquiries, reports, and browses do not have procedure help.

For information on using the help system, refer to the *9.0 User Interface Guide*.

QAD Web Site

For MFG/PRO users with a QAD Web account, MFG/PRO documentation is available for viewing or downloading at:

http://support.qad.com/documentation/

To obtain a QAD Web account, go to:

http://support.qad.com/

The QAD Web site also has information about training classes and other services that can help you learn about MFG/PRO.

Conventions

MFG/PRO 9.0 is available in several interfaces: Windows, character, Web browser, and an interface for object-oriented programs. To standardize presentation, the documentation uses the following conventions:

- MFG/PRO screen captures reflect the Windows interface.
- References to keyboard commands are generic. For example, choose Go refers to F2 in the Windows interface and to F1 in the character interface. The following tables identify the keyboard commands for the Windows and character interfaces.

Windows Keyboard Commands

Navigation Commands	Keyboard Entry	Description
Go	F2	Moves to next frame.
End	Esc	Exits a frame, program, or menu.
Previous	F9 or up arrow	Retrieves previous record in a key data field.
Next	F10 or down arrow	Retrieves next record in a key data field.
Enter	Enter	Moves to next field within a frame.
Tab	Tab	Moves to next field within a frame.
Back Tab	Shift+Tab	Moves back one field within a frame.
Exit	Alt+X	Closes a program.
Run	Ctrl+R	Starts a program by name.
Save (object)	F12	In a key frame, moves to data entry; in data entry, saves and returns to key frame.
Print (object)	Ctrl+P	Prints browse or maintenance information.

Help Commands	Keyboard Entry	Description
Field Help	F1	Opens help on current field.
Procedure Help	Shift+F1	Opens help on current program.
Browse	Alt+F1	Displays choice of records.
Look-Up Browse	Alt+F2	Displays choice of records.
About	Ctrl+F1	Displays the program name.
Browse Options	F7	Opens the browse options window.
Browse Options Toggle	Alt+F	Turns the browse options on and off.
Browse Graph	Shift+F11	Opens the browse graphing window.
Field Name	Ctrl+F	Displays the field name.

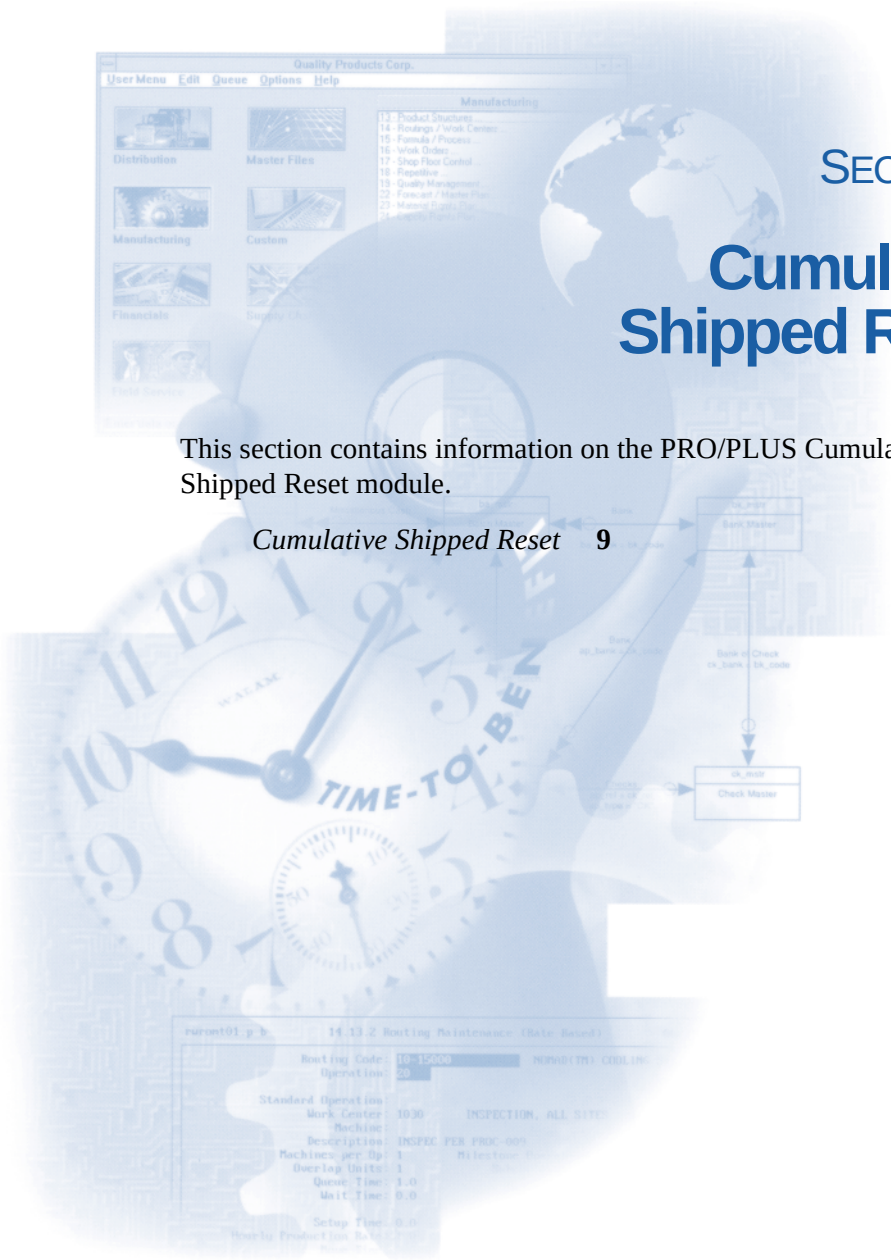
Edit Commands	Keyboard Entry	Description
Delete Record	F5	Deletes an open record.
Cut	Ctrl+X	Cuts a field or selection to clipboard.
Copy	Ctrl+C	Copies a field or selection to clipboard.
Paste	Ctrl+V	Pastes data from the clipboard.

Character Keyboard Commands

Navigation Commands	Keyboard Entry	Control Key Entry	Description
Go	F1	Ctrl+X	Moves to next frame.
End	F4	Ctrl+E	Exits a frame, program, or menu.
User Menu	F6	Ctrl+P	Displays list of user-selected programs.
Previous	F9 or up arrow	Ctrl+K	Retrieves previous record in a key data field and scrolls up in look-up browses.
Next	F10 or down arrow	Ctrl+J	Retrieves next record in a key data field and scrolls down in look-up browses.
Enter	Enter		Moves to next field within a frame.
Tab	Tab		Moves to next field within a frame.
Back Tab	Shift+Tab	Ctrl+U	Moves back one field within a frame.
Menu Bar (object)	Esc, M		Accesses the menu bar.
Save (object)	F12		In a key frame, moves to data entry; in data entry, saves and returns to key frame.
Print (object)	Ctrl+P		Prints browse or maintenance information

Help Commands	Keyboard Entry	Control Key Entry	Description
Field Help	F2	Ctrl+W	Opens help on current field.
Procedure Help	F2	Ctrl+W	Opens help on current program.
Look-Up Browse	F2	Ctrl+W	Displays choice of records.
Browse Options	F7		Opens the browse options window.
Browse Options Toggle	Alt+F		Turns the browse options on and off.
Field Name	Ctrl+F	Ctrl+F	Displays the field name.

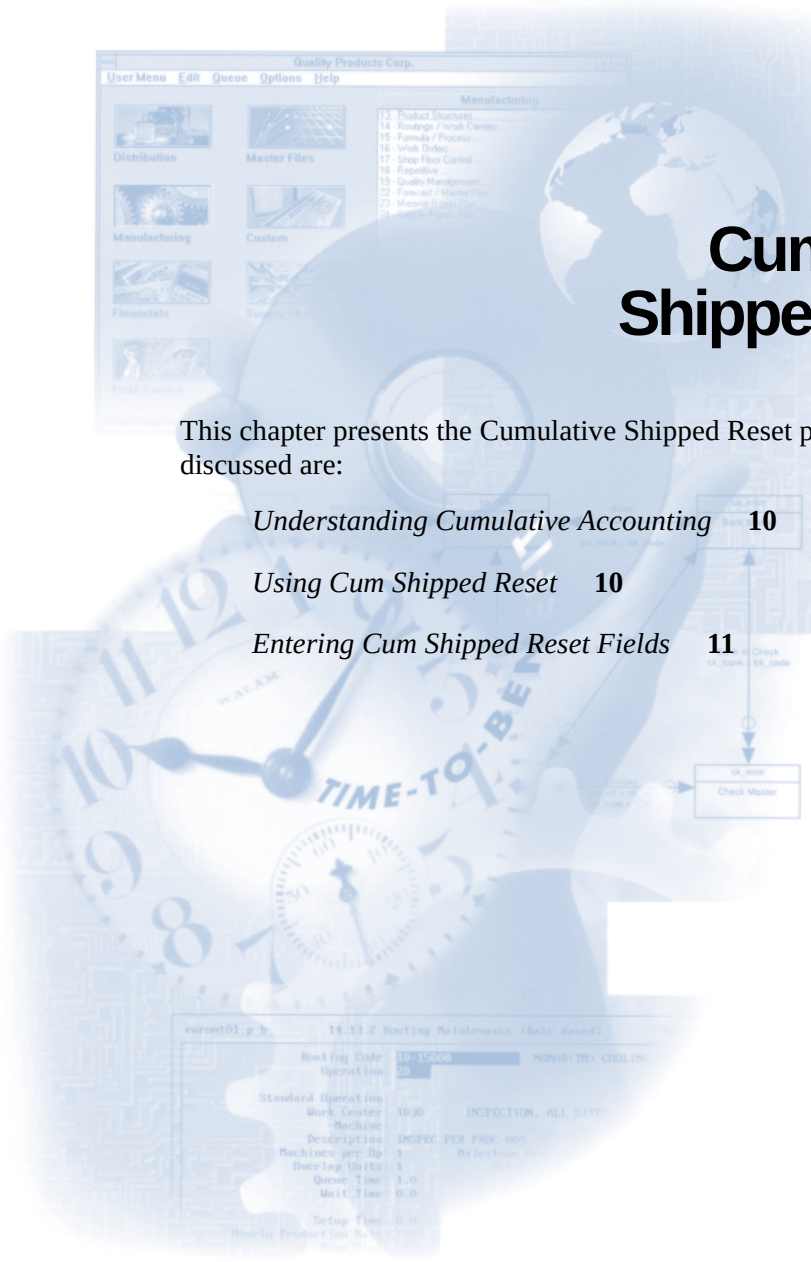
Edit Commands	Keyboard Entry	Control Key Entry	Description
Insert	F3	Ctrl+T	Enables text insertion.
Delete Record	F5	Ctrl+D	Deletes an open record.
Recall (standard)	F7	Ctrl+R	Recalls last saved value in a field.
Cut	F8		Clears a field.
Copy	F11	Ctrl+B	Copies a field.
Paste	F11	Ctrl+B	Inserts value that you copied.
Multiple Copy (standard)	F12	Ctrl+A	Copies values from one or more fields and pastes them into the same fields of another record.
Clear Date	Shift+?		Clears the value in date fields.



SECTION 1

Cumulative Shipped Reset

This section contains information on the PRO/PLUS Cumulative Shipped Reset module.



CHAPTER 1

Cumulative Shipped Reset

This chapter presents the Cumulative Shipped Reset program. Topics discussed are:

Understanding Cumulative Accounting

Cumulative accounting is widely used in manufacturing environments. This accountability method keeps track of the cumulative shipped quantity for a supplier. Periodically and at the request of a customer, the supplier must reset this number to zero or some other specified quantity. If this reset is not done on the specified date and time, product demand calculated by the system may be incorrect. This would result in lost sales for the supplier.

Using Cum Shipped Reset

Cum Shipped Reset (7.5.19.1) resets the cumulative totals for scheduled orders and generates a summary or detail report showing the scheduled orders reset. You can reset one or a range of scheduled orders based on the selection criteria.

You can run the cumulative reset function without actually resetting a scheduled order's cumulative totals. This gives you an opportunity to review the scheduled orders being reset before actually changing the database. You do this by setting Update to No. When Update is Yes, the cumulative totals are reset.

Cum Shipped Reset lets you include or exclude manual adjustments made in Cumulative Shipped Maintenance (7.5.16). To include these manual adjustments, set the Include Manual Cum Adjustments field to Yes. Setting this field to No ignores all manual adjustments when resetting the cumulative shipped quantity.

At the time you reset a scheduled order's cumulative totals, you can also enter a new cum shipped start date and time. This new date and time replaces the scheduled order's current cumulative start date and time. The time must be in 24-hour format.

Tip
Only shipments for scheduled sales order lines are included.

When the cumulative totals are reset to zero for a date in the past, all shipments made between the specified time in the past and the current system date are totaled. This total is set as the new cumulative shipped quantity for the scheduled sales order lines.

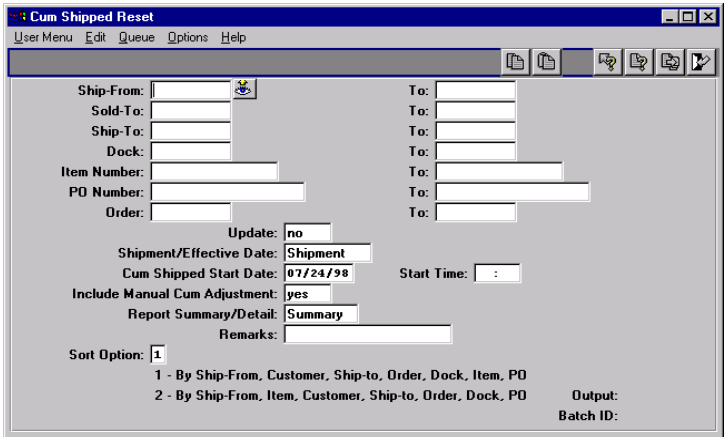


Fig. 1.1
Cum Shipped Reset (7.5.19.1)

Entering Cum Shipped Reset Fields

The first half of the Cum Shipped Reset screen consists of selection criteria ranges such as ship-from, sold-to, ship-to, and dock addresses. Use these values to identify the cumulative shipped quantities to reset.

Update. Enter Yes to reset the cumulative totals. Enter No to print the report without resetting cumulative totals.

Shipment/Effective Date. Enter the type of date specified in Cum Shipped Start Date.

- Shipment indicates that the value in Cum Shipped Start Date is the date when the shipment was initially entered into the system.
- Effective indicates that the value in Cum Shipped Start Date is the date when the shipment was effective for accounting purposes.

Cum Shipped Start Date. Enter the new date to start accumulating cumulative quantities for the scheduled orders.

Start Time. Enter the time when cumulative shipped reset is to occur on the specified date. The time must be entered in 24-hour format.

Include Manual Cum Adjustment. Enter Yes to include all manual adjustments in the Cum Shipped total. Enter No to ignore all manual adjustments made in Cumulative Shipped Maintenance (7.5.16).

Report Summary/Detail. Enter the format to use for this report.

Remarks. Enter any general comments.

Sort Option. Enter the sort option that determines the order the information prints on the report.

SECTION 2

Self-Billing

This section contains informaton on the PRO/PLUS Self-Billing module. The following chapters are included:

CHAPTER 2

Introduction to Self-Billing

This chapter introduces Self-Billing functions and features.

Overview

Use MFG/PRO's Self-Billing module to process customer-initiated payments by applying payment to MFG/PRO invoices based on line-item shipper details, including:

- Customer details
- Purchase order (PO) number
- Kanban number
- Release authorization number (RAN)
- Evaluated receipt settlement (ERS) payment references

See *User Guide Volume 4: Financials* for a discussion of ERS.

With Self-Billing you can:

- Automatically enter customer remittance information using Document Import (35.13)
- Automatically enter remittance information based on hard-copy customer remittance advice
- Manually enter remittance information into MFG/PRO
- Apply under- or over-payment credit to accounts receivable based on such documents
- Apply batch payments to invoices and memos referenced on self-bills

Reviewing Traditional Self-Billing

In the automotive industry, suppliers often do not send invoices to their customers. Instead, the customer remits a self-bill. This document details shipments received and amount due to the supplier for these shipments. The amount also reflects any deductions for defective or damaged parts, and any other pertinent credits due. This document is called a self-bill because the customer decides the payable amount instead of relying on an invoice from the supplier.

Figure 2.1 shows the traditional self-bill work flow.

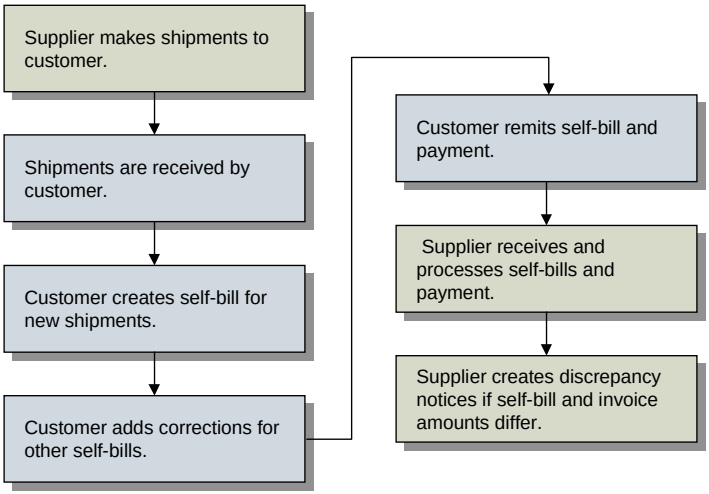


Fig. 2.1
Traditional Self-Bill Work Flow

The self-bill is remitted to the supplier, who then processes it and compares it with open invoices. When the self-bill information is entered into the system, it is mapped to an invoice.

If the supplier notes any discrepancy between the self-bill and their records, the customer must be notified within a predefined period for corrections to be made. In some situations, a self-bill is remitted and only later is the payment made. In other situations, payment may accompany the self-bill.

The payment remitted reflects the self-bill and any agreed-upon corrections from previous self-bills. Each supplier-customer relationship usually sets up specific rules for reconciling discrepancies. Sometimes these must be written off as losses by either the supplier or the customer.

Customer-Initiated Payments

MFG/PRO Self-Billing lets you process customer-initiated payments based on the various types of information remitted on the customer's document. Reconciliation is not limited to just the document number.

Many industries do not use the traditional self-billing methodology. In some situations, suppliers do send invoices to their customers. However, customers disregard these and, as in the traditional self-billing environment, send their own type of remittance advice document to their

supplier. This customer remittance document contains different details, based on the specific industry. These details can include customer bill-to, PO numbers, kanban numbers, RANs, shipper numbers, invoice line-item numbers, sales order (SO) numbers, and others.

The customer remittance document must always include an amount payable to the supplier. This can also be in the form of an ERS payment. The amount can reflect any adjustments for defective or damaged parts and any other pertinent credits due.

Unlike the traditional self-bill process, other industries do not necessarily rely on the customer-remitted document number as reference to the original supplier invoice. Instead, the supplied information must be used to reconcile the customer's remittance document to the supplier's invoice records.

Self-Bill Document

A customer remittance or self-bill can be remitted in two forms: hard copy or an EDI transaction. In either case, the information received on the self-bill is defined by the customer and should be the same in either form. The information on a self-bill can, but does not need to, include the following types of information.

- Adjustments and corrections from previous self-bills
- Partial payment for a shipment
- Full payment for a shipment
- Trailer charges on selected invoices (trailer charge self-bill lines)

  In MFG/PRO, freight and special handling charges are grouped into this category.
- Tax charges on select invoices (tax self-bill lines)

Self-Billing Programs

The Self-Billing module uses the following programs.

Table 2.1 Self-Billing Programs

Menu Number	Description	Program Name
27.6.12.1	Self-Bill Maintenance	arsbmt.p
27.6.12.4	Self-Bill Auto Create	arsbac.p
27.6.12.7	Self-Bill Payment Application	arsbpap.p
27.6.12.8	Self-Bill Payment Undo	arsbpu.p
27.6.12.10	Self-Bill Discrepancy Report	arsbrp02.p
27.6.12.11	Invoice/Memo AR Balance Report	arsbrp03.p
27.6.12.13	Self-Bill Report	arsbrp.p
27.6.12.15	Shipment-Invoice Crossref Report	arsbsirp.p
27.6.12.23	Self-Bill Delete/Archive	arsbdel.p
27.6.12.24	Self-Billing Control File	arsbpm.p
35.13	Document Import	edimport.p

CHAPTER 3

Preparing to Use Self-Billing

This chapter describes how to prepare your system to use Self-Billing programs, and how to activate self-billing functionality.

Introduction

AR Self-Billing uses processed shipping information to match incoming customer-initiated payments. The system must first process shipping information for the incoming remittance.

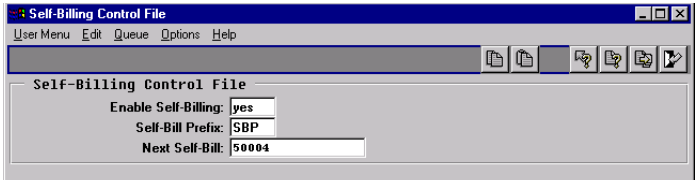
Shipment details are captured at the time a shipper is confirmed. Invoice, tax, order-level discount, and trailer information is captured at the time of invoice posting.

Note The sales order shipment program does not capture self-billing information.

Activating Self-Billing

To use Self-Billing, you must activate it in the Self-Billing Control File (27.6.12.24).

Fig. 3.1
Self-Billing Control File (27.6.12.24)



In the Self-Billing Control File, set the following parameters.

1. Set Enable Self-Billing to Yes.
2. Define the three-character, self-bill numbering prefix according to your MFG/PRO environment.
3. Enter the next self-bill number (maximum 20 characters).

Setting Up Customers

Prior to processing customer-initiated payments, you must set Capture Self-Billing Information to Yes in Customer Maintenance (2.1.1) for all relevant bill-to addresses (see Figure 3.2). Self-billing information is captured only for bill-to addresses with this flag set to Yes. This flag is the only indicator that self-bill information should be collected. The Capture Self-Billing Information flag displays only after you activate self-billing in the Self-Billing Control File.

To activate self-billing data collection in Customer Maintenance for customers already in your system, enter the customer ID and press Go. The Capture Self-Billing Information pop-up appears as you proceed through the maintenance frames.

When this flag is Yes, the system captures data for both discrete and scheduled orders when Pre-Shipper/Shipper Confirm (7.9.5) is run.

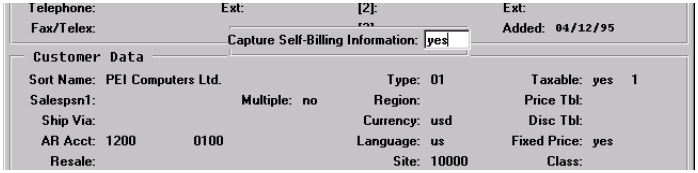


Fig. 3.2 Customer Maintenance Self-Billing Pop-Up (2.1.1)

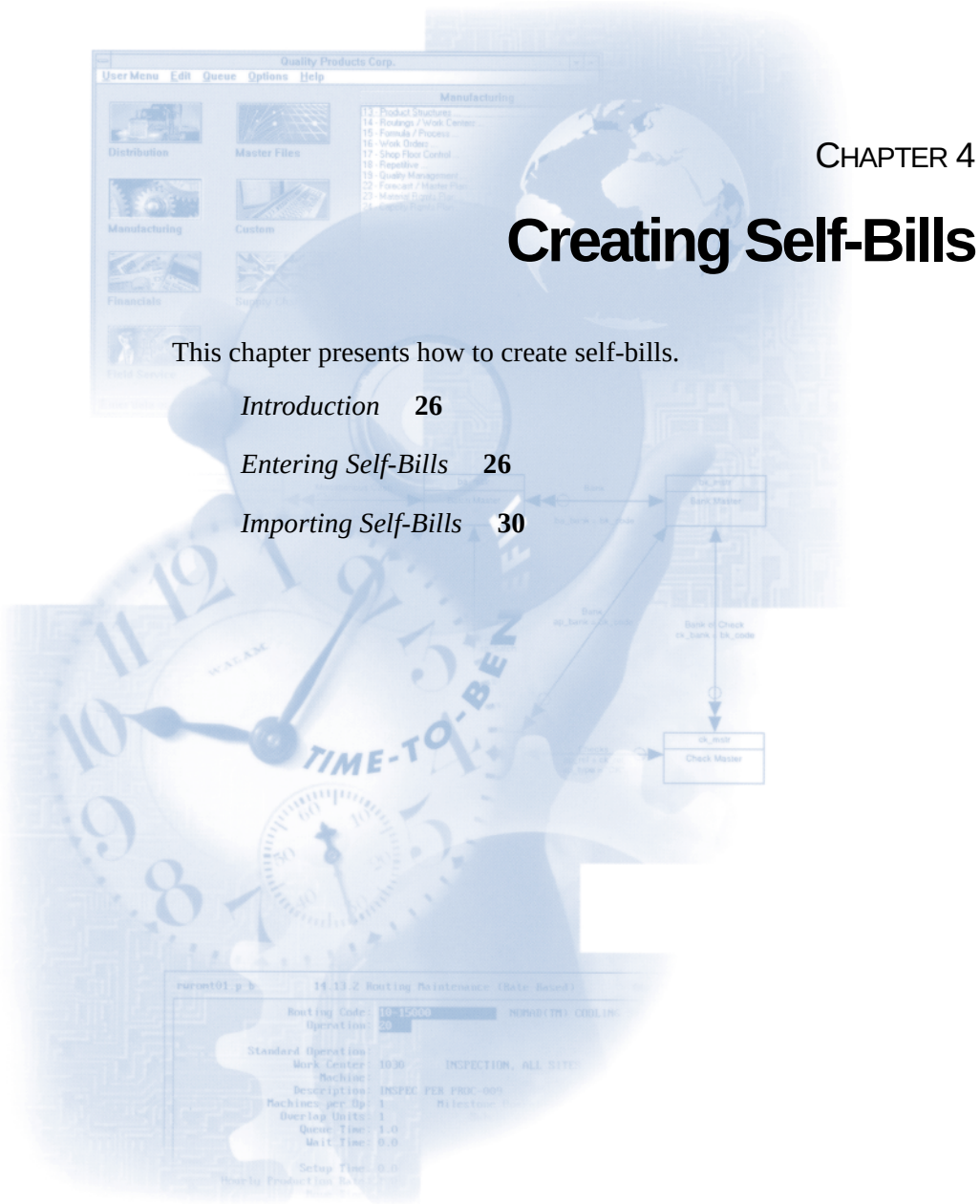
Capturing Self-Billing Data

Once you have activated Self-Billing and set up the customers that use it, you must allow sufficient time for your system to capture required customer data before you can begin to process customer-initiated payments.

To begin capturing self-billing data:

1. Use shippers to process all shipments that may be referenced on future self-bills.
2. Invoice and post to AR all shipments that may be referenced on a future self-bill.

Note The item numbers to be referenced on future self-bills must be used on the original sales order. These items are either the customer's item numbers or the MFG/PRO item numbers, whichever appear on the customer-remitted document.



CHAPTER 4

Creating Self-Bills

This chapter presents how to create self-bills.

Introduction

See Chapter 3, “Capturing Self-Billing Data,” on page 23.

Before your MFG/PRO system can begin to process customer-initiated payments, the corresponding shipping data must be collected for discrete sales orders and scheduled orders by Pre-Shipper/Shipper Confirm (7.9.5). You must allow a period of time for this shipping data to be captured before you begin to process any self-bills. During this time period, post all invoices to AR for shipments to customers that use self-bills.

Entering Self-Bills

Self-Bill Auto Create (27.6.12.4) facilitates the task of entering customer remittance advice into MFG/PRO. With this program, you specify a range of selection criteria as shown on the customer’s remittance advice. You can then associate the payment information with the correct MFG/PRO invoice. You assign a self-bill number, or the system generates a self-bill number and assigns it to the document you are creating.

See Chapter 5, “Matching Adjustment Self-Bill Lines,” on page 38.

In certain situations, you may not be able to associate some lines from a customer’s remittance advice to the self-bill you are creating. These lines are labeled adjustment self-bill lines. You must manually associate these lines with the corresponding invoice lines using Self-Bill Maintenance (27.6.12.1).

Once you create the self-bill using Self-Bill Auto Create, Self-Bill Maintenance is automatically invoked so you can associate any adjustment self-bill lines with the corresponding invoice shipment.

The auto-create process consists of four steps.

1. Create a new self-bill by defining selection criteria.
2. Use the Self-Bill Workbench to refine the selection by deselecting any lines that should not be referenced on this self-bill.
3. Print, review, and add selections to the self-bill.
4. Use Self-Bill Maintenance to further define these selections so that they correctly reflect the information on the customer-remitted self-bill.

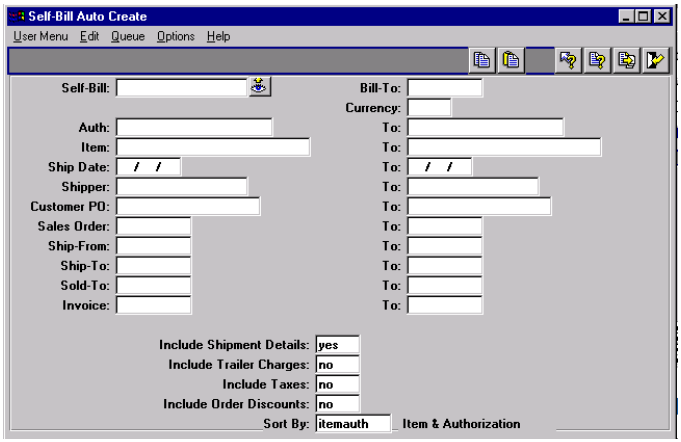


Fig. 4.1
Self-Bill Auto Create (27.6.12.4)

Entering Auto Create Fields

Self-Bill. Enter the self-bill to which the selections are to be added.

When left blank, a self-bill number is generated using control file default information.

Specifying an existing self-bill number adds selections to that self-bill. Specifying any other number in this field creates a new self-bill for that number and selections are added to it.

Bill-To. Enter the bill-to for which the selection is to be made. This is the customer's address.

When entering information for an existing self-bill, you must also enter that bill-to.

All shipments referenced on the shipper must be paid by the same bill-to.

Currency. Enter the currency for this self-bill document.

All shipments referred to on the self-bill must be invoiced in the same bill-to currency. Only this currency can be used on this self-bill.

Currency is mandatory. When a self-bill is specified in the Self-Bill field, data defaults from that self-bill's bill-to.

Authorization. Enter the authorization number sent by the customer to identify a shipment. Release Authorization Number (RAN), Dealer

Order Number (DON), and kanban numbers are examples of authorization numbers.

See “Shipment-Invoice Crossref Report” on page 49.

When you add detail lines, you can enter an authorization number to select shipments from the shipment-invoice cross-reference table.

Sort By. Specify the display order for information on the Self-Bill Workbench. The four sort orders are:

- Item Number and Authorization Number
- Authorization Number and Item Number
- Shipper Number and Item Number
- Customer PO and Item Number

Using Self-Bill Auto Create

Follow these steps to create a new self-bill or to add lines to an existing self-bill using Self-Bill Auto Create (27.6.12.4).

1. Enter a previously created self-bill number, or leave Self-Bill blank when creating a new self-bill.
2. Enter any identifying information in the auto-create selection screen. Enter as much or as little information as you have from the customer’s remittance advice you are re-creating. Significant information you should enter is:
   - Shipper number
   - Sold-to
   - Ship-to
   - Item number
   - Date of shipment
   - Authorization number

Note The more selection criteria you provide, the narrower and more accurate your selection becomes.

3. Specify whether to include shipment details, trailer charges, taxes, or order discounts on the selection display screen.
4. Select a sort order for the resulting workbench report.

5 Press Go.

The system analyzes your customer's shipment data and displays a list of possible shipper numbers that might be associated with the customer's remittance advice document. This information is displayed in the workbench according to the sort order you previously indicated.

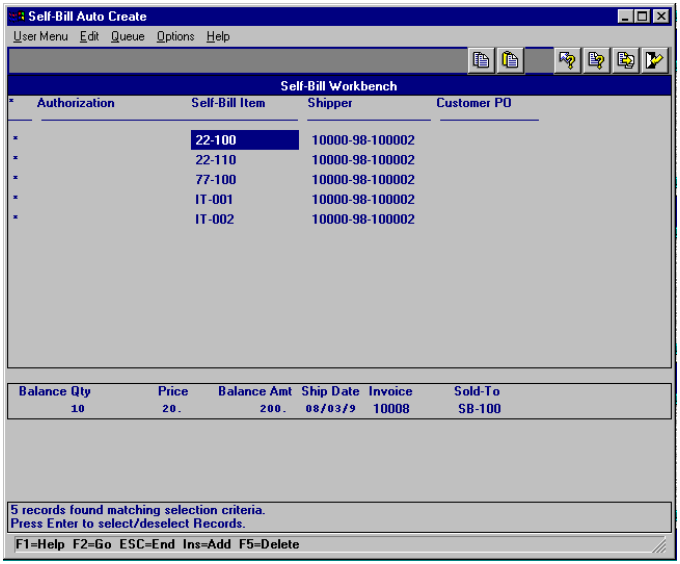


Fig. 4.2 Self-Bill Workbench

6 Use the workbench to refine your selection by deselecting any lines that should not be referenced by this self-bill. Item number is the customer's item number, which was originally used on the order.

- Use the Up/Down arrows to navigate from entry to entry.
- Use Enter to deselect any entry that does not belong on the self-bill. An asterisk (*) indicates selection.

7 Press Go to continue with your selection.

8 Print and review the selection. You are prompted to continue.

- If you continue, either all selections are added to an existing self-bill or a new self-bill is created and selections are added to it.
- If you do not continue, selections are not added to the self-bill.

See “Maintaining Self-Bills” on page 32.

9 Self-Bill Maintenance (27.6.12.1) is automatically invoked to let you edit these selections to correctly reflect the information on the remittance advice. In the Self-Bill Maintenance header, you cannot edit the Self-Bill, Bill-To, or Currency fields, which default from Self-Bill Auto Create.

Importing Self-Bills

For more details on EDI processing, see *User Guide Volume 7: Release Management.*

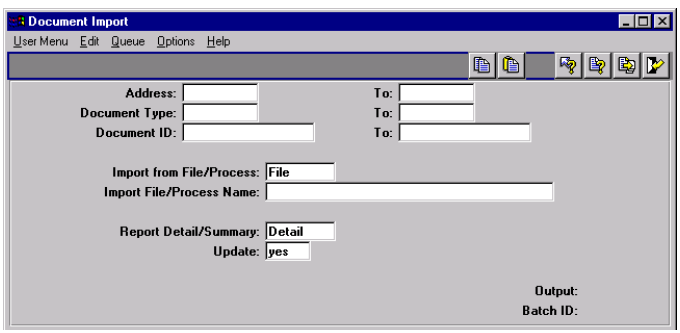
Use Document Import (35.13) to import EDI self-bills into the system. This function loads self-bill information from a flat file and processes it to create a self-bill document in MFG/PRO. During creation, MFG/PRO tries to associate incoming electronic self-bill data with invoice data. Once loaded into MFG/PRO, the information can be manually modified using Self-Bill Maintenance.

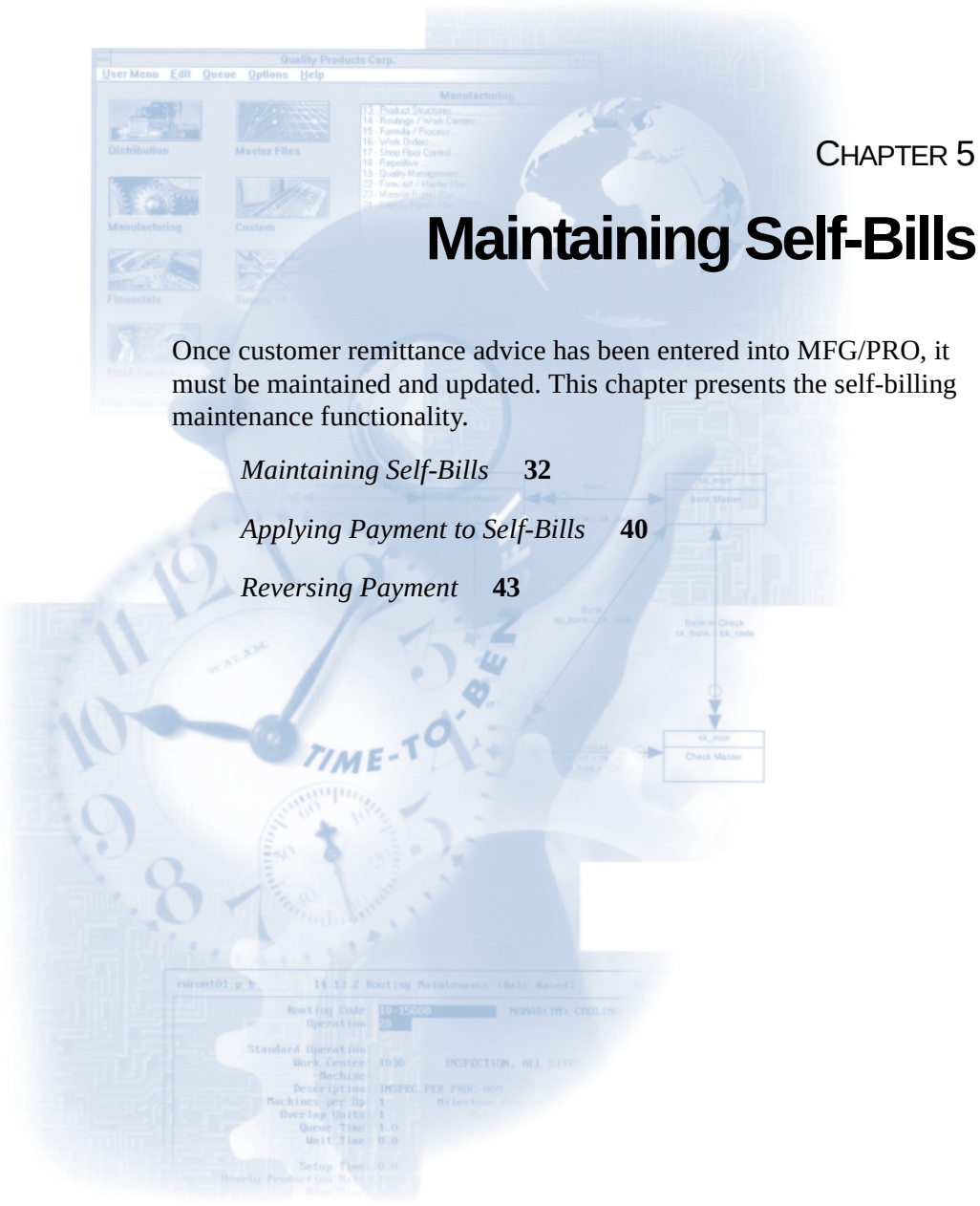
See “Matching Adjustment Self-Bill Lines” on page 38.

It is important for EDI self-bill lines to be associated with an MFG/PRO invoice number. However, the system may not be able to make this association for some self-bill lines due to incorrect or incomplete information in the EDI file. These problems are reported in the EDI load report produced during import.

Lines that the import process cannot associate are tagged as adjustment entry lines. You can manually associate adjustment self-bill lines to the correct invoice in Self-Bill Maintenance.

Fig. 4.3
Document Import (35.13)





CHAPTER 5

Maintaining Self-Bills

Once customer remittance advice has been entered into MFG/PRO, it must be maintained and updated. This chapter presents the self-billing maintenance functionality.

Maintaining Self-Bills

Use Self-Bill Maintenance (27.6.12.1) to manually enter new self-bills and delete and maintain existing self-bills. Use this function to reconcile any adjustment lines that result from processing a self-bill using Self-Bill Auto Create (27.6.12.4) or Document Import (35.13).

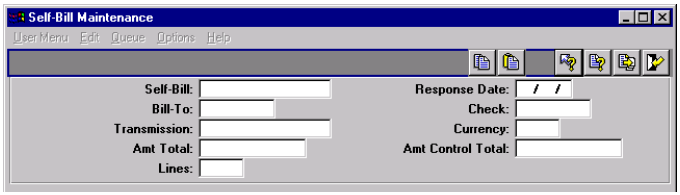


Fig. 5.1
Self-Bill Maintenance (27.6.12.1), Header

Entering Header Values

Self-Bill. Enter the self-bill to which the selections are to be added. When left blank the system generates a self-bill number.

By entering an existing self-bill number, you specify a self-bill to which selected details are added. Specifying any other number in this field creates a self-bill for that number and adds the selection to it.

Bill-To. Enter the bill-to for which the selection is to be made. The bill-to is required. You cannot change the bill-to once you have created a self-bill in the system.

All shipments referenced on the shipper must be paid by the same Bill-To and with the same currency.

Transmission. Enter the transmission that identifies the batch of EDI self-bills received from this customer.

This field is used to group a number of EDI self-bills.

Amt Total. Displays a running total amount of all shipments and other entries referenced on this self-bill. This total is maintained by the system and cannot be changed.

Lines. Displays a running total number of lines on this self-bill. This system-maintained field is for reference only and cannot be edited.

Response Date. Enter the date by which you need to communicate any discrepancies found within the self-bill back to your customer.

This is a previously agreed-upon date between you and your customers. It defaults to the current date.

Check. Enter the check number used for the self-bill.

If a payment has been applied to this self-bill with Self-Bill Payment Application (27.6.12.7), then the check used for that transaction defaults here.

Currency. Enter the currency for this self-bill document. All records included on this self-bill must be invoiced using this currency. For new self-bills, currency defaults from the bill-to address of the customer.

Amt Control Total. Enter the control total of all shipments and other entries referenced on the self-bill. This control total is usually the total on the hard-copy self-bill.

Tip
Total is expressed in terms of the currency specified for this customer.

This total is used to reconcile the total amount of the self-bill. In order to make a payment for a self-bill, the Amt Control Total must match the Amt Total of the self-bill.

If any entries on the self-bill are incorrectly entered, the amount will not match the self-bill Amount Total. You are warned about the discrepancy when exiting this maintenance function. The two totals must match to apply payment to the self-bill.

Creating a New Self-Bill

Normally, you would not use Self-Bill Maintenance (27.6.12.1) to create a new self-bill. Use Self-Bill Auto Create or Document Import to create a new self-bill. However, under some circumstances you may have to use Self-Bill Maintenance to create a new self-bill.

Follow these steps to create a new self-bill using Self-Bill Maintenance. In the program header do the following.

1. Enter a new self-bill number.

   Leave blank for the system to create a new number from the information in the control file.

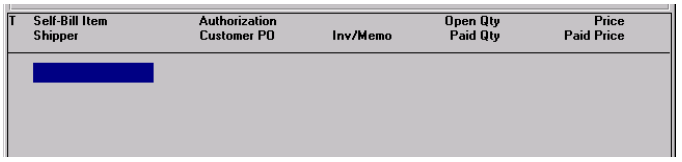
2. Enter or select a customer bill-to address.

   On a new self-bill, information defaults for Response Date and Currency.

3 Edit Transmission, Response Date, and Amt Control Total as needed. Press Go.

A self-bill line selection frame appears.

Fig. 5.2
Self-Bill Maintenance, Line Selection Frame

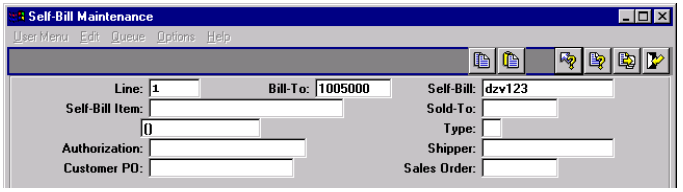


Follow these steps to create a new self-bill line.

1 On the blank self-bill line, press Insert.

The self-bill line edit frame appears. Line indicates the new self-bill line.

Fig. 5.3
Self-Bill Maintenance, Line Edit Frame



2 You must enter the Self-Bill Item or Sold-To.

3 Enter any other identifying information available. Press Go.

MFG/PRO matches shipment invoice records based the information in these fields.

For Type:

- Leave blank if entering a shipment line.
- Enter A for an adjustment line. Use this code when creating an adjustment line to reference a write-off memo.
- Enter C for trailer charges line.
- Enter D for discount line.
- Enter T for tax line.

4 When MFG/PRO finds multiple matches for the information you enter, a shipment selection frame appears. Use this frame to select the correct line.

- Use the arrow keys to scroll from line to line.
- Press Enter to select the correct line.

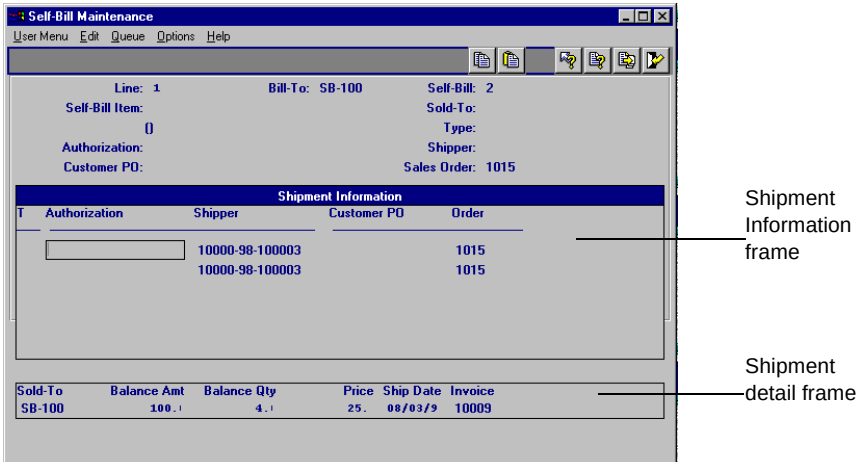


Fig. 5.4 Self-Bill Maintenance, Shipment Information Frame

If only one match is found, or after you select the correct shipment line from the line match frame, the financial detail frame appears.

5 Enter or edit financial details and remarks for the line. Press Go.

6 Matching shipment information is displayed in the last frame.

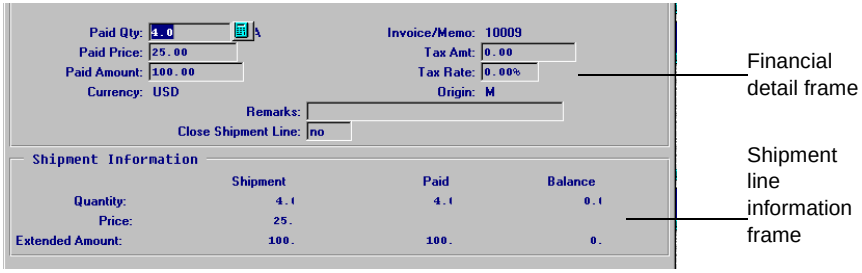


Fig. 5.5 Self-Bill Maintenance, Shipment Detail Frames

Working with Self-Bill Lines

The self-bill lines that are created in Self-Bill Auto Create (27.6.12.4) or Document Import (35.13) must be modified to correctly reflect what has been paid on each self-bill. The lines on the newly created self-bill include the entire unpaid quantity and expected price.

After using Document Import to process EDI self-bills, use Self-Bill Maintenance to reconcile any adjustment lines. After using Self-Bill Auto Create, you are automatically brought to the Self-Bill Maintenance header.

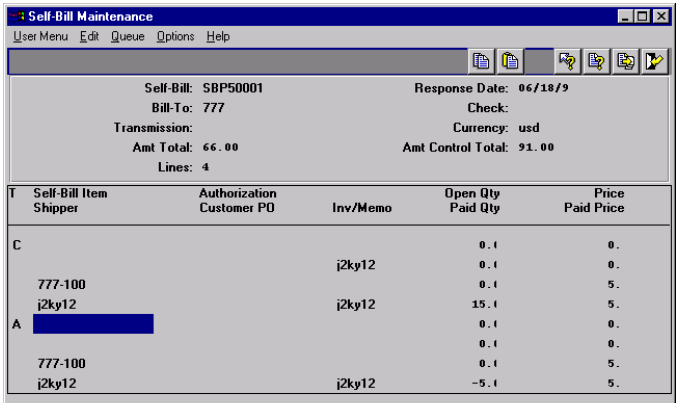
See “Matching Adjustment Self-Bill Lines” on page 38.

Once the header information has been entered into the Self-Bill Maintenance header or you have finished the initial auto-create procedure, the line selection frame appears. Use this frame to edit, delete, or add new self-bill lines. Use this frame to link adjustment self-bill lines to shipments, in effect changing self-bill adjustment lines to shipment self-bill lines.

To modify self-bill line details:

1 Select the self-bill line to modify.

Fig. 5.6 Self-Bill Maintenance, Line Selection Frame



Use the arrow keys to navigate up and down the self-bill lines. Press Enter to select the line to be modified.

The self-bill line edit frame appears.

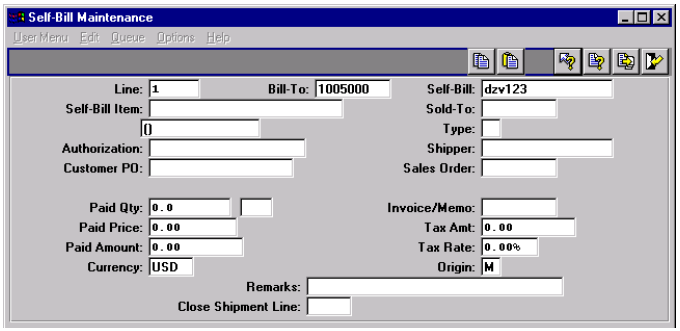


Fig. 5.7
Self-Bill Maintenance, Line Edit Frame

2 Add or modify the fields according to the information from the EDI or the customer remittance advice document.

Note The field values entered in the Line Edit frame are the same values displayed in the Line Selection frame. When entering a new line, you must enter values. When editing an existing line, the values displayed were defined when the line was originally created.

Self-Bill Item. This is the item referenced on the customer remitted correspondence—either the customer item number specified on the scheduled or discrete sales order line or the MFG/PRO item number.

If specified on the sales order line, the customer item number takes precedence over your item number.

Type. This is the code identifying this line type. There are five types:

Tip
On the Line Selection frame the Type field label is T.

- Blank indicates shipment lines.
- A indicates adjustment lines.
- T indicates tax.
- C indicates trailer charges.
- D indicates discount.

Authorization. This is the authorization number sent by the customer to identify a shipment.

Release Authorization Number (RAN), Dealer Order Number (DON), and kanban numbers are some examples of authorization numbers.

During the addition of detail lines, you can enter an authorization number to select shipments from the shipment-invoice cross-reference table.

Inv/Memo. The memo or invoice being detailed by this line.

When this self-bill line is an adjustment line and Inv/Memo is left blank, an unapplied cash entry is created for the amount referenced.

Open Qty. The quantity not yet paid on any self-bill. This field applies only to shipment self-bill lines and does not display for adjustment self-bill lines. Open Qty is expressed in terms of order unit of measure.

Paid Qty. The total number of items that have been paid for.

Price. This is your listed price for the item.

Paid Price. The price paid by the customer for each item.

Matching Adjustment Self-Bill Lines

Follow these steps to match adjustment self-bill lines with corresponding shipment information.

1. Go through the self-bill line modification steps outlined on page 36.
2. Select the adjustment self-bill line to match.

   The self-bill line detail edit frame appears with all the adjustment line details.
3. Press Insert.

   The shipment information frame appears.

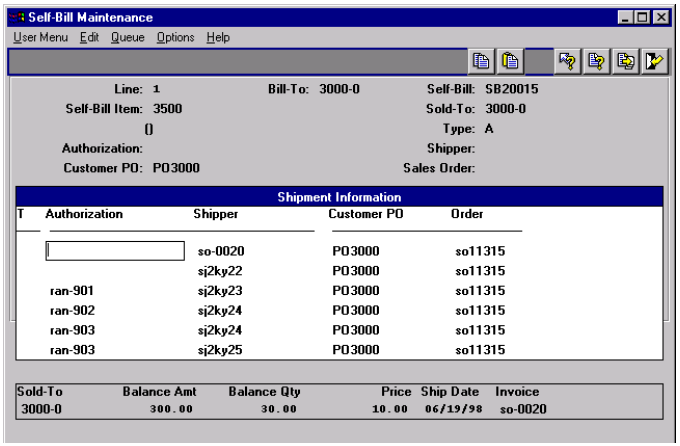


Fig. 5.8
Self-Bill Maintenance, Shipment Information Frame

4 Use the arrow keys to navigate to the corresponding shipment.

5 Press Enter to match the shipment with the adjustment line.

Deleting Self-Bills

You can use Self-Bill Maintenance (27.6.12.1) to delete an entire self-bill or a specific self-bill line. When a self-bill or a self-bill line is deleted, any shipment-invoice cross-reference records associated with it are released and the invoice lines can be selected on another self-bill.

See “Shipment-Invoice Crossref Report” on page 49.

Note A self-bill or self-bill line cannot be deleted if payment has been applied to it.

To delete a self-bill line:

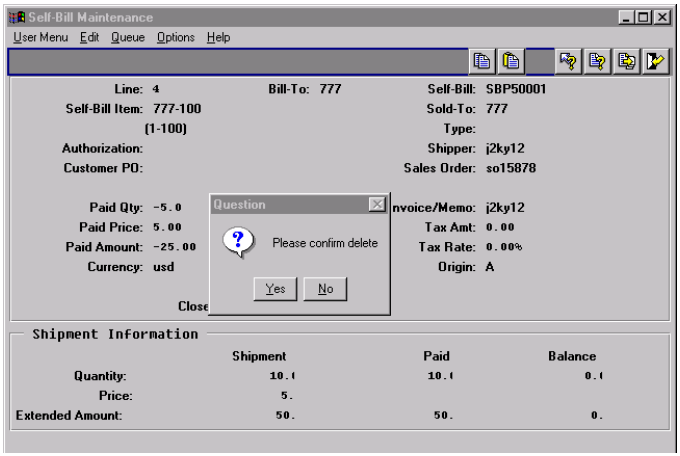
1 Select the self-bill that has the line you want to delete.

2 In the line selection frame, select the line to delete.

3 Press Delete.

4 The self-bill line detail frame and a delete confirmation prompt appear.

Fig. 5.9
Self-Bill Line Detail Frame and Delete Line Confirmation Prompt



5 Choose Yes to delete the selected line.

To delete an entire self-bill:

1 In the maintenance header, select the self-bill to delete. Press Go.

2 When the second set of fields are highlighted, press Delete.

3 You are prompted to continue with the deletion. Choose Yes to delete the selected self-bill.

Applying Payment to Self-Bills

Once a self-bill has been created and payment has been received, payment must be credited to the appropriate MFG/PRO invoices. Use Self-Bill Payment Application (27.6.12.7) to apply payment to all of the invoices and memos that are referenced by a self-bill document.

Important You cannot apply payment to a self-bill if the Amt Total does not equal the Amt Control Total.

When you use this program to apply payment, the payment is applied to the invoice or memo specified on the self-bill detail line.

When a payment is applied, four different situations are possible.

- Payment is credited to the invoice or memo.

- When no invoice or memo is specified—Inv/Memo is blank—the amount paid is applied to unapplied cash with a reference to the self-bill and the self-bill line.
- When payment is greater than the amount open on the invoice, the overpayment amount is applied to unapplied cash with a reference to the invoice.
- When payment is greater than the invoice line, the overpayment is applied to unapplied cash with a reference to the self-bill and self-bill line.

Reconciling Self-Bills

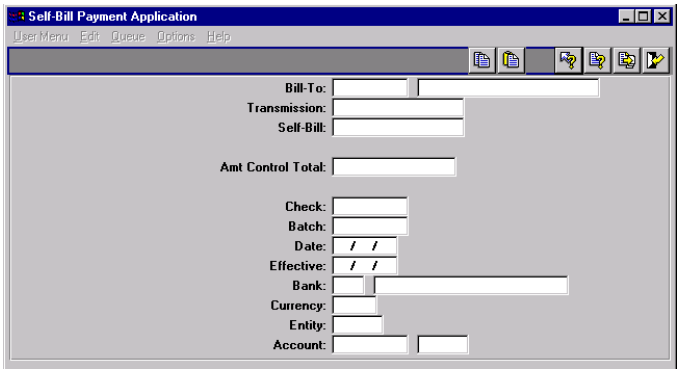
Self-Bill Payment Application (27.6.12.7) lets you reconcile discrepancies between the self-bill document and MFG/PRO invoices. You can reconcile discrepant lines in various ways.

- Manually match discrepant lines to the correct invoice shipment.
- Correct any open quantities or amounts on the affected invoice.
- Correct any price differences between the self-bill and the invoice information.
- Match any adjustment line with the correct invoice shipment information.
- Write off a discrepant amount by creating a debit or credit memo.

When you write off a discrepancy:

1. Create a debt/credit memo in DR/CR Memo Maintenance (27.1) for the write-off amount.
2. Create an adjustment line for the amount.
3. Enter the debt/credit memo in Inv/Memo on the detail line for the adjustment.

Fig. 5.10
Self-Bill Payment Application (27.6.12.7)



Applying Payments

Before you can execute Self-Bill Payment Application successfully, you must ensure that the Amt Total and the Amt Control Total for that self-bill are the same.

To apply self-bill payments to all associated invoices:

1. Enter the customer bill-to address.
2. Enter the transmission or self-bill number.

   The Amt Control Total and other customer financial information display.
3. Enter the associated check or batch number and correct dates.
4. You can also specify the bank to use. The bank must use the same currency as the self-bill.
5. You are prompted to continue with the payment application. Choose Yes and press Go to continue.

   Payment is applied to the associated invoices, and the associated self-bills are updated with the correct check number.

Note Choosing No returns you to the program header without updating any information.

Reversing Payment

If you need to reverse a payment, use Self-Bill Payment Undo (27.6.12.8). This program reverses payments made in Self-Bill Payment Application (27.6.12.7).

Payments cannot be reversed if:

- Unapplied cash related to the self-bill has been used to pay another invoice or memo.
- The payment period is not a valid GL period.
- The payment period is in a closed GL period.
- The payment period is in a closed year.

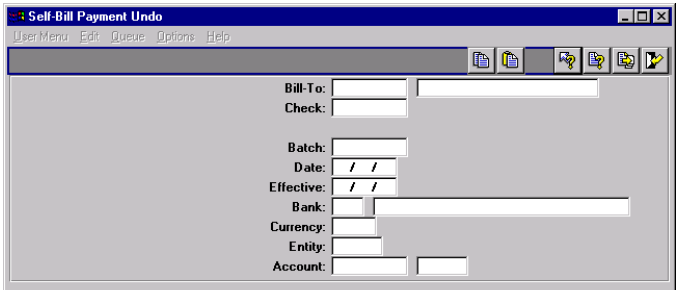


Fig. 5.11
Self-Bill Payment Undo (27.6.12.8)

To undo a payment:

1. Enter the bill-to address and check number.
2. Press Go. Financial information for that check is displayed.
3. You are prompted to confirm the update. Choose Yes to reverse the payment.

The check number in Check is completely removed from all system self-bills referencing it. This is equivalent to deleting a payment record in Payment Maintenance (27.6.4).

CHAPTER 6

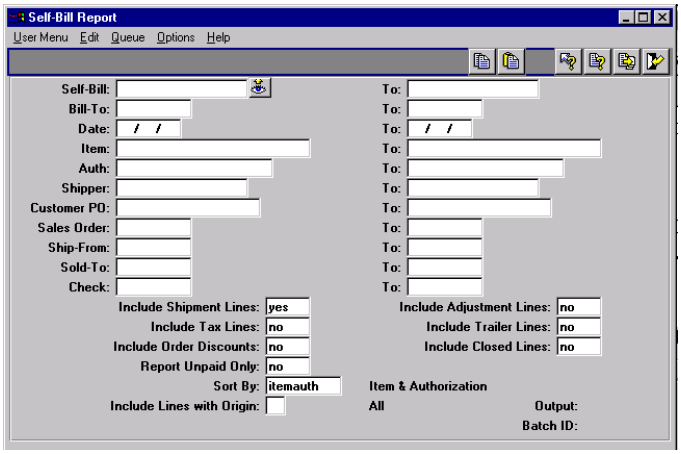
Self-Billing Reports and Inquiries

This chapter presents the remaining reports, browses, and functions in the Self-Billing module.

Self-Bill Report

Use Self-Bill Report (27.6.12.13) to review self-bill detail information. There are various ways the report can be produced to view the self-bill details. Use the selection criteria and sort options to sort and narrow down the information reported.

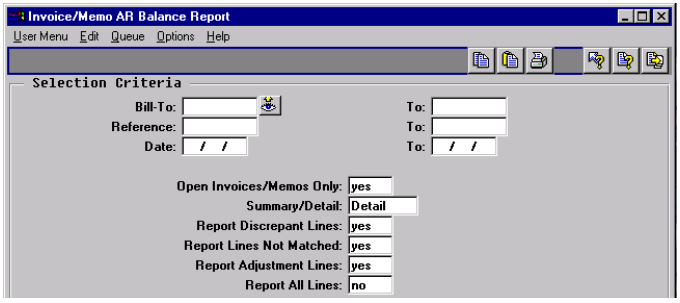
Fig. 6.1
Self-Bill Report (27.6.12.13)



Invoice/Memo AR Balance Report

Use Invoice/Memo AR Balance Report (27.6.12.11) to determine what portion of invoices referenced by the self-bill have been paid. Internally, the system maintains a map between every self-bill line and an invoice. Applying payment to a self-bill means applying payment to the associated invoices.

Fig. 6.2
Invoice/Memo AR Balance Report (27.6.12.11)



Use this report in summary mode to determine if an invoice related to a self-bill has any outstanding amounts. The detail mode lets you drill down to find which shipments have been fully paid and which have not.

Self-Bill Discrepancy Report

Use Self-Bill Discrepancy Report (27.6.12.10) to view discrepancy details associated with a self-bill document. Use the details provided by this report to reconcile discrepancies in self-bills. This report shows the three types of discrepancies that prevent you from applying payment to a self-bill.

- Discrepant Lines: Lines matched to invoice shipment data where the invoice shipment data has an open quantity, an open amount, or a price difference.
- Adjustment Lines: Lines marked with a type A. These lines could not be matched when the self-bill was originally created.
- Lines Not Matched: Lines that can be matched to invoice shipment data, but for some reason were not. These are marked as type blank.

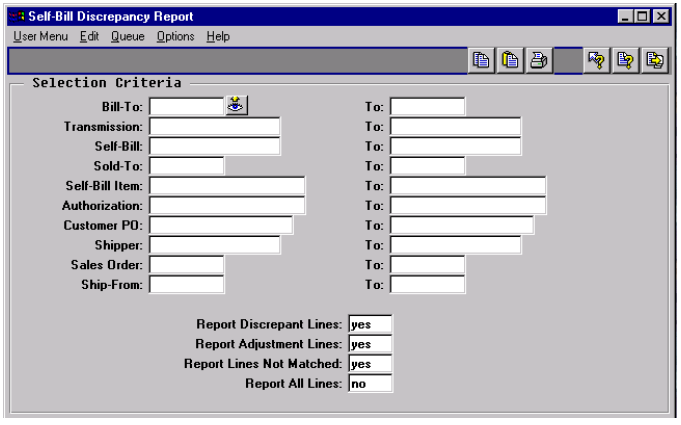


Fig. 6.3 Self-Bill Discrepancy Report (27.6.12.10)

For each self-bill, the discrepancy total is displayed first, followed by the detailed sub-totals by reason for each account. These amount details can be used to create discrepancy memos to apply credit to the proper accounts. The discrepancy memo must be created and registered with the self-bill in order to apply payment to the self-bill.

See “Applying Payments” on page 42.

Discrepancies can occur for various reasons, such as the following:

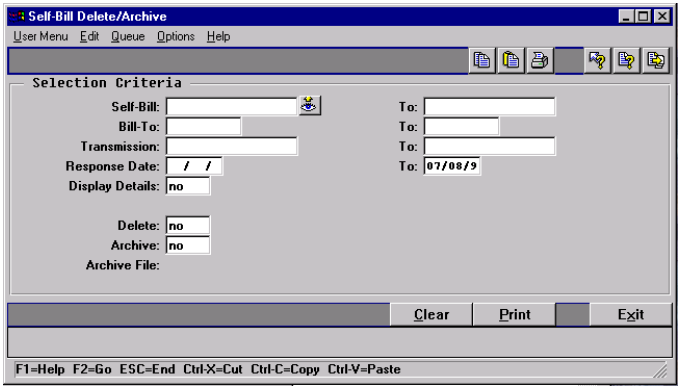
- Differences between quantities shipped and received
- Unit price differences
- Special (trailer) charges in MFG/PRO invoices not included in self-bills
- Special charges included in self-bills but not included in MFG/PRO invoices

Use this report as reference for reporting any discrepancies to the customer.

Self-Bill Delete/Archive

Self-Bill Delete/Archive (27.6.12.23) is very similar to other delete/archive functions in MFG/PRO. It can copy (archive) or remove (delete/archive) closed records from your database. Archived self-bills can be returned to an MFG/PRO database using Archive File Reload (36.16.5).

Fig. 6.4
Self-Bill Delete/Archive (27.6.12.23)



Delete. Indicates whether to delete the specified information from the system. Select Yes to remove the data. No will leave specified information in the system.

Archive. Indicates whether to archive the specified information. Select Yes to save the specified information on tape or other storage media. If you select No, any information you delete during this process cannot be recovered.

Shipment-Invoice Crossref Report

The shipment-invoice cross-reference structure holds the map between shipment-related details such as shipper number or authorization number and associated MFG/PRO invoice numbers.

Shipment-Invoice Crossref Report (27.6.12.15) facilitates inquiries into the self-bill cross-reference structures in the system.

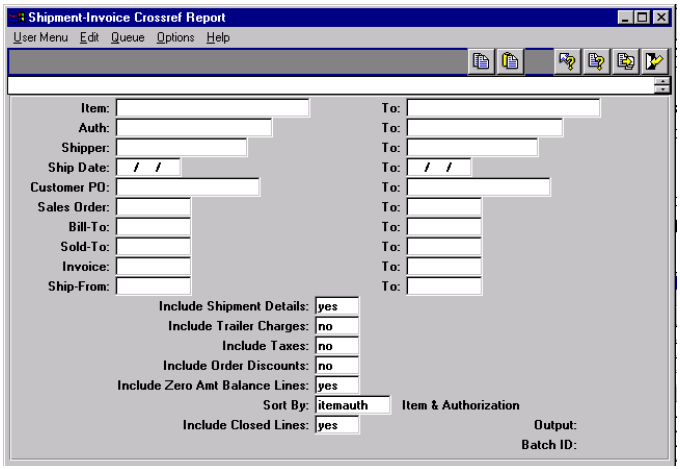
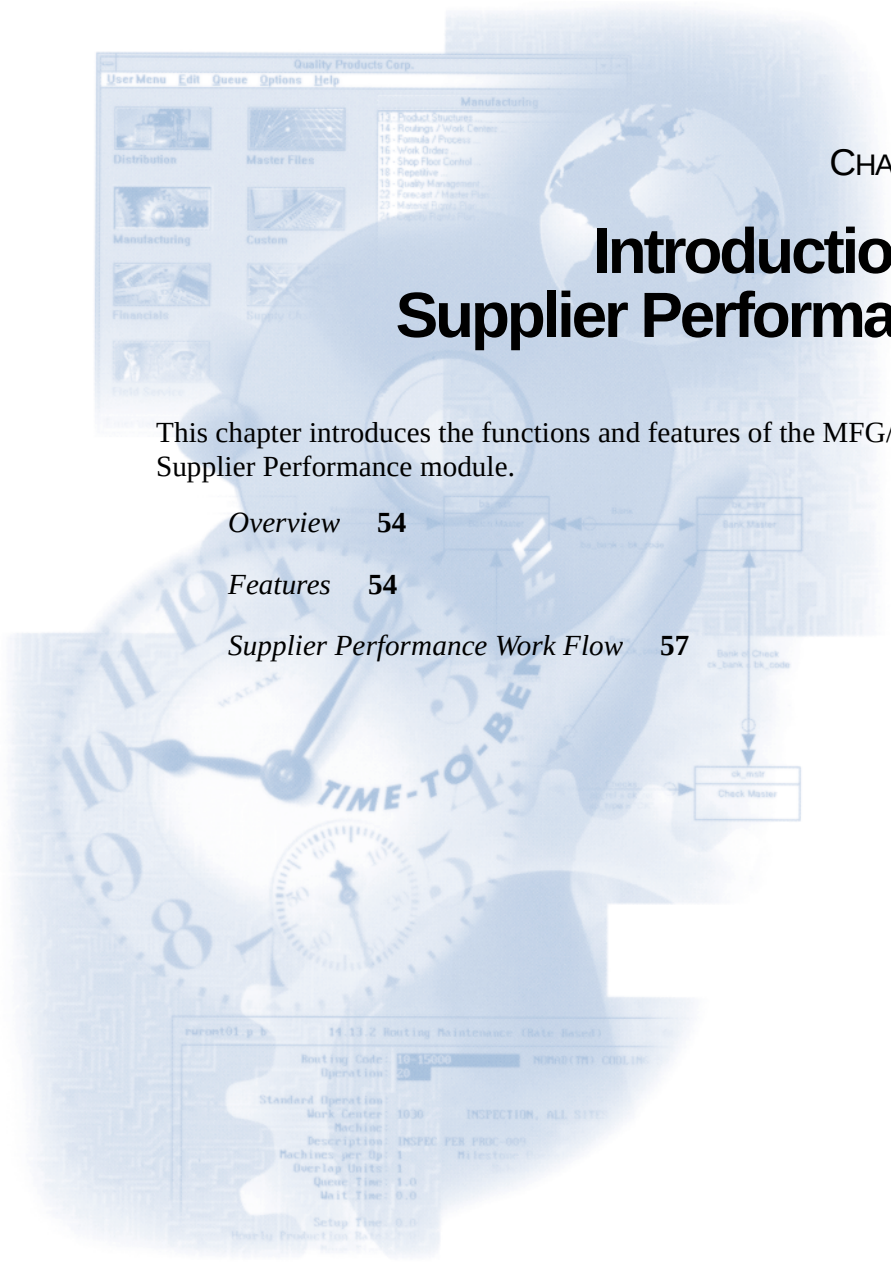


Fig. 6.5
Shipment-Invoice Crossref Report (27.6.12.15)

SECTION 3

Supplier Performance

This section contains information on the PRO/PLUS Supplier Performance module. The following chapters are included:



CHAPTER 7

Introduction to Supplier Performance

This chapter introduces the functions and features of the MFG/PRO Supplier Performance module.

Overview

MFG/PRO's Supplier Performance module enables manufacturers to monitor the performance of their internal and external suppliers. Depending on your manufacturing environment, you can customize the way your system collects performance data as well as how you report performance metrics. You can create your own data collection points or use the ones predefined in the system.

This module provides flexible automatic and manual data collection. You can optionally record any nonroutine events or modify or add to any existing event with the maintenance functions. Finally, you can tailor performance reports—both internal and external—to meet your needs.

Features

Flexible Registration

MFG/PRO's Supplier Performance module lets you enable or disable data collection for any registration. A *registration* in Supplier Performance is the record used to specify the supplier, site, item, corporate commodity code, date, or combination of these for which performance data is collected.

You can explicitly define when, where, and for what registration you want data to be collected. You can further define the data you want to collect by specifying a date or date range when the data collection should occur or be disabled.

Flexible Event/Category Definitions

This module gives you broad control of the performance activities you want to count, where you want to count them, and for which registration you want to collect data. You can use system events as measurements, or you can define the specific nonsystem events to be counted. Supplier Performance automatically collects data during the following transactions.

- Document Import (35.13)
- Purchase Order Receipts (5.13.1)

- PO Shipper Receipt (5.13.20)
- Distributed Order Receipt (12.15.20)
- RTS Receipts (11.7.3.13)
- Schedule Update from MRP (5.5.3.1)

Using category and event definitions, tell the system what data you want reported, and how you want that data to be reported. Although the system has predefined categories and events, you must create corresponding category and event definitions. Your category and event definitions tell the system how much each system category and event is worth, whether to report data for that event or category, and how to report that data.

Use Performance Category Maintenance (5.15.1) and Performance Event Maintenance (5.15.5) to create category and event definitions for each system category and event. Use System Category/Event Maint (5.15.22) to link system categories and events with the category and event definitions you create.

When you create category and event definitions, you can specify if you want optional data collection to occur during the following system transactions:

- Purchase Order Returns (5.13.7)
- RTS Shipments (11.7.3.16)
- Inventory Transfers
  - Transfer–Single Item (3.4.1)
  - Transfer–Multi Item (3.4.2)
  - Transfer with Lot/Serial Change (3.4.3)
  - Batchload Transfer with Lot/Serial Change (3.4.4)

Figure 7.1 shows some events you can track. You can create nonsystem event definitions that you can manually enter into the system. For example, you can define events to track supplier performance by:

- Freight type or cost
- Product quality
- Service quality
- On-time scheduled-order delivery

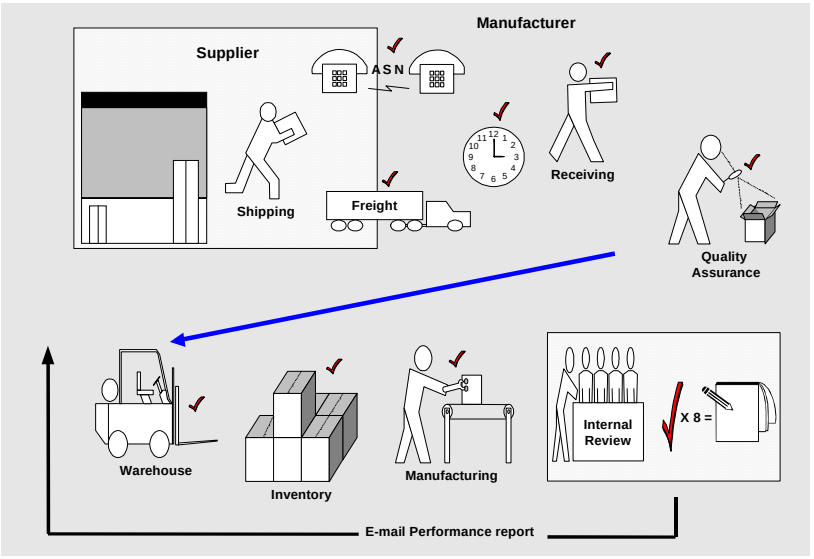


Fig. 7.1, Sample Supplier Performance Data Collection Points

Multiple Rating Systems

See “Using the Computational Methods” on page 67 for more details.

Supplier Performance offers three performance calculation and rating methods.

Discrete method. Counts points associated with each performance event. For example, 100 points earned for 100 on-time deliveries.

Proportional method. Assigns a percentage rating based on the actual number of satisfactory events completed divided by the total possible number of events.

Parts-per method. Similar to the proportional method, but uses a large factoring number to assign a rating.

You are not limited to using only one method in your system. Apply any method to each of the registrations you are tracking.

Supplier Performance Work Flow

Figure 7.2 shows a typical Supplier Performance work flow.

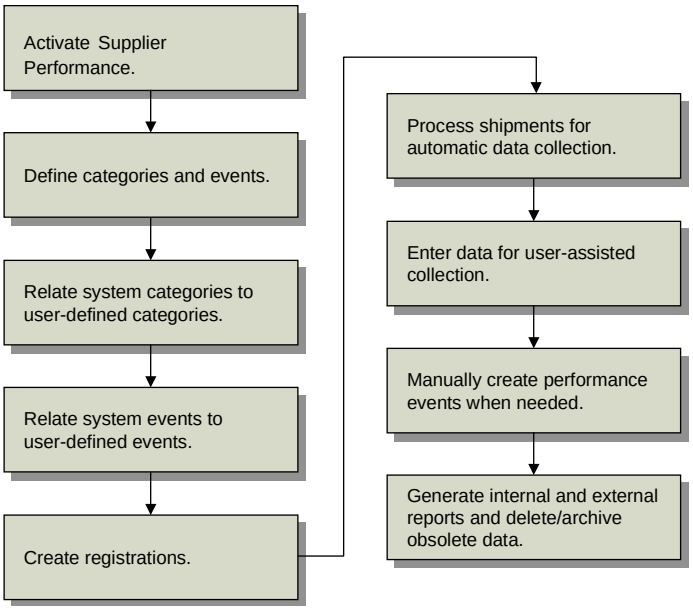


Fig. 7.2 Supplier Performance Work Flow

Supplier Performance Programs

The Supplier Performance module uses the following programs.

Table 7.1 Supplier Performance Programs

Menu Number	Description	Program Name
5.15.1	Performance Category Maintenance	povecmt.p
5.15.2	Performance Category Inquiry	povecrp.p
5.15.3	Supplier/Category Maintenance	povescmt.p
5.15.4	Supplier/Category Inquiry	povescrp.p
5.15.5	Performance Event Maintenance	poveemt.p
5.15.6	Performance Event Inquiry	poveeiq.p
5.15.7	Performance Weight Factor Maint	povewmt.p
5.15.8	Performance Weight Factor Inquiry	povewiq.p
5.15.10	Registration Maintenance	povesimt.p
5.15.11	Registration Report	povesirp.p

Menu Number	Description	Program Name
5.15.13	Performance Data Maintenance	povepmt.p
5.15.14	Performance Data Report	povedrp.p
5.15.15	Performance Report Card	povedrp2.p
5.15.17	Missed Shipment Event Generator	povemsrq.p
5.15.19	Summary Data Extract	povesmex.p
5.15.20	Summary Data Report	povesmrp.p
5.15.22	System Category/Event Maint	poveecmt.p
5.15.23	Delete/Archive Menu	
5.15.23.1	Performance Data Delete/Archive	poveup.p
5.15.23.2	Summary Data Delete/Archive	povesup.p
5.15.23.3	Supplier Cross-Reference Maint	poveexmt.p
5.15.23.4	Supplier Cross-Reference Report	povexrp.p
5.15.24	Supplier Performance Ctrl File	povepm.p

Supplier Performance Program Types

The Supplier Performance module consists of four program types:

- Setup programs
- Registration programs
- Data collection and maintenance programs
- Reports and inquiries

Each step of the supplier performance process is detailed in the following chapters.

CHAPTER 8

Setting Up Supplier Performance

This chapter details the steps you must take when setting up your Supplier Performance system. This chapter discusses the following topics:

Planning a Supplier Performance System

Before you begin the supplier performance setup, you should first plan your system. Basic information you should decide and plan before setting up a supplier performance system includes:

- The categories and events to monitor
- The impact or value of events
- The suppliers, items, sites, and/or commodity codes to monitor
- The impact or value of events for specific registrations

  For example, does registration A in another country receive the same late penalties as registration B, located across town?
- The computational system to use for each category
- Which suppliers should receive E-mail performance reports

Configuring Control File Settings

To set up the supplier performance system in your MFG/PRO environment, you must first activate Supplier Performance and define default information in the Supplier Performance Ctrl File (5.15.24).

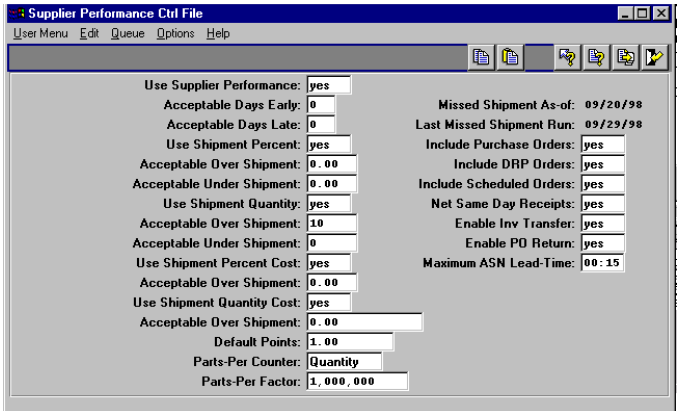


Fig. 8.1 Supplier Performance Ctrl File (5.15.24)

Use the following field descriptions to guide you through the control file setup.

Use Supplier Performance. Enter Yes or No (the default) to indicate whether Supplier Performance is enabled.

When disabled, information related to supplier performance is not captured by the system. This flag overrides all other Supplier Performance flags.

Acceptable Days Early. Enter the acceptable number of days a shipment can be early without generating an early shipment event.

This value sets the default for the same field in Registration Maintenance (5.15.10).

Acceptable Days Late. Enter the acceptable number of days a shipment can be late without generating a late shipment event.

This value sets the default for the same field in Registration Maintenance.

Use Shipment Percent. Enter Yes or No to specify whether the system should evaluate the incoming receipts against a user-specified value.

Yes: The system evaluates whether incoming receipts are over or under a user-specified percentage value. The evaluation is based on a comparison of quantity received to quantity expected.

No: Evaluation does not occur. The values in the corresponding Acceptable Over Shipment and Acceptable Under Shipment fields are not used.

This value sets the default for the same field in Registration Maintenance.

Acceptable Over Shipment. Enter the maximum percentage by which an incoming shipment can be over the expected quantity without generating an overshipment event.

Tip
This field is used when Use Shipment Percent is Yes.

This value sets the default for the same field in Registration Maintenance.

Acceptable Under Shipment. Enter the maximum percentage by which an incoming shipment can be under the expected quantity without generating an undershipment event.

Tip
This field is used when Use Shipment Percent is Yes.

This value sets the default for the same field in Registration Maintenance.

Use Shipment Quantity. Enter Yes or No to specify whether to use the shipment quantity to calculate supplier performance.

Yes: The system evaluates whether incoming receipts are over or under the user-specified quantity.

No: Evaluation does not occur. The values in the corresponding Acceptable Over Shipment and Acceptable Under Shipment fields are not used.

This value sets the default for the same field in Registration Maintenance.

Tip
This field is used when Use Shipment Quantity is Yes.

Acceptable Over Shipment. Enter the maximum quantity by which an incoming shipment can be over the expected quantity without generating an overshipment event.

This value sets the default for the same field in Registration Maintenance.

Tip
This field is used when Use Shipment Quantity is Yes.

Acceptable Under Shipment. Enter the maximum quantity by which an incoming shipment can be under the expected quantity without generating an undershipment event.

This value sets the default for the same field in Registration Maintenance.

Use Shipment Percent Cost. Enter Yes or No to specify whether the system should evaluate the incoming receipts based on the percentage of item cost.

Yes: The system evaluates whether incoming receipts are over or under the specified percentage value. The evaluation is based on a comparison of quantity received to quantity expected.

For example, an item might cost $1,000 each, and you receive 12 instead of 10. The overshipment based on quantity might not generate a supplier performance event, but if the percent of cost is 10%, then an overshipment is recorded.

No: Evaluation does not occur. The value in the corresponding Acceptable Over Shipment field is not used.

This value sets the default for the same field in Registration Maintenance.

Tip
This field is used When Use Shipment Percent Cost is Yes.

Acceptable Over Shipment. Enter the maximum cost by which an incoming shipment can be over the expected cost based on a percentage.

This value sets the default for the same field in Registration Maintenance.

Use Shipment Quantity Cost. Enter Yes or No to specify whether to use the total value of the shipment quantity to calculate supplier performance.

Yes: The system evaluates whether incoming receipts are over a specified cost based on quantity. The evaluation is based on a comparison of the cost of the quantity received and the cost of the quantity expected.

No: Evaluation does not occur. The value in the corresponding Acceptable Over Shipment field is not used.

This value sets the default for the same field in Registration Maintenance.

Acceptable Over Shipment. Enter the maximum cost by which an incoming shipment can be over the expected cost based on quantity.

Tip
This field is used when Use Shipment Quantity Cost is Yes.

This value sets the default for the same field in Registration Maintenance.

Default Points. Enter the default point value to use when creating events in Performance Event Maintenance (5.15.5).

This value sets the default for the Points field in Performance Event Maintenance.

Parts-Per Counter. Enter the parts-per calculation method:

- Quantity: The parts-per calculation is based on the total quantity received.
- Events: The calculation is based on the number of events a receipt has generated.

This value sets the default for the same field in Performance Category Maintenance (5.15.1).

Parts-Per Factor. Enter the factor used to calculate supplier performance rank when the parts-per rating method is used. The default is 1,000,000.

This value sets the default for the same field in Performance Category Maintenance.

Missed Shipment As-of. Displays the date entered for the same field in the Missed Shipment Event Generator (5.15.17) when that program was last executed. This is the beginning date the system uses when searching for missed shipments. This field is for reference only and is not editable.

Last Missed Shipment Run. The last date the Missed Shipment Event Generator was run. This field is for reference only and is set by the system each time the Missed Shipment Event Generator is run.

Include PO Orders. Enter Yes or No to specify whether the Missed Shipment Event Generator should consider purchase orders. This value sets the default for the same field in the Missed Shipment Event Generator screen.

Include DO Orders. Enter Yes or No to specify whether the Missed Shipment Event Generator should consider distribution orders. This value sets the default for the same field in the Missed Shipment Event Generator screen.

Include Scheduled Orders. Enter Yes or No to specify whether the Missed Shipment Event Generator should consider scheduled orders. This value sets the default for the same field in the Missed Shipment Event Generator screen.

Net Same Day Receipts. Enter Yes or No (the default) to indicate whether multiple same-day receipts should be netted as one receipt when calculating the supplier's overall report card score.

Enable Inv Transfer. Enter Yes or No (the default) to specify whether the system should prompt the user for supplier performance data during inventory transfers.

Yes: A supplier performance data pop-up appears in the inventory transfer programs when transferring material from the inspection location specified in the Purchasing Control File (5.24).

Transfer programs are:

- Transfer–Single Item (3.4.1)
- Transfer–Multi Item (3.4.2)
- Transfer with Lot/Serial Change (3.4.3)
- Batchload Transfer with Lot/Serial Change (3.4.4)

Enable PO Return. Enter Yes or No (the default) to specify whether the system should prompt the user for supplier performance data during purchase order returns.

Tip
This field also controls the RTS pop-up.

Yes: A supplier performance data pop-up appears in Purchase Order Returns (5.13.7) and RTS Shipments (11.7.3.16).

Maximum ASN Lead-Time. Enter the maximum lead time for advance ship notices (ASN).You must use the standard hour and minute time format (HH:MM).

This field determines the amount of time allowed between the time a shipment leaves the supplier's dock and the time the ASN for that shipment is created and sent to the customer.

For example, the maximum ASN lead time is 00:20. If a shipment leaves the supplier's dock at 9:00 AM, the supplier must create and send the ASN for that shipment before 9:20. If the supplier sends the ASN after 9:20, the lead time has been exceeded and a late-ASN event is recorded.

This value sets the default for the same field in Registration Maintenance.

Defining Supplier Interval Ratings

Use the Supplier Interval Ratings frame to create a reference table that appears on the supplier report card. The table shows performance levels and is used as a guide for interpreting supplier ratings.

Fig. 8.2
Supplier Performance Ctrl File, Supplier Interval Ratings Frame

To set up the interval ratings table, enter the interval titles with their corresponding maximum score. The system generates the appropriate minimum score numbers for each level and displays the results in descending order.

Defining Performance Categories

The next step in setting up Supplier Performance is to define categories in Performance Category Maintenance (5.15.1). Supplier performance uses four predefined system categories to capture and associate event data.

- ASN Information
- PO Receipts
- DO Receipts
- RTS Receipts

You must create category definitions to use the data captured by system categories. MFG/PRO uses the details from the category definitions you create to sort, calculate, and report on data captured by the corresponding system categories.

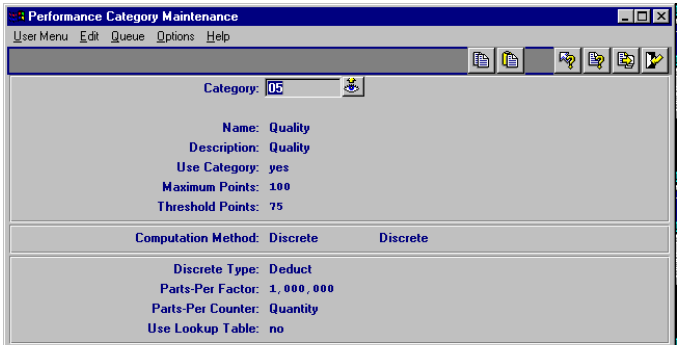


Fig. 8.3 Performance Category Maintenance (5.15.1)

Aspects of the category you can customize include:

- Naming the category

  You can use the predefined system category names or create names to fit your environment.

- Activating or deactivating categories

  You can have multiple categories in your system but use only a subset of these. If you want to stop using a category without deleting it from your system, deactivate it in the Use Category field. If you want to stop reporting for a category without stopping data collection, use Supplier/Category Maintenance (5.15.3).

- Defining point values

  Use Maximum Points to indicate the maximum allowable points for the category. Use Threshold Points to define the minimum number of points a supplier can have in the category before that supplier is considered deficient.

- Defining computational methods

  Use Computational Method to indicate how performance points are calculated for the category.

- Setting lookup table ranges when applicable

  See “Understanding the Lookup Table” on page 68.

Use Performance Category Inquiry (5.15.2) to view the categories you create using Performance Category Maintenance.

Using the Computational Methods

Categories are scored using one of three computational methods, each with its own attributes and purpose.

Discrete method. Involves adding or deducting points from a category’s starting value or maximum points. The Discrete Type field determines if the event adds to or deducts from the supplier’s score. This method is commonly used with subjective categories, but can be used by all categories.

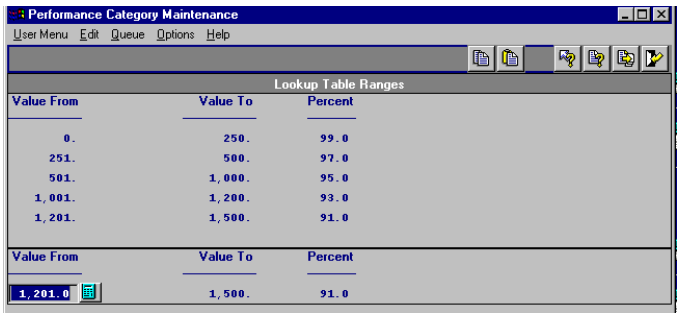
Proportion method. Distributes the total points based on a number of occurrences captured. It takes into account the number of occurrences captured and the number of events captured. This supports manufacturers who, for example, determine that the number of deliveries should be factored into the rating on delivery.

Parts-per method. Uses a factoring value (typically 1 million) to extrapolate the points awarded and produces a result that helps differentiate suppliers having almost perfect scores. The parts-per method includes a lookup table. The table contains the range of values for lookup and an associated percentage of category points.

Understanding the Lookup Table

When you are using the parts-per computational method you can create a reference lookup table. Set Use Lookup Table to Yes to create and use a lookup table for a supplier. The values you set up in this table are used by the Performance Report Card (5.15.15) to calculate the supplier's score percentage.

Fig. 8.4 Performance Category Maintenance, Lookup Table Ranges Frame



Many manufacturing companies set specific performance guidelines for their suppliers. The lookup table is used when these guidelines indicate a parts per number.

One example of the lookup table's use is:

- A company requires a supplier to have no more that 50 defective parts per million.
- For that company, the category Quality is worth 50 points on the report card.
- To manually calculate the parts per number, you take the actual number of defective parts and the total number of parts and put them into terms of the Part-per value (in this case a million) using the following formula:

  *[part per number= (defective parts/total parts shipped) * 1,000,000]*

When a supplier ships 100,000 parts with 34 defective, the supplier's part per number is 340, calculated as:

*[parts per=(34/100,00)*1,000,000]*

This part per number (340) still needs to be related to what the supplier should receive for the category. This is the purpose of the lookup table.

In Figure 8.4, the 340 part per number fits into the interval of 251-500, so the Quality category would receive 97% of 50 points, or 48.5 points.

Defining Performance Events

After setting up category definitions, create event definitions in Performance Event Maintenance (5.15.5). Events are actions—positive or negative—that the system records and uses as supplier performance data. Examples of events are on-time delivery, quality of items, undershipment, or overshipment.

Event points are used by the discrete computational method only. The proportional and parts-per computational methods use ratios to rate suppliers based on activity.

As events take place within MFG/PRO, points are awarded to the supplier. These events are termed *system events* because MFG/PRO can automatically recognize and count them. You must create event definitions to use the data captured by the system events. MFG/PRO uses the details from the event definitions you create to sort, calculate, and report on data captured by the corresponding system events.

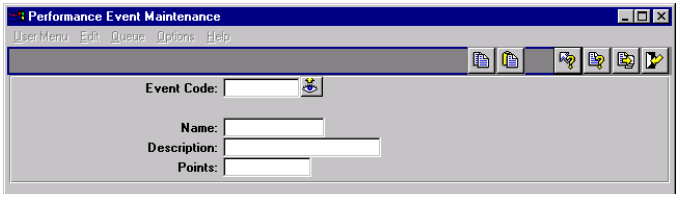


Fig. 8.5
Performance Event Maintenance (5.15.5)

You define the points corresponding to the events during setup. Once your system is active, it automatically recognizes the event, and the event definition indicates how to award point values. This reduces the amount of manual data entry needed during the normal business flow.

See “Creating Category and Event Relationships” on page 70.

Events of a subjective nature are termed *subjective events*, since it takes a user decision to determine the event. These user-interpreted events are captured manually using the various Supplier Performance pop-up windows or using Performance Data Maintenance (5.15.13).

System events are negative events such as late shipment, overshipment, or duplicate ASNs. Subjective events can be positive, such as good phone

support or sharing research costs. They can also be negative, such as wrong labeling or excess freight charges.

You can update the definition of both system and subjective events at any time. Changes take effect immediately.

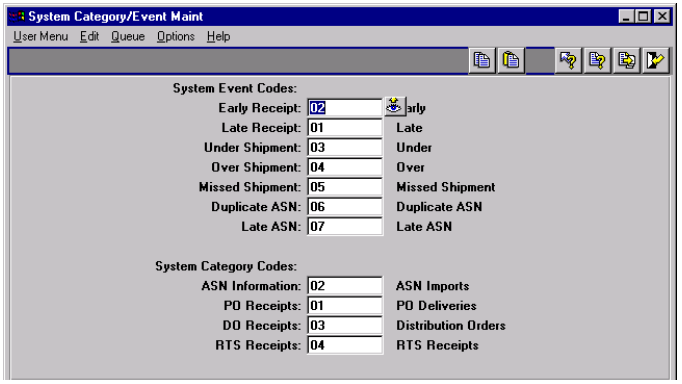
Use Performance Event Inquiry (5.15.6) to view the event definitions you create using this program.

Creating Category and Event Relationships

After defining categories and events, use System Category/Event Maint (5.15.22) to relate system categories and events with the category and event definitions you created in Performance Event Maintenance and Performance Category Maintenance.

As automatic data collection takes place, these category and event code cross-references are used to relate the system activities to the supplier report card using your category and event definitions. The category and event definition codes tell the system where to place the data.

Fig. 8.6
System Category/ Event Maint (5.15.22)



In some situations, not all system categories and events are used; leave these references blank. Entries in all fields are optional. When you leave a field blank, the automatic data collection process does not create events for that system category or event. If you modify a field and remove the value, the system stops collecting data for these categories and or events.

Defining Weight Factors

After relating categories and events, define weight factors for your system using Performance Weight Factor Maint (5.15.7).

Weight factors are multipliers used to affect the value of an event by compounding its severity. Weight factors are only applied to discrete categories. The weight factors you create should reflect the type of impacts you want to have on your suppliers' ratings. Some examples of weight factors you can apply to the quality of a commodity delivered to you are normal, excellent, and poor.

Weights are typically used for negative events to indicate the level of disruption to a normal routine. You predefine weight factors in order to provide consistency in their use. Applying a weight to an event is a manual task and is done in Performance Data Maintenance (5.15.13). The system is designed to allow weights to be applied to events at any point after the events have been recorded.

Fig. 8.7
Weight Factor Maintenance (5.15.7)

Weight factors are optional measurements, but can be an important part of the performance measurement system. The weight factors you create will vary depending on your manufacturing environment.

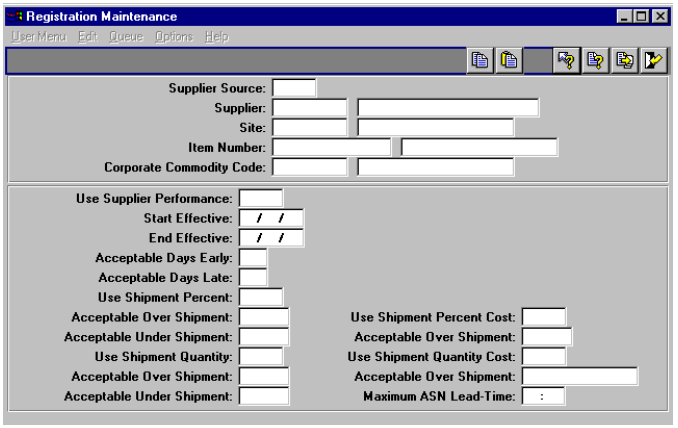
Example A supplier provides you with uncommonly poor-quality goods. The associated Poor Quality event code is worth 1 point. However, you apply the Extremely Poor weight factor, which has a value of 3.00. The system calculates the new weighted performance event score as 3 (1 x 3.00). The weighted performance event score displays on the supplier's report card.

Use Performance Weight Factor Inquiry (5.15.8) to view the weight factors created using this program.

Creating Registrations

The final step in setting up the Supplier Performance system is to register the suppliers, items, commodity codes, or sites to be monitored. Use Registration Maintenance (5.15.10) to create registrations that indicate the items, suppliers, commodity codes, sites, or combination of these to track and rate. You can also use Registration Maintenance to exclude any registration from performance tracking by setting Use Supplier Performance to No.

Fig. 8.8 Registration Maintenance (5.15.10)



To create a registration, enter identifying information in the first frame. You can fill in all of the fields to measure performance for very specific suppliers that meet the criteria. A very specific registration could be for a certain item, from a specific supplier, at a specific site.

You can specify only one field to collect data for a broader range. If you specify a commodity code only, for example, performance data is collected for both PO and DO suppliers from all sites that supply any item belonging to the commodity code you specify.

See “Use Supplier Performance” on page 60.

The data in the second frame defaults from the Supplier Performance Ctrl File (5.15.24). Modify the default information according to the specific need of the registration you are creating.

Use Registration Report (5.15.11) to view all details associated with the registrations you create in this program.

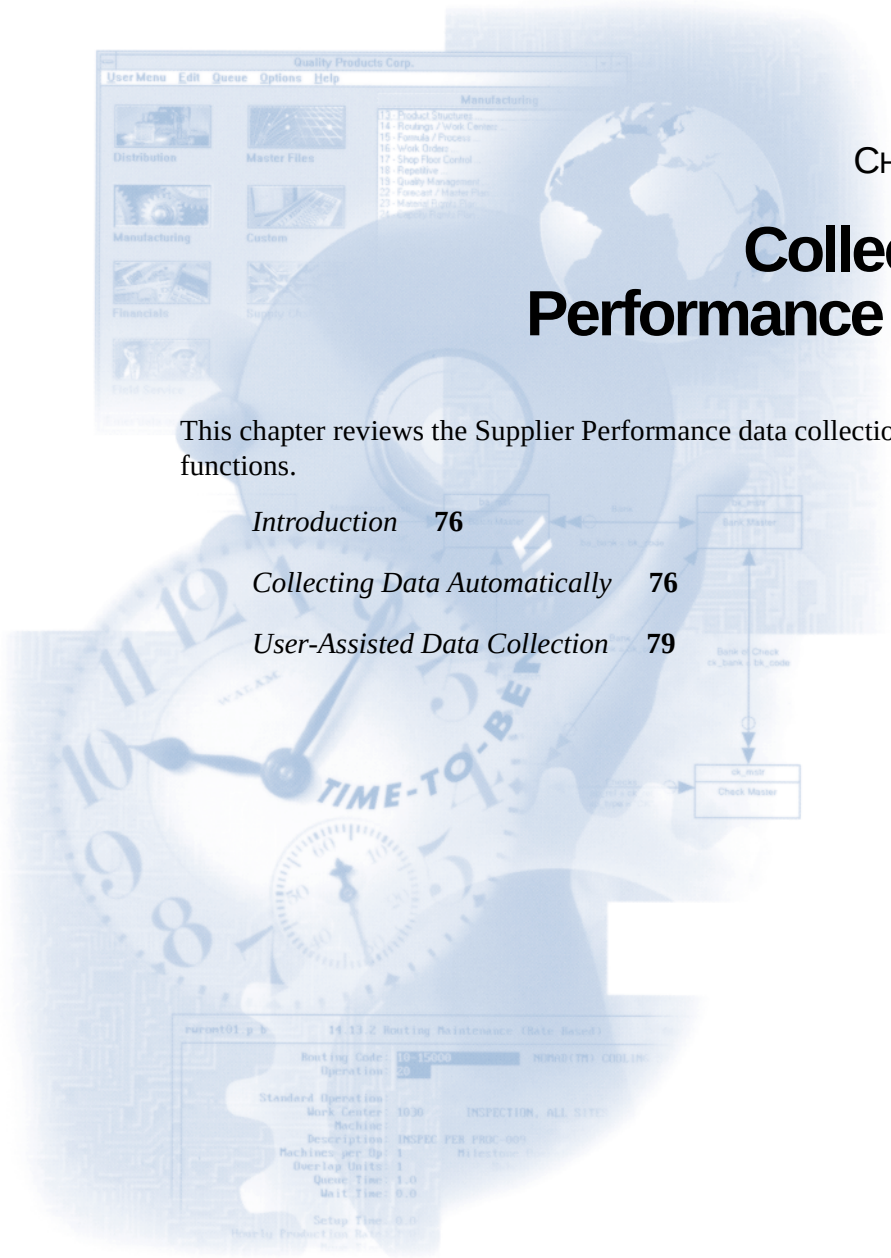
Collecting Data Without Reporting

Use Supplier/Category Maintenance (5.15.3) to disable the reporting of data for a particular supplier, site, or any site and supplier combination.

This program can create exceptions to the normal registration. By turning off a category for a supplier, the category is still registered, but the information gathered is not used in the score calculation. In effect, you give the category full points on the supplier's report card.

You can disable category data reporting for a supplier and all the sites it serves by leaving the Site field blank. You can disable data reporting for a site regardless of the supplier that serves it by leaving the Supplier field blank.

Fig. 8.9 Supplier/Category Maintenance (5.15.3)



CHAPTER 9

Collecting Performance Data

This chapter reviews the Supplier Performance data collection functions.

Introduction

This chapter reviews how and where performance data is captured. The following items are discussed:

- Automatic data collection
- User-assisted data collection
- Manual data collection
- Updating captured data with comments, weights, and other information
- Finding missed shipments and how they are handled

Collecting Data Automatically

Performance data can be automatically collected during the following transactions:

- Schedule Update from MRP (5.5.3.1)
- Document Import (35.13)
- Purchase Order Receipts (5.13.1)
- PO Shipper Receipt (5.23.20)
- Distributed Order Receipt (12.15.20)
- RTS Receipts (11.7.3.13)

Each time a measurable transaction occurs, the system checks for associated registrations. Once a registration is confirmed, the performance data is recorded. Figure 9.1 shows the automatic data collection cycle.

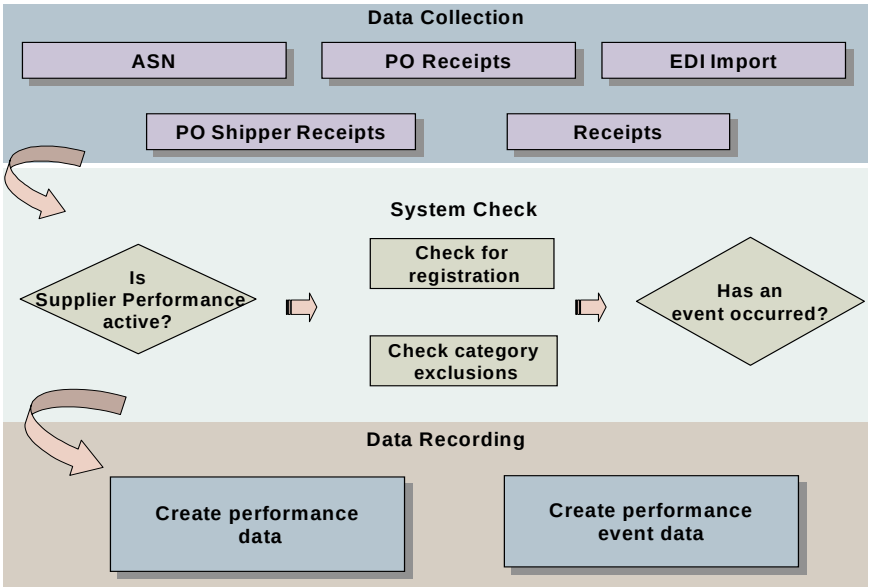


Fig. 9.1
Automatic Data Collection Cycle

When receipts and imports are processed for valid registrations, the system evaluates each receipt and EDI document import to determine if a performance event should be recorded.

Table 9.1 shows all the automatically created performance events and where they are generated. As events are recorded and stored in the MFG/PRO database, you can run the Performance Report Card (5.15.15) or the Performance Data Report (5.15.14) to gauge the supplier's performance against the system-defined categories used during automatic data capture.

Table 9.1
Automatic Data Collection Events and Where They Are Captured

Captured During	Possible Events	
PO Receipts	Early Receipt	Overshipment
	Late Receipt	Undershipment
DO Receipts	Early Receipt	Overshipment
	Late Receipt	Undershipment
RTS Receipts	Early Receipt	Overshipment
	Late Receipt	Undershipment

Captured During	Possible Events	
ASN Import	Late ASN	Duplicate ASN
Schedule Update From MRP	Missed Shipment	

Understanding Automatic Data Collection

Several types of events are automatically generated during various transactions, as shown in Table 9.1 on page 77. These transactions, the possible events, and how the events are captured are discussed here.

PO, DO, and RTS Receipts

During a PO receipt, DO receipt, or RTS receipt, an early, late, overshipment, or undershipment event can be automatically generated, based on the following calculations:

For field information, see "Configuring Control File Settings" on page 60.

1. The receipt date is compared with the planned receipt date. If the receipt is early or late, that number of days is compared with the values specified in Acceptable Days Early or Acceptable Days Late in the control file. When an acceptable value is exceeded, a late or early event is automatically created.

2. The receipt quantity is compared with the open quantity. If the receipt quantity is under or over the open quantity, that quantity is converted to a percent. The difference and difference percent are compared with the values in Acceptable Over Shipment (quantity), Acceptable Under Shipment (quantity), Acceptable Over Shipment (percent), and Acceptable Under Shipment (percent) in the control file. When one of these values is exceeded, an event is automatically created.

3. The cost of the quantity received is compared with the cost of the open quantity. If the quantity-received cost is more than the open-quantity cost, the cost difference is converted to a percent.The cost difference and cost difference percent are compared with the values in Acceptable Over Shipment (cost) and Acceptable Under Shipment (percentage). When one of these values is exceeded, an event is automatically created.

Schedule Update from MRP

During Schedule Update from MRP only missed shipment events are generated. If any overdue quantity exists on the prior schedule as a new schedule release is being generated, that quantity is moved to the cumulative required portion of the schedules, and is seen as a missed shipment. A missed shipment event is automatically created. When the missed shipment arrives it is netted against the schedule and the missed shipment event is replaced with a late shipment event.

Advance Ship Notice

Late ASN events are recorded when the lead time for ASNs specified in Maximum ASN Lead-Time in the Supplier Performance Ctrl File is exceeded. ASN lead time is the amount of time allowed between the time a shipment leaves the supplier's dock and the time the ASN for that shipment is created and sent to the customer. Both of these times are contained within the EDI transaction.

User-Assisted Data Collection

User-assisted data collection can happen in five areas of MFG/PRO.

- Purchase Order Returns (5.13.7)
- RTS Shipments (11.7.3.16)
- Inventory Transfers (3.4 menu)
- Performance Data Maintenance (5.15.13)
- Missed Shipment Event Generator (5.15.17)

Purchase Order Returns and RTS Shipments

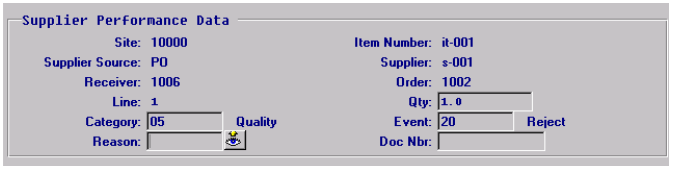
When material is returned or moved from the inspection location, a pop-up window lets you enter a performance event. This pop-up appears only if Supplier Performance is activated in the Supplier Performance Ctrl File (5.15.24) and Enable PO Returns is Yes.

The inspection location is set in the Purchasing Control File (5.24).

Note RTS shipments are handled in the same way as PO Returns. The same control file flag controls both the PO Returns and RTS pop-up windows.

The vendor and order information defaults to the pop-up but cannot be changed. The Category, Event, Quantity, and Reason fields can be updated. Recording of the event is optional. The pop-up is intended to capture information regarding material quality. To continue without entering an event, press Go.

Fig. 9.2
Supplier Performance Pop-Up in PO Returns



To correct an incorrectly entered receipt that creates a performance event, reverse the entire receipt. Reversing the entire receipt also removes all other performance events associated with that receipt. If you do not reverse the entire receipt, then you must remove any performance events manually. To remove a performance event manually, use Performance Data Maintenance (5.15.13).

Inventory Transfer

The Supplier Performance Data pop-up lets you capture data when using any of the three inventory transfer programs:

- Transfer–Single Item (3.4.1)
- Transfer–Multi Item (3.4.2)
- Transfer with Lot/Serial Change (3.4.3)

See “Configuring Control File Settings” on page 60.

This pop-up appears only if Supplier Performance is activated in the Supplier Performance Ctrl File, Enable Inv Transfer is Yes, and the inventory is being moved from the Inspection Location defined in the Purchasing Control File (5.24).

You can use the pop-up to create a performance event. The pop-up screen works similarly in the three inventory transactions. Because the inventory transactions are generic and not PO/DO related, you must enter the supplier, order, and receiver numbers manually.

Creating and Modifying Performance Data

When performance data is generated for any registration, that data is saved for future reporting. The data is identified by a system-generated transaction ID.

Use Performance Data Maintenance (5.15.13) to access, add, and modify details of the captured performance data. Use this program to manually create performance data. This program displays similar information as Transaction History (27.21).

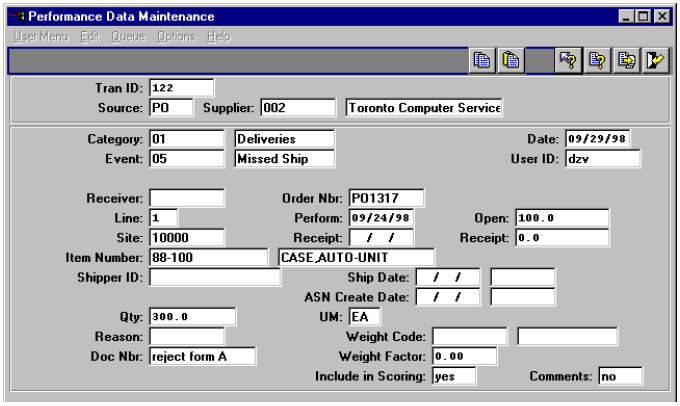


Fig. 9.3
Performance Data Maintenance (5.15.13)

The system-generated transaction ID identifies specific events associated with the corresponding registrations and the particular performance details.You can use this program to search for specific performance records. Each time this program is accessed, the first screen appears without data. Enter the Tran ID, or browse existing IDs using the up and down arrows. Pertinent performance data is also displayed.

Modify captured performance data by adding performance weight factors or updating other fields:

1. Identify and select the corresponding Tran ID.
2. Navigate to the fields you need to edit.
3. Enter any new information or comments, or add the appropriate performance weight factor codes.

You can manually create new performance data—for example, add a note about performance that is not captured by the system, such as bad telephone service or lack of professionalism.

1 Leave Tran ID blank.

2 Enter the new data in the appropriate fields.

3 Save the new record.

A new Tran ID is generated and assigned to the new data.

Missed Shipment Event Generator

Use Missed Shipment Event Generator (5.15.17) prior to generating performance reports. This program updates performance data with the most current results. It evaluates POs and DOs, then creates missed shipment events for any open orders not fully reconciled.

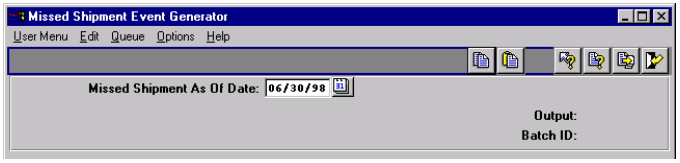
See “Configuring Control File Settings” on page 60.

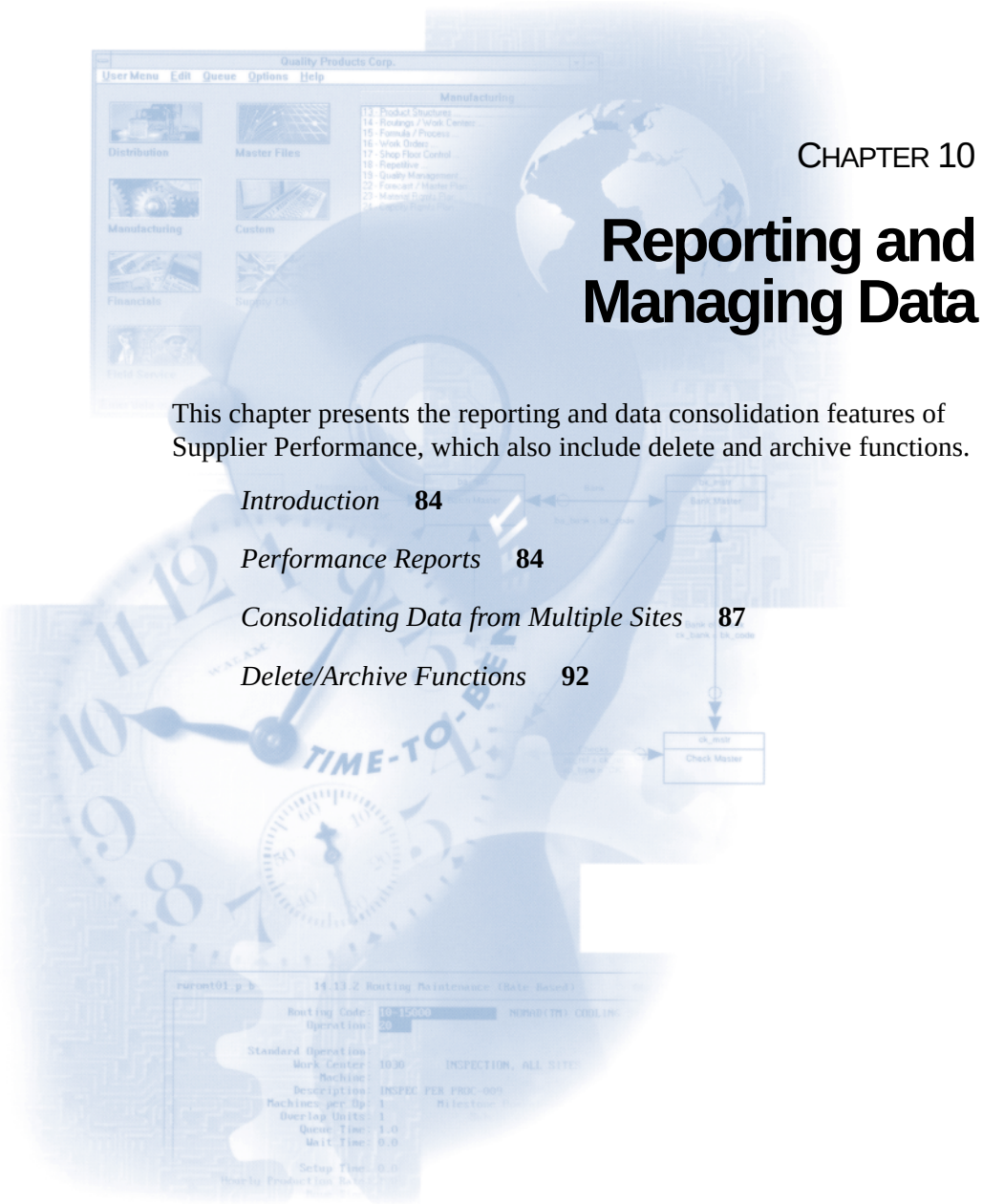
You indicate whether POs, DOs, or both are evaluated by specifying defaults in the control file. Missed shipment events are created only for valid registrations.

Note Missed shipment events do not remain in the system. They are removed upon receipt of the associated late shipment.

This program does not evaluate supplier schedules. These are evaluated in Schedule Update from MRP (5.5.3.1).

Fig. 9.4
Missed Shipment Event Generator (5.15.17)





CHAPTER 10

Reporting and Managing Data

This chapter presents the reporting and data consolidation features of Supplier Performance, which also include delete and archive functions.

Introduction

The output of a successful supplier performance system is a detailed supplier performance report. Supplier Performance uses various reports. This chapter discusses the reporting, data consolidation, and delete/archive functions of Supplier Performance.

The performance reports are:

- Performance Report Card (5.15.15)
- Performance Data Report (5.15.14)
- Registration Report (5.15.11)
- Summary Data Report (5.15.20)
- Performance Category Inquiry (5.15.2)

The data consolidation programs and reports are:

- Supplier Cross-Reference Maint (5.15.23.3)
- Supplier Cross-Reference Report (5.15.23.4)
- Summary Data Extract (5.15.19)
- Performance Data Delete/Archive (5.15.23.1)
- Summary Data Delete/Archive (5.15.23.2)

Performance Reports

Performance Report Card

Ideally, this is the system report you give to your suppliers to indicate their performance as measured by your system. You can automatically E-mail this report to your suppliers.

The Performance Report Card (5.15.15) is a snapshot in time of a supplier’s overall rating. The program generates supplier ratings by examining performance data based on selection criteria you enter. This data is then scored according to parameters associated with categories, events, and weights.

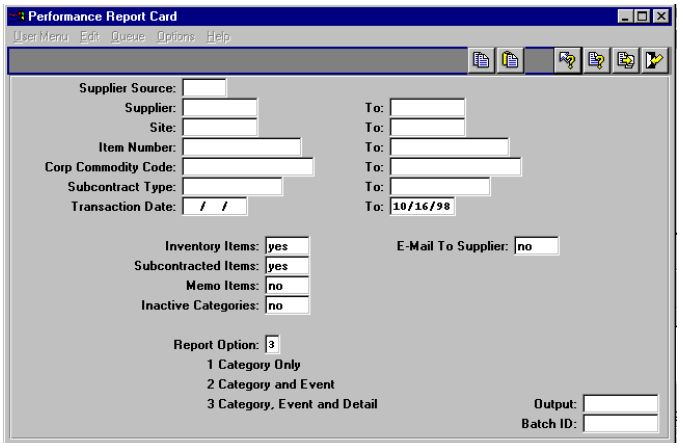


Fig. 10.1
Performance Report Card (5.15.15)

This report can be produced with various information. Set Inactive Categories to Yes to include all categories in the system, even those not currently being used. You can indicate what other types of items to include, and the report is printable with three levels of detail. Each report option displays a new level of information detail for the report card.

- Category
- Category and Event
- Category, Event, and Detail

Performance Data Report

Use the Performance Data Report (5.15.14) to examine raw performance data.

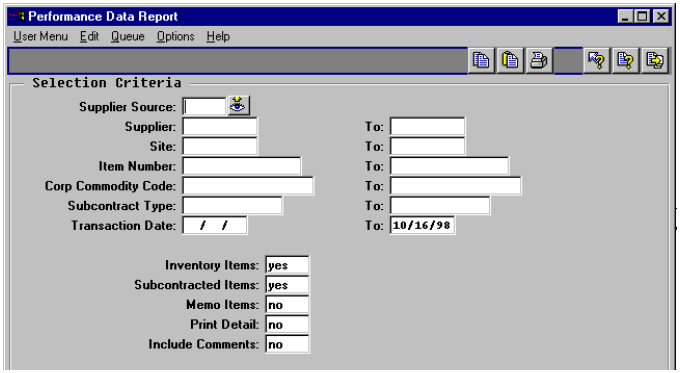


Fig. 10.2
Performance Data Report (5.15.14)

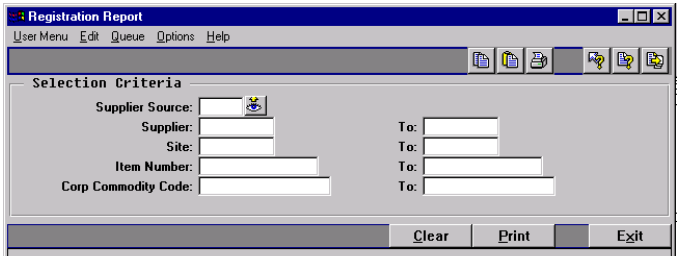
With this flexible report you can:

- View data in multiple detail and summary formats
- Select data by multiple selection criteria
- View event comments

Registration Report

Use Registration Report (5.15.11) to view all details associated with the registrations you create in Registration Maintenance (5.15.10). When you enter a value in a selection criteria field, the report finds and reports the complete details of any registration that has that value.

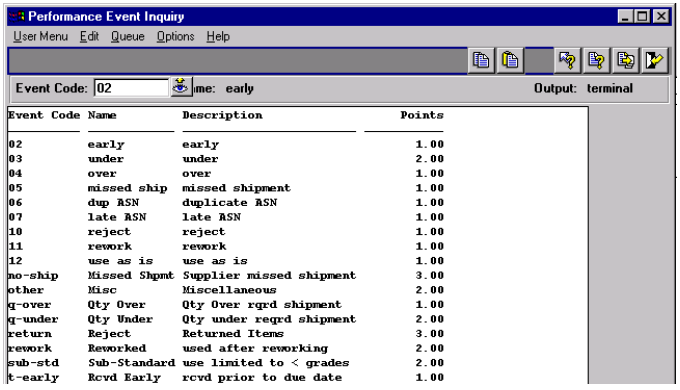
Fig. 10.3
Registration Report (5.15.11)



Performance Event Inquiry

Use Performance Event Inquiry (5.15.6) to view the event definitions you create using Performance Event Maintenance (5.15.5). This inquiry displays the indicated event definition followed by subsequent definitions that reside on the system.

Fig. 10.4
Performance Events Inquiry (5.15.6)



Performance Category Inquiry

Use Performance Category Inquiry (5.15.2) to view the category definition details you create using Performance Category Maintenance (5.15.1). When a lookup table has been defined for a category, its values also display.

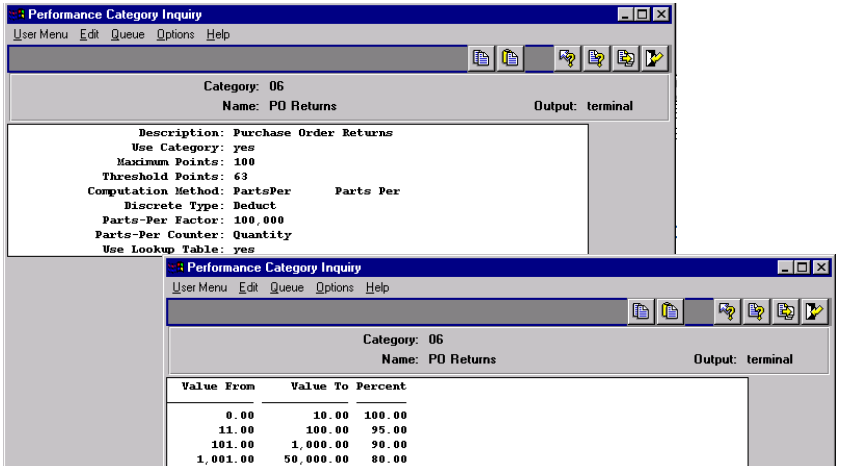


Fig. 10.5
Performance Category Inquiry (5.15.2)

Consolidating Data from Multiple Sites

You can consolidate performance data from multiple sites to one central database using Archive File Reload (36.16.5) to load files produced by Performance Data Delete/Archive and Summary Data Delete/Archive.

See “Delete/ Archive Functions” on page 92.

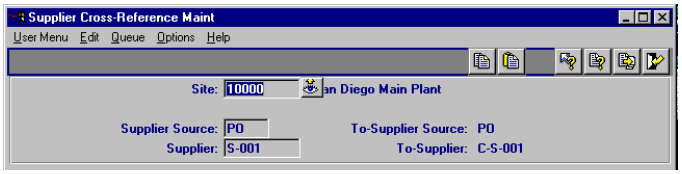
Supplier Cross-Reference Maint

When you consolidate performance data or summary performance data from multiple sites to one local database, performance data labeling variations may occur. Use Supplier Cross-Reference Maint (5.15.23.3) at each reporting site to help you resolve any supplier name inconsistencies.

In this program, you indicate the supplier source and name you gave the supplier, and the supplier source and name that is used at the corporate site.

When data is archived using these cross-references, the archive data is saved with the correct corporate name, instead of the name used at the reporting site.

Fig. 10.6
Supplier Cross-Reference Maint (5.15.23.3)



Supplier Source. Enter DO or PO to differentiate the type of source supplier being referenced.

- PO: Only suppliers previously defined in Supplier Maintenance can be specified in the Supplier field.
- DO: Only sites previously defined in Site Maintenance can be specified in the Supplier field.

Supplier. Enter the supplier name as recognized at the local site.

To-Supplier. Enter the corporate name for the local supplier.

When performance data or performance summary data is archived and Use Cross-Reference is Yes, the local site name is changed to this corporate site name in the archive file only.

Example Site 2000, 3000, and 4000 all track performance for their suppliers. ABC Inc. is a supplier for all three sites, but each site identifies ABC Inc. with a different supplier code (001, 505, and 100).

These three sites must produce monthly supplier performance data for their corporate headquarters. The corporate headquarters uses the name ABC Inc. to consolidate the monthly data. To resolve the supplier name inconsistencies when consolidating data from these sites, each site uses Supplier Cross-Reference Maintenance to map their supplier names (001, 505, and 100) to the corporate name (ABC Inc.).

When the archive functions are used at site 2000, 3000, and 4000, the performance data is archived using the defined supplier cross-references. The archive files with the corporate supplier name are then sent to the corporate headquarters where they are consolidated into one database using Archive File Reload (36.16.5).

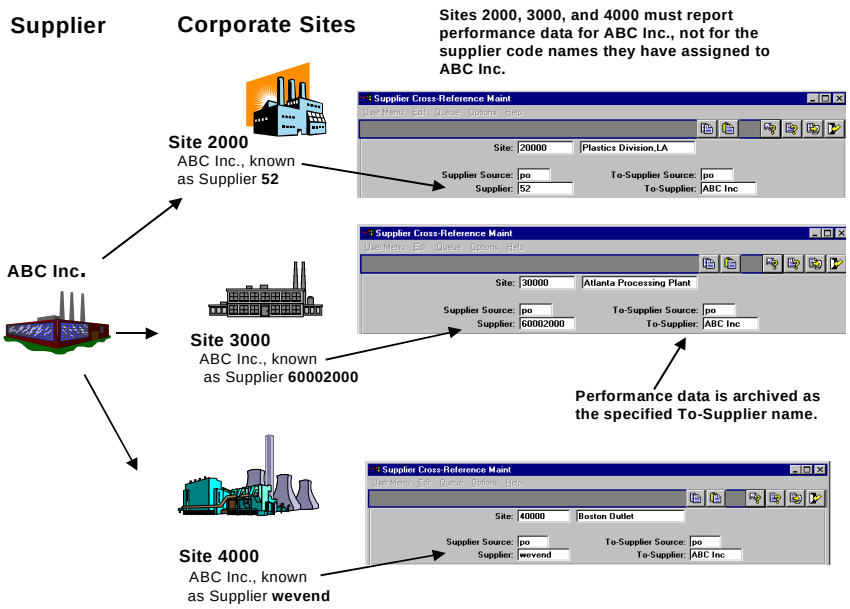


Fig. 10.7 Cross-Reference Example

Supplier Cross-Reference Report

Use Supplier Cross-Reference Report (5.15.23.4) to examine the cross-references created in Supplier Cross-Reference Maint.

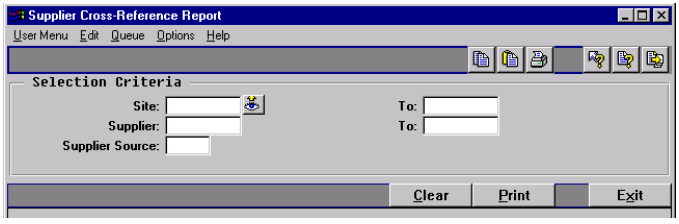


Fig. 10.8 Supplier Cross-Reference Report (5.15.23.4)

Figure 10.9 show the report output.

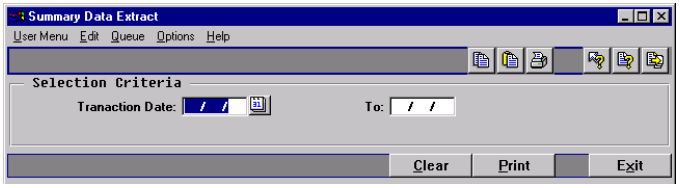
Fig. 10.9
Supplier Cross-Reference Report Output (5.15.23.4)

```
povexrp.p              5.15.23.4 Supplier Cross-Reference Report
Date: 10/16/98
Page: 1                                  9.0 Cycle Test
Time: 16:51:26
                From      1000                              To    10010

Site     Source Supplier Description                Supplier
-------- ------ -------- ------------------------   --------
10000    PO     77000    Waycombe                    77-A
10000    PO     77001    Carl Tech                   77-B
10000    PO     77002    AB&E Enterprise             77-C
10000    PO     77003    Kitty Inc.                  77-D
10000    PO     77004    Guileful Co                 77-E
10000    PO     77005    Jamaica metals              77-F
10000    PO     77006    Mato Inc.                   77-G
12000    DO     33003    Dsite12000 ooo              6766
10000    DO     77000    R10003se                    787-A
10005    DO     00002    AB&E site 1000e             778-C
10006    PO     45603    Kitco Inc.                  778-D
10007    PO     98764    Jolopie Manufacturers       778-E
10008    PO     73245    JannaCo metals              778-F
10009    PO     34568    RG Labels Inc.               778-G
```

Summary Data Extract

Use the Summary Data Extract (5.15.19) to collapse and compress supplier performance data for the purpose of historical reporting. A date range is used for the selection criteria of the extract. The summarized data retains enough information to match the criteria used in the Performance Report Card (5.15.15).

Fig. 10.10
Summary Data Extract (5.15.19)



Summary Data Extract takes the information in your database and, based on the selection criteria, summarizes and saves the data as a separate record in the database. After you run this program multiple times, you can use these individual records for data reports.

Example If you run this program every month for six months and retain the information in your system, at the end of the six-month period you can run the Summary Data Report (5.15.20) to view the six summary reports you created during the reporting period.

Depending on reporting policies in your MFG/PRO environment, you can use the summarized data as the basis for your long-term reports. When combining data from multiple reporting sites, use Supplier Cross-Reference Maint (5.15.23.3) at each site to solve supplier name inconsistencies between sites.

See “Supplier Cross-Reference Maint” on page 87.

Summary Data Report

Use the Summary Data Report (5.15.20) to review a supplier’s overall rating for the date range originally extracted using the Summary Data Extract. The format is the same as that of the Performance Report Card (5.15.15). The date range determines which sets of summary records are included in the report. Each set of records produces a separate report card for the date range indicated.

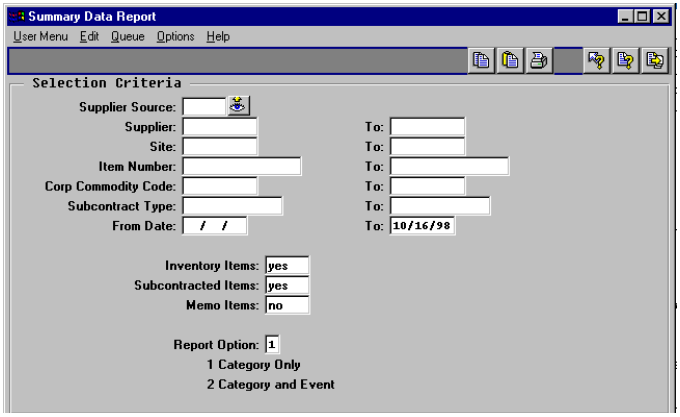


Fig. 10.11 Summary Data Report (5.15.20)

You can run this report with two levels of detail.

- Category only
- Category and event

You can also include or exclude inventory, subcontract, or memo items from the report.

Delete/Archive Functions

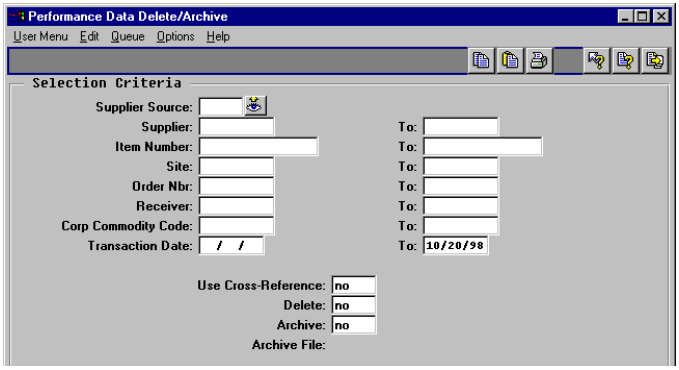
Supplier Performance delete and archive functions are similar to other delete/archive functions in MFG/PRO. The archive file produced by the delete/archive functions is also used for data consolidation from multiple sites.

Performance Data Delete/Archive

Use Performance Data Delete/Archive (5.15.23.1) to delete and archive performance data. You cannot delete performance data in any other Supplier Performance program. You can also archive performance data without deleting it from your system.

For data consolidation purposes, the archive file produced can be reloaded using Archive Data Reload (36.16.5). You can also archive performance data using the corporate standardized supplier names you defined in Supplier Cross-Reference Maintenance (5.15.23.3).

Fig. 10.12
Performance Data Delete/Archive (5.15.23.1)



Summary Data Delete/Archive

Use Summary Data Delete/Archive (5.15.23.2) to delete and/or archive summary performance data created by Summary Data Extract. You can also archive summary data without deleting it from your system. For data consolidation purposes, the archive file produced can be reloaded using Archive Data Reload (36.16.5). You can also archive summary data using the corporate standardized supplier names you defined in Supplier Cross-Reference Maintenance (5.15.23.3).

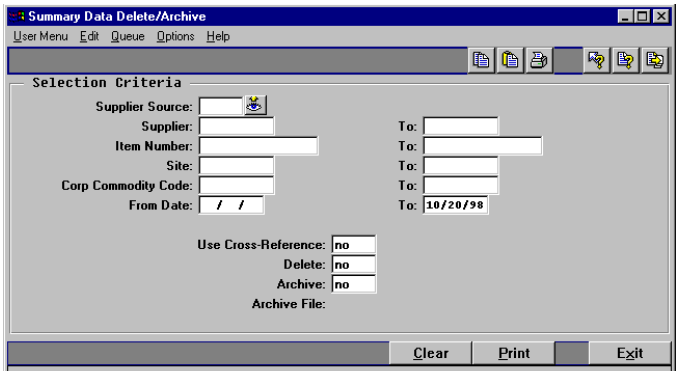
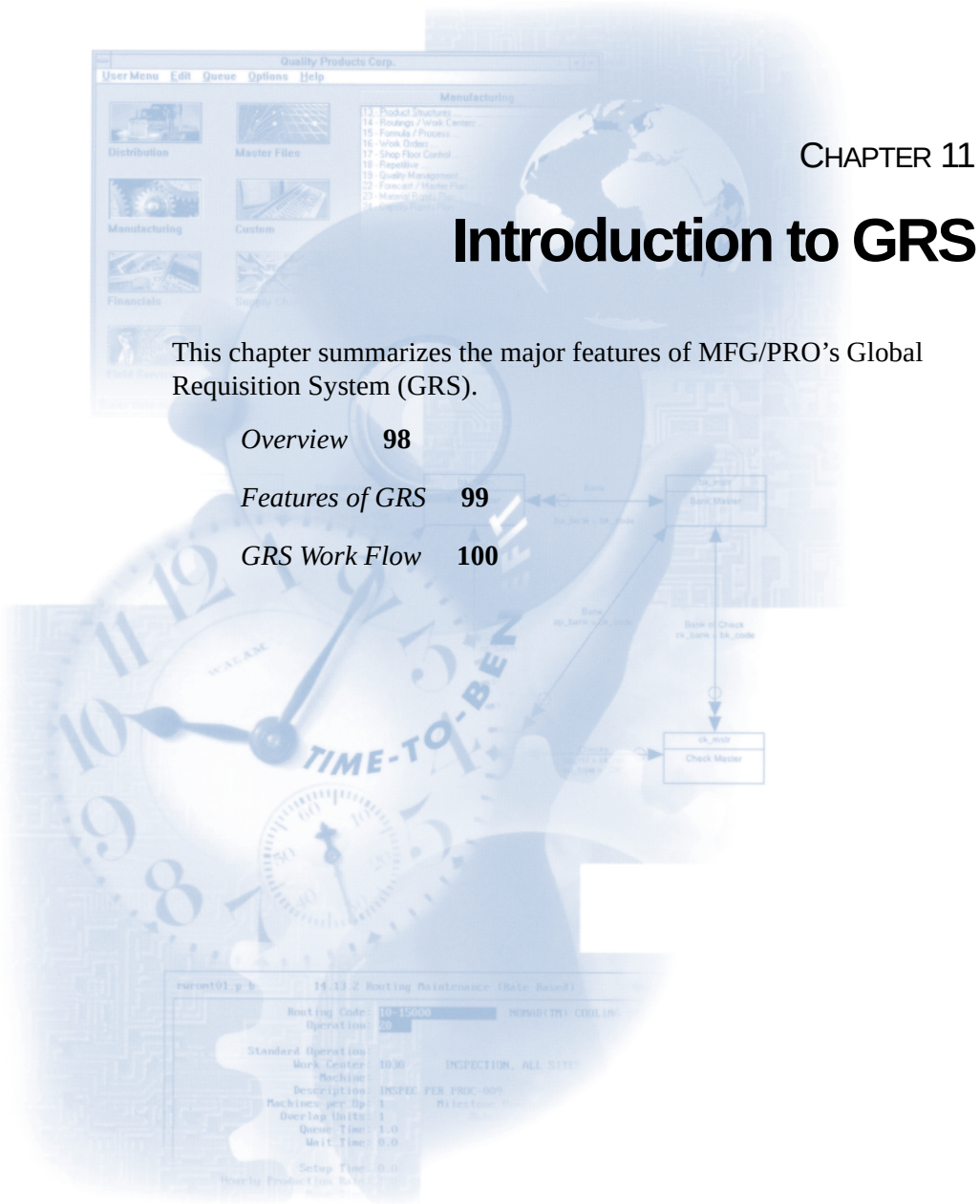


Fig. 10.13
Summary Data Delete/Archive (5.15.23.2)

SECTION 4

Global Requisition System (GRS)

This section includes information about the Global Requisition System (GRS) module. The following chapters are included:



CHAPTER 11

Introduction to GRS

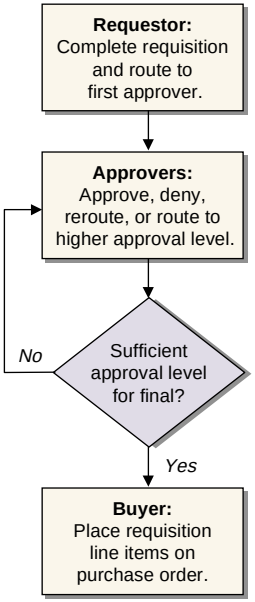
This chapter summarizes the major features of MFG/PRO's Global Requisition System (GRS).

Overview

MFG/PRO's Global Requisition System (GRS) module lets you create multiple-line purchase requisitions and route them through the approval process. Based on the type of purchase, the cost, and the requestor's department, the system determines which individuals are authorized to approve the requisition. Optionally, GRS sends E-mail messages throughout the requisition life cycle to communicate status and required actions to originators, end users, reviewers, approvers, and buyers.

Reviewers and approvers can use the features of GRS to modify, approve, deny, or cancel entire requisitions or individual line items. When a requisition has been approved at the specified final level, a buyer can use approved requisition lines to build purchase orders (POs). Figure 11.1 is a simplified flow diagram of the requisition process.

Fig. 11.1
Requisition Process



Features of GRS

Flexible Approval Process

You can set up approval levels based on the way you assign responsibilities within your company.

- Approvers can be defined *vertically* through your organization, relating the approval levels to entities, sub-accounts, and cost centers.
- You can also set up approvers *horizontally* based on the categories of items they are approving.
- If an individual is responsible for a project that crosses different organizations, you can set that person up as a *job* approver.
- Or, a person who is responsible for replenishing inventory used for manufacturing can be a *product line* approver.

Multiple-Line Requisitions

Instead of limiting a purchase requisition to a single item, GRS features multiple-line entry. You set up default information, such as the supplier, the requesting site, and the need date, in a header applying to the whole requisition. If you need to change any of this information for a single line item, you can override much of it on a line-by-line basis while you are entering individual requisition items.

You can also create a multiple-line requisition by approving a group of MRP planned orders.

System-Generated E-Mail

From the time a requisition begins the approval process until the last line item is referenced on a purchase order, GRS can use your E-mail system to advise end users, reviewers, and approvers of the requisition's status. Messages include notifications that a requisition is waiting for an approval and notifications to buyers when requisitions are approved.

If you use these features, you have two choices of E-mail mode. In Regular mode, a minimum number of messages are generated, mainly to inform approvers that their inputs are needed. If you select Extended

mode, the system also sends status messages to the requestor and end user.

PO Build from Requisitions

GRS reduces repetitive data entry by letting you generate a purchase order directly from approved requisitions. Common data from the requisition header is copied into the purchase order header. You can then copy approved requisition line items to build the detailed line items on the PO.

GRS Work Flow

Table 11.1 shows the functions available in the GRS module.

Table 11.1
Global Requisition Menu (5.2)

Menu Number	Description	Program Name
5.2.1.1	Approval Level Maintenance	rqlmt.p
5.2.1.2	Approval Level Browse	rqliq.p
5.2.1.4	Category Maintenance	rqcmt.p
5.2.1.5	Category Report	rqcrp.p
5.2.1.7	Job Maintenance	rqjmt.p
5.2.1.8	Job Browse	rqjiq.p
5.2.1.13	Horizontal Approver Maintenance	rqahmt.p
5.2.1.14	Vertical Approver Maintenance	rqavmt.p
5.2.1.15	Job Approver Maintenance	rqajmt.p
5.2.1.16	Product Line Approver Maint	rqaplmt.p
5.2.1.17	Approver Report	rqarp.p
5.2.1.20	Buyer Maintenance	rqbmt.p
5.2.1.24	Requisition Control File	rqpm.p
5.2.3	Requisition Maintenance	rqrqmt.p
5.2.4	Requisition Inquiry	rqrqiq1.p
5.2.5	Requisition Browse	rqrqiq5.p
5.2.6	Requisition Report	rqrqrp5.p
5.2.8	Requisition History Log	rqrqrp4.p
5.2.13	Requisition Approval Maintenance	rqapmt.p
5.2.14	Requisition Routing Maintenance	rqrtmt.p

Menu Number	Description	Program Name
5.2.15	Approval Status Inquiry	rqrqiq2.p
5.2.16	Approver's Open Req. Inquiry	rqrqiq3.p
5.2.17	PO and Req. Cross Reference	rqpoiq.p
5.2.18	Build PO from Requisitions	rqpobld.p
5.2.21	Out of Tolerance Inquiry	rqrqiq4.p
5.2.23	Requisition Delete/Archive	rqrqup.p

GRS programs fall into five groups. The programs you use depend on your role in the requisition process.

- GRS setup (system administrator)
- Requisition creation (requestors)
- Requisition approval (reviewers and approvers)
- PO build (buyers)
- Reports and inquiries (as needed)

Figure 11.2 shows the overall flow of GRS tasks. Subsequent chapters describe each step in the requisition process.

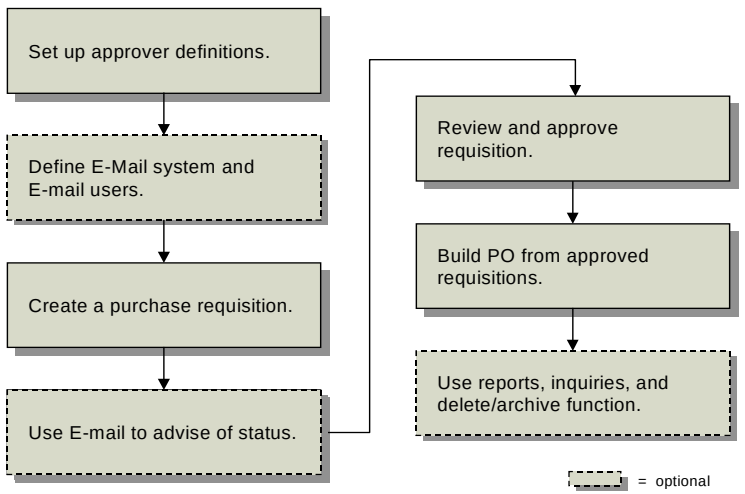


Fig. 11.2
GRS Task Flow

CHAPTER 12

Implementing GRS

This chapter describes how to set up the Global Requisition System based on the specific way your company wants to use the requisition approval process.

Introduction

This chapter is designed for the system administrator responsible for preparing GRS for use. Topics include:

- Planning the best way to set up GRS for your company.
- Establishing data for the system to use during the requisition process.
  - Requisition Control File: default settings for the system to use.
  - E-Mail: If your company wants to use system-generated E-mail, define the E-mail system you use and specify user E-mail addresses.
  - Approval Levels: two-digit codes related to maximum amounts of a specified approval currency.
  - Categories: sets of related GL accounts with a single approver or group of approvers across organization structures; used when establishing horizontal approvers for types of items.
  - Jobs: limited-duration tasks, such as projects. Used to allow approval authority over a range of organizational structures, but only if associated with a specific job.
  - Buyers: individuals responsible for referencing approved requisition items on purchase orders.
  - Approvers: horizontal, vertical, job, and product line, depending on how your company wants to authorize purchases. Can be defined using various combinations of levels, categories, jobs, entities, sub-accounts, and cost centers.

The Global Requisition Setup Menu (5.2.1) lists the programs used to implement the purchase requisition process.

Table 12.1
Global Requisition Setup Menu (5.2.1)

Menu Number	Description	Program Name
5.2.1.1	Approval Level Maintenance	rqlmt.p
5.2.1.2	Approval Level Browse	rqliq.p
5.2.1.4	Category Maintenance	rqcmt.p
5.2.1.5	Category Report	rqcrp.p
5.2.1.7	Job Maintenance	rqjmt.p
5.2.1.8	Job Browse	rqjiq.p
5.2.1.13	Horizontal Approver Maintenance	rqahmt.p

Menu Number	Description	Program Name
5.2.1.14	Vertical Approver Maintenance	rqavmt.p
5.2.1.15	Job Approver Maintenance	rqajmt.p
5.2.1.16	Product Line Approver Maint	rqaplmt.p
5.2.1.17	Approver Report	rqarp.p
5.2.1.20	Buyer Maintenance	rqbmt.p
5.2.1.24	Requisition Control File	rqpm.p

Figure 12.1 summarizes the tasks required to set up GRS. These tasks are described in detail in the following sections.

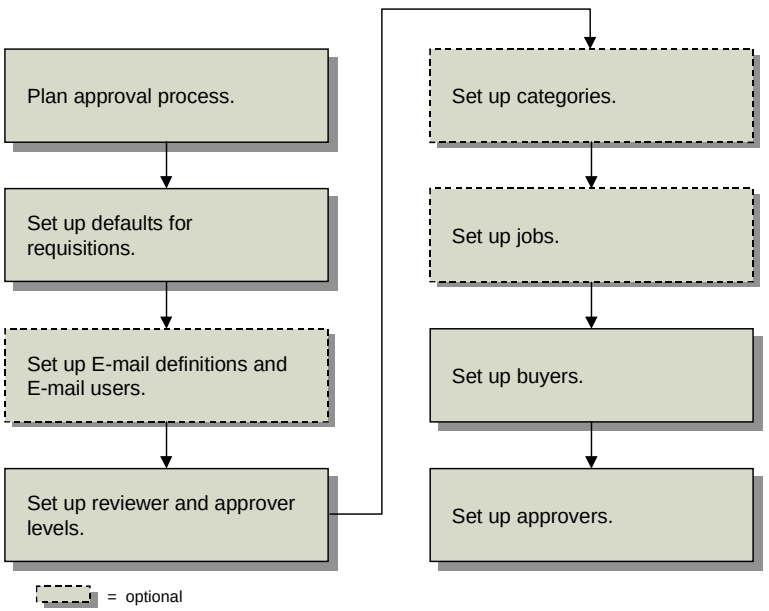


Fig. 12.1
GRS Setup Tasks

Planning the Approval Process

Before starting to set up GRS, you should consider the way you want the approval process for your company to flow. Use the following questions as a guideline:

- Will you operate more efficiently if GRS generates E-mail messages to the people involved in the approval cycle?
- Should only the next approver be notified of approval-related events, or would a wider distribution be better?
- Are most of your requisitions approved by department heads or supervisors?
- Are the types of purchases you make monitored across departments by certain reviewers, regardless of which department generates the requisition?
- Do you want the buyer to be able to change the cost specified on a requisition when placing a purchase order? And, if so, do you want to set parameters to identify a cost variance as out of tolerance?

System-Generated E-Mail

One element to consider in the planning process is whether your company wants to use the automated E-mail notification features of GRS. If so, you must establish a record in E-Mail Definition Maintenance (36.4.20) for each E-mail system your company uses. You must also enter E-mail addresses for all GRS users in User Maintenance (36.3.18).

If you decide to use automatic E-mail, you can send E-mail in Regular or Extended mode. Table 12.2 summarizes GRS events and the resulting E-mail recipients for these modes.

Table 12.2
E-Mail Modes

GRS event	Regular mode notifies:	Extended mode also notifies:
Route requisition	New route-to	Requested by, end user
Reverse route requisition	Current route-to	Requested by, end user
Modify or delete requisition	Current route-to	Requested by, end user
Mark out of tolerance	Requested by, end user	

A system-generated E-mail message includes the following:

- Action
- Requisition number
- Requisition date
- Need date
- Due date
- Requested by
- Entered by
- End user
- Route to
- Reason
- Remarks
- Approval status
- Database
- Extended cost total
- Maximum extended cost total
- Approval comments (up to 15 lines)

Approver Types

Before you begin using the setup programs, consider how your company manages requisition approvals. GRS provides the flexibility to set up approvers based on the way your company wants to manage the approval process. You can set up four types of approvers—horizontal, vertical, job, and product line—using approver maintenance programs (5.2.1.13 through 5.2.1.16).

See “Setting Up Approvers” on page 116.

Once you have decided which types of approvers are best suited to the way you want to use GRS, you are ready to set up levels, categories, and jobs—the building blocks used to define approvers.

Note Because of GRS’s flexibility, you can change or add to the approver profiles at any time. For example, when you go through the initial setup process, your company might not need to use job approvers. However, later it may be convenient to isolate some purchase approval authority to a specific project. You can then define the job and add a job approver for it.

Horizontal Approvers

Approvers can be set up *horizontally* based on the categories of items they are approving. For example, one manager in your company might approve all computer purchases, regardless of which department creates the requisition. You use Category Maintenance (5.2.1.4) to assign a range of accounts to a category such as Computers. You can then require all

See “Setting Up Categories” on page 114.

computer requisitions to be sent to the approver named for this category, regardless of the requestor's sub-account or department.

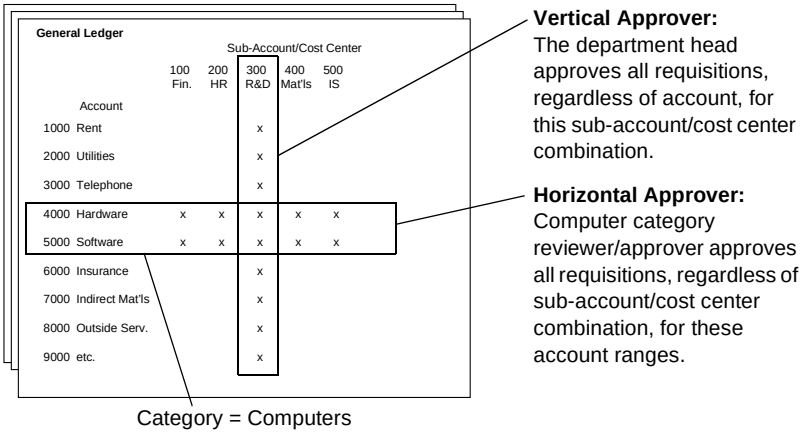
Vertical Approvers

Many companies approve purchases on a group or department basis; normally, a department manager or supervisor approves requisitions for the department. If this is the way your company works, you can define approvers *vertically* through the organization; the approval levels can be related to combinations of entities, sub-accounts, and cost centers.

Even if you use vertical approvers, you might want to have someone else review specific types of purchases across all organizations to make sure purchases conform to company policy. Then, you can also define categories and set up horizontal approvers with different ranges of account authorizations.

Figure 12.2 is a simplified overview of the difference between horizontal and vertical approvers. It also illustrates how a requisition might require both types of approval.

Fig. 12.2
Vertical versus Horizontal Approvers



Job Approvers

Sometimes, you might need to set up projects or other relatively short-term tasks that do not require long-term approval authority. In this case, you can set up one person—usually the program manager—as a *job* approver.

This approver can authorize requisitions within specified ranges of sub-accounts and cost centers—but only if the requisitions are associated with a specific job. This way, a single approver can authorize project-specific purchases originated by several departments (multiple sub-accounts).

Product Line Approvers

Product lines group items for reporting, planning, and accounting purposes. A product line approver authorizes inventory purchases for direct materials associated with specific sites and product lines. A person who approves MRP-planned material purchases must be defined as a product line approver.

Setting Up Requisition Defaults

Use the Requisition Control File (5.2.1.24) to establish default values for new requisitions you create with Requisition Maintenance (5.2.3). Setting default values saves time while preparing a requisition, because standard values are already filled in. As needed, the requisition originator can change most of these settings on individual requisitions.

Example Your company does not ordinarily use header comments on its requisitions, so you set the Header Comments flag to No in the Requisition Control File. A requestor who needs to add header comments can change the flag to Yes on individual requisitions.

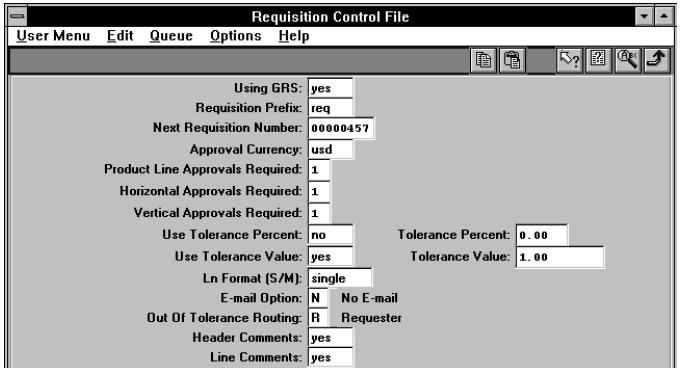


Fig. 12.3
Requisition Control File (5.2.1.24)

Using GRS. Yes or No flag used to activate GRS. If set to No, the functions of the standard MFG/PRO requisition programs located on

the Purchase Requisitions Menu (5.1) are available. To use the GRS programs, set the flag to Yes. When Yes, you can no longer use Purchase Requisition Maintenance (5.1.4).

You cannot use requisitions created in Purchase Requisition Maintenance (5.1.4) to create purchase orders with GRS. Only GRS-created requisitions are available for the buyer to copy while using Build PO from Requisitions (5.2.18).

Warning If you activate GRS, create new requisitions in GRS Requisition Maintenance (5.2.3), then reset the Using GRS flag to No, the GRS-created requisitions are not available from any of the 5.1 menu programs. In addition, any POs you have built from GRS requisitions are not accessible from Purchase Order Maintenance (5.7) when GRS is inactive.

Tip
Prefix codes restrict the size of the numeric portion of the requisition ID. The combined length cannot exceed eight characters.

Requisition Prefix. An optional one- to three-character prefix for purchase requisition numbers. For example, you might want to make your purchase requisitions easy to identify by adding a prefix of RQ. When you add a new requisition and leave Requisition Number blank, it is automatically set to the prefix code followed by the next sequential number.

Tip
Start with a large number (such as 10000) so that requisitions sort in sequence.

Next Requisition Number. The next automatic purchase requisition number for system-assigned numbers. When setting a default starting number, remember that purchase requisition numbers are alphanumeric and sort in that sequence: requisitions 10, 20, and 100 sort in the sequence 10, 100, 20.

Approval Currency. The currency to be used in defining approval levels. Defaults from the system base currency.

Requisitions can be created in more than one currency. GRS converts other currencies to the approval currency as part of the approval process. A valid exchange rate must exist for this currency during approval.

Product Line Approvals Required. The minimum number of approvers needed to approve direct material requisitions before they can be placed on a purchase order.

Horizontal Approvals Required. The minimum number of category-oriented approvers needed to approve each category within a requisition before it can be placed on a purchase order.

Vertical Approvals Required. The minimum number of organization-oriented approvers needed to approve requisitions before they can be placed on a purchase order. Job approvers are included in this number.

Use Tolerance Percent. Enter Yes or No to indicate whether you want the system to check the cost of an item shown on the requisition against the actual cost specified on the purchase order. If this field is Yes and you enter a value in the Tolerance Percent field, the system compares the requisition maximum cost to the PO cost if the buyer increases the cost after copying the approved line to the PO. If the percentage is exceeded, GRS prompts the buyer to mark the line out of tolerance.

See "Out-of-Tolerance Conditions" on page 152.

Tolerance Percent. The default allowable percentage difference between the maximum cost shown on a requisition line item and the cost entered on the purchase order.

Tip
If you set both Use Tolerance Percent and Use Tolerance Value to Yes, GRS uses the smaller of the two to determine if lines are out of tolerance.

Use Tolerance Value. Yes or No flag used with Tolerance Value field. Processing works similarly to Use Tolerance Percent.

Tolerance Value. The default allowable cost difference between the maximum cost shown on a requisition line item and the cost entered on the purchase order. Processing works similarly to Tolerance Percent.

Ln Format (S/M). Specify the default method for entering purchase requisition line items—single-line or multiple-line. Multiple-line mode displays several lines on a single screen, but only allows input or modification of basic data. Single-line mode displays all data fields for one line per screen. This value can be changed at any time on individual requisitions.

E-mail Option. Enter the default E-mail mode. Valid settings are N, R, and E.

- Set to None (the default) if you do not want to use the system-generated E-mail features of GRS. Users cannot override this setting on individual requisitions.

See "System-Generated E-Mail" on page 106.

- Set to Regular or Extended to make this the default E-mail mode for all requisitions. Users can change the default setting on individual requisitions.

Tip
This field is only used when Use Tolerance Percent or Use Tolerance Value is Yes.

Out of Tolerance Routing. Enter the code indicating the default routing for requisitions when the buyer chooses to route an out-of-tolerance line: R (requestor), L (last approver), F (first approver), or N (none). If you set the field to None, the Route To field on the out-of-tolerance routing screen defaults to blank.

Header Comments. Yes or No flag indicating whether comments are normally entered on each requisition header. Information associated with the header usually applies to the entire requisition and prints at the top of the requisition. The flag can be changed manually on a requisition. If you do not normally use header comments, set this flag to No to avoid being prompted each time with the comment entry screen.

Line Comments. Yes or No flag indicating whether comments are normally entered on each requisition line. The flag can be changed manually on a requisition. If you normally do not use comments, set this flag to No to avoid being prompted each time with the comment entry screen.

Setting Up Automated E-Mail (Optional)

See “System-Generated E-Mail” on page 106.

If you want GRS to send automatic E-mail notifications during the requisition approval cycle, use E-Mail Definition Maintenance (36.4.20) to establish information about how GRS communicates with your E-mail system. You must also add E-mail information for each user in User Maintenance (36.3.18).

These functions are described in *User Guide Volume 11: Manager Functions*.

Defining Approval Levels

An approval level within GRS is defined as the maximum amount of approval currency a person assigned that level is authorized to approve. You define approval levels in Approval Level Maintenance (5.2.1.1). To view existing approval levels, use Approval Level Browse (5.2.1.2).

See “Approval Level Browse” on page 156.

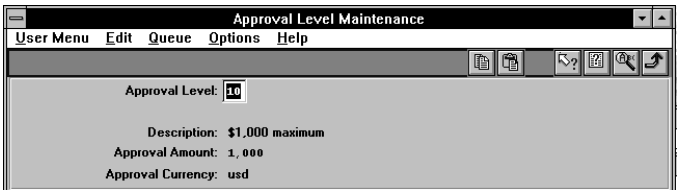


Fig. 12.4 Approval Level Maintenance (5.2.1.1)

Approval Level. Enter a two-digit number defining a level. At initial system setup, you should consider establishing these in increments of 5 or 10 so that you can later insert intermediate levels. These codes are also used in the Review Level field in approver maintenance programs (5.2.1.13 through 5.2.1.16).

See “Setting Up Approvers” on page 116.

Approval Level 00 is reserved by the system and indicates that a person is not an approver or reviewer. Individuals with this level are not included when reports are generated.

Description. Optionally enter a text description of the approval level. This description appears on various inquiries and reports.

Approval Amount. The amount a person assigned this level is authorized to approve or required to review. This amount is expressed in the approval currency defined in the Requisition Control File (5.2.1.24). You can assign a zero-level authorization. This defines a person who reviews requisition items and can either deny them or approve them and route them to someone with a higher approval level.

Note This amount can represent either a maximum or minimum, depending on where it is used. In the approver maintenance programs, Approval Level is the *maximum* authorized level. When Approval Required is Yes in one of these programs, the associated individual must approve all requisitions *up to* this amount. But when Review Required is Yes, Review Level is a *minimum*—this individual must review all requisitions *above* this amount.

Approval Currency. The default currency from the Requisition Control File (5.2.1.24). This is a display-only field.

Setting Up Categories

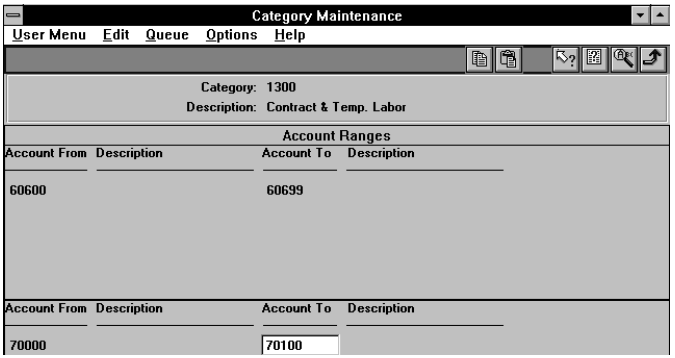
A category is a logical grouping of accounts related to specific approvers. For example, you might have one person in your organization review all computer purchases.

Depending on the way your company wants to manage the requisition approval process, you can establish a set of categories with Category Maintenance (5.2.1.4). The center frame displays ranges of accounts already associated with the category; use the bottom frame to add, modify, or delete accounts.

See page 156.

Use Category Report (5.2.1.5) to view descriptions and ranges of accounts associated with existing categories.

Fig. 12.5
Category Maintenance (5.2.1.4)



Category. A one- to four-character alphanumeric code you assign to each category.

Description. A text description of the items in the category, such as computer equipment or communications. This description appears on various inquiries and reports.

Tip
The same account numbers can be included in more than one category.

Account From. Beginning of a range of accounts to be included in this category. All sub-accounts that fall within this range are also included. For example, account range 5100 - 5100 includes 5100001 through 51009999, where 5100xxxx is the sub-account.

Account To. End of a range of accounts to be included in this category; defaults to same value as Account From. This field cannot be left blank.

Setting Up Jobs

A job is a relatively short-term set of tasks, such as a limited-duration project. People from many different sub-accounts or cost centers often issue requisitions for the same job. To keep purchase accountability with one person—usually the project manager—you can set up a job code. Use Job Maintenance (5.2.1.7) to define jobs. Job Browse (5.2.1.8) lets you view existing job definitions.

See “Job Browse” on page 157.

Note While job and project are used for the same type of activity, MFG/PRO uses project to track expenses to a GL account. Job is used only to determine an approver for a requisition.

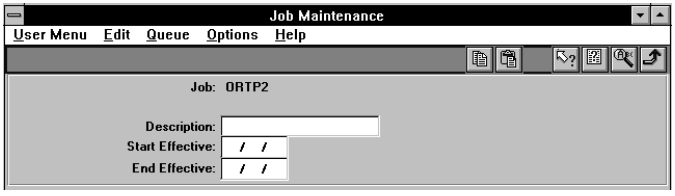


Fig. 12.6
Job Maintenance (5.2.1.7)

Job. An alphanumeric code assigned to this job. When an approved requisition line is copied to a purchase order, this information is added to the Sales/Job field on the PO. The job code is not validated against any system data. Consider establishing naming standards for your company to make the codes easy to recognize on reports and inquiries.

Description. A short description of the project or activity for this job. This description appears on various inquiries and reports.

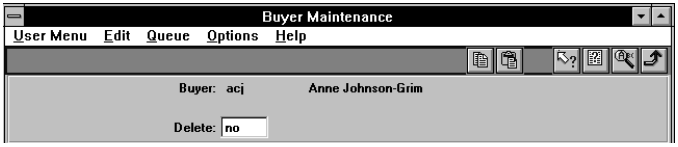
Start Effective. The first date this job can be used on a requisition. The default is blank. Effective dates are optional. If you leave the date fields blank, the job is effective indefinitely.

End Effective. The last date this job can be used on a requisition. The default is blank.

Setting Up Buyers

The buyer—an individual who places purchase orders with suppliers—is the last person in the requisition process. After a requisition has passed through final approval, it is routed to the buyer, who references approved requisition line items on purchase orders. Use Buyer Maintenance (5.2.1.20) to add and delete buyers.

Fig. 12.7
Buyer Maintenance (5.2.1.20)



Buyer. User ID of the person designated in this record as a buyer. During the approval process, the buyer named on the requisition is notified by system-generated E-mail when the requisition is approved and ready to be moved onto a purchase order. Any valid MFG/PRO user can be defined as a buyer.

Delete. Yes or No flag used to remove employee's status as a buyer. Default is No; set to Yes to delete this person from the buyer master.

Important If you use generalized codes for the Buyer field (po_buyer) in Purchase Order Maintenance (5.7), you must first use Generalized Codes Maintenance (36.2.13) to establish any user you want to define in Buyer Maintenance as a valid entry. Otherwise, an error displays in Buyer Maintenance.

Setting Up Approvers

See "Planning the Approval Process" on page 106.

As discussed in the section on planning, GRS provides four programs for defining the approvers most appropriate to your company. These programs use combinations of the level, category, and job data you established earlier in the setup process, along with entity, sub-account, and cost center data, to define an approver profile.

See "Approver Report" on page 157.

Use Approver Report (5.2.1.17) to view information on existing approvers.

This section describes the four GRS approver maintenance programs. These programs include many common fields. Descriptions of these fields are provided only once and are not repeated for each program.

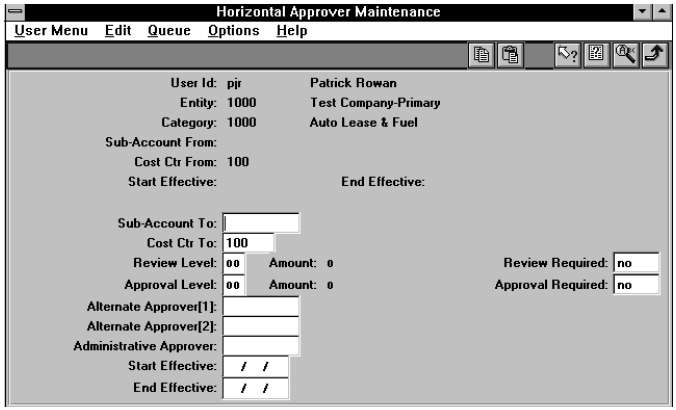


Fig. 12.8 Horizontal Approver Maintenance (5.2.1.13)

User Id. Enter the ID of an individual assigned an expenditure authorization limit within a defined set of GL account, sub-account, cost center, and entity ranges. This can also be a reviewer—a person who may not have a high enough level to approve a purchase, but still reviews it from a policy or compliance standpoint.

Tip When you enter a valid value, the system displays the full description of the selected entry.

Entity. Enter the entity code for which an approver can authorize requisitions. Entity codes are used to process the general ledger transactions of a specific part of your company—an office or region, for example. Leave blank if this approver can authorize requisitions for all entities.

Category. Alphanumeric code for the selected category. This field applies to Horizontal Approver Maintenance only.

See page 114.

Sub-Account From. Beginning of the range of sub-accounts for which this approver is authorized to approve requisitions. If there is a value in Sub-Account To, this field cannot be blank.

Tip If your company's general ledger is set up with sub-accounts and cost centers, GRS validates any entries in these fields.

Sub-Account To. End of sub-account approval range. Defaults to value entered in Sub-Account From field. If there is a value in Sub-Account From, this field cannot be blank.

Cost Ctr From. Beginning of the range of cost centers for which this approver is authorized to approve requisitions. If there is a value in Cost Ctr To, this field cannot be blank.

Cost Ctr To. End of cost center approval range. Defaults to value entered in Cost Ctr From field. If there is a value in Cost Ctr From, this field cannot be blank.

Review Level. Enter the two-digit code representing the minimum amount of specified currency an individual is required to review on a requisition. Used in conjunction with the Review Required flag to indicate that this person must review all requisitions at or above the level shown here—even if the person's approval authority is insufficient to make final approval.

Review Required. Yes or No flag indicating whether all requisitions at or above the level specified in Review Level must be reviewed by this individual. Default is No. This applies only to requisitions requiring this person's approval type—horizontal, vertical, job, or product line.

Approval Level. Enter the two-digit code representing the maximum amount of specified currency an individual is authorized to approve on a requisition.

The way GRS uses this level varies by the type of approver. For example, for vertical and job approvers, the system determines approvers based on the total maximum cost of the requisition. This is because all the line items use the same sub-account and cost center combination. For horizontal approvers, GRS selects approvers based on the total maximum cost of all the line items for each category included on the requisition.

Approval Required. Yes or No flag indicating whether all requisitions at or below the level specified in Approval Level must be approved by this individual. Default is No. This applies only to requisitions requiring this person's approval type—horizontal, vertical, job, or product line.

Tip
An alternate does not have to be the same type of approver—just the same level.

Alternate Approver [1], Alternate Approver [2]. Enter the ID of another approver with the same or greater expenditure authorization limit who is allowed to authorize requisitions on behalf of a regular approver when that person is not available. You can designate up to two alternate approvers.

Administrative Approver. Enter the ID of an individual authorized to approve purchase requisitions on behalf of this approver. The person

specified does not need to be assigned an approval level. Completing this field allows routine requisition activities to continue during a manager's absence.

Start Effective. Enter the first date this approver is authorized to approve requisitions. The default is blank. Effective dates are optional; you can use start and end dates to assign approvers for short-term tasks or as temporary alternates.

End Effective. Enter the last date this approver is authorized to approve requisitions. The default is blank; effective period is open-ended.

Similar to Horizontal Approver Maintenance; does not include Category field

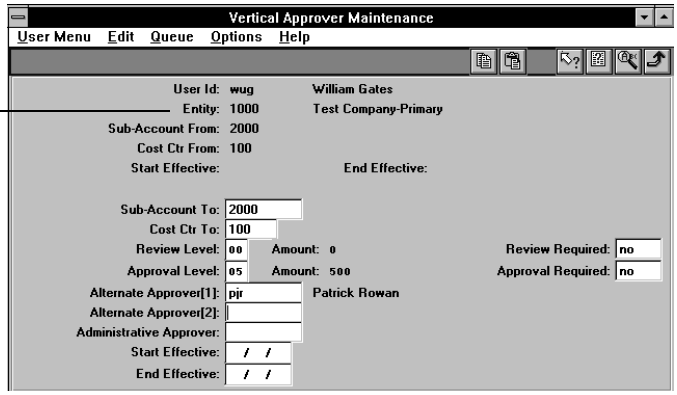


Fig. 12.9 Vertical Approver Maintenance (5.2.1.14)

Includes Job field

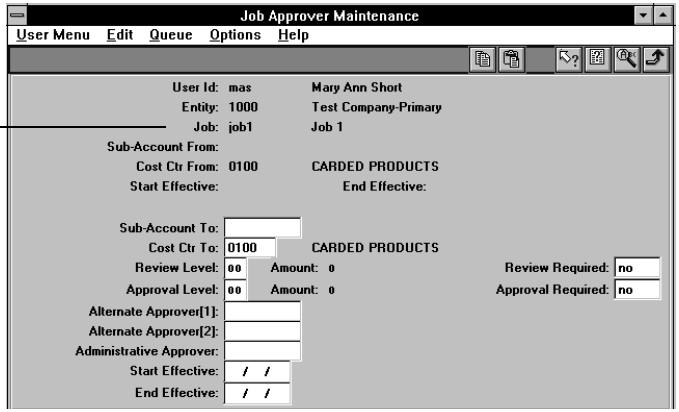
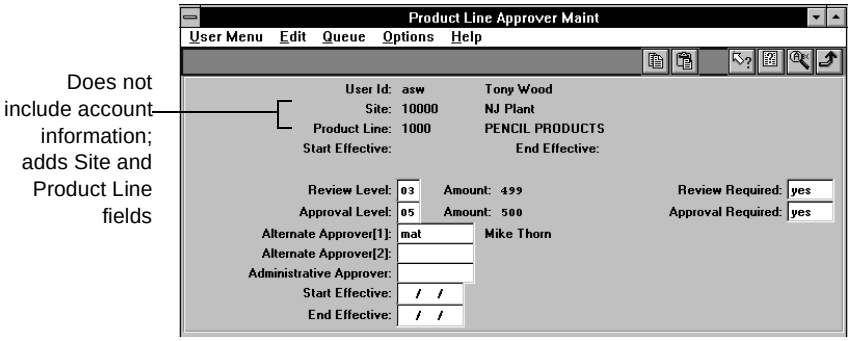


Fig. 12.10 Job Approver Maintenance (5.2.1.15)

Job. The job code assigned to this project or activity. This field applies to Job Approver Maintenance only.

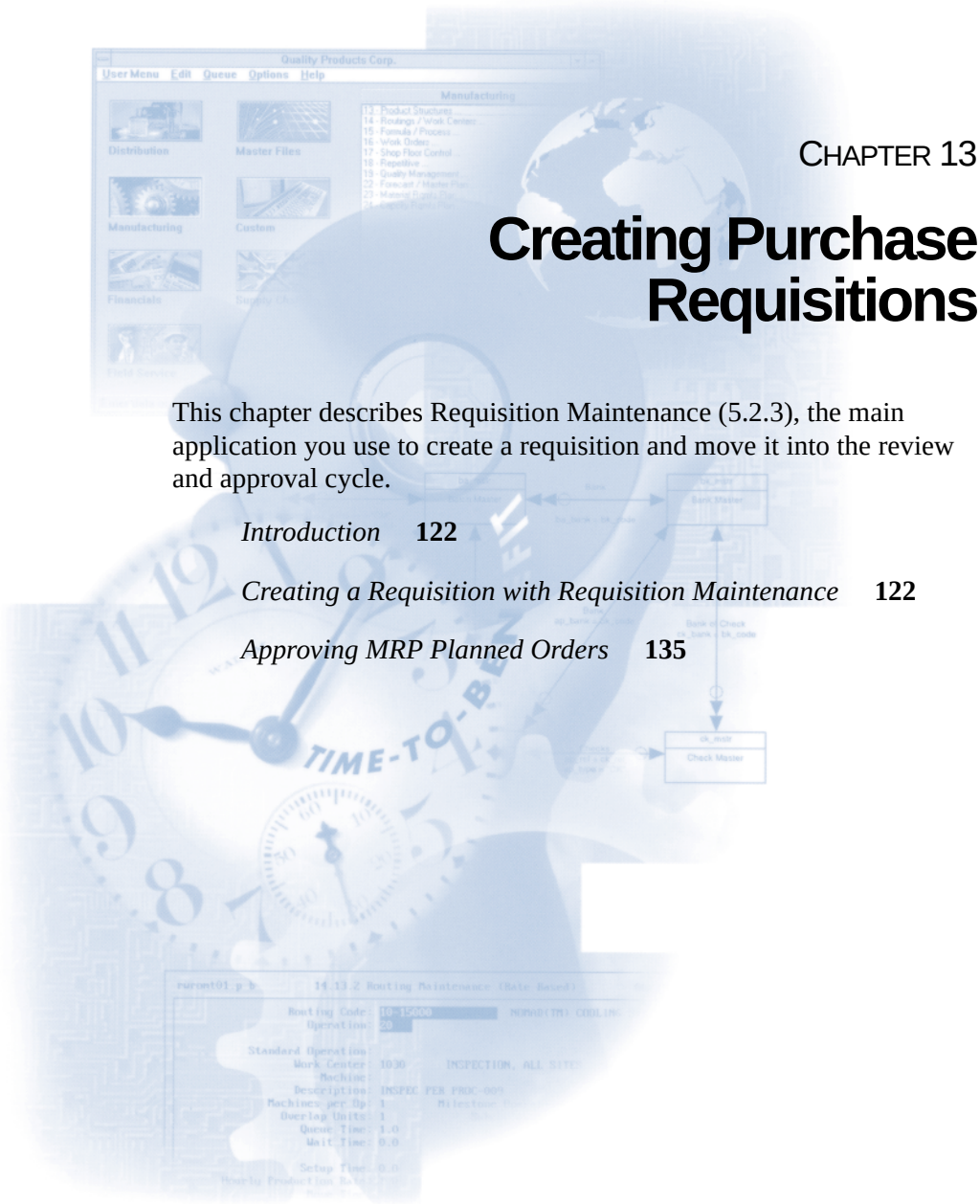
See "Setting Up Jobs" on page 115.

Fig. 12.11
Product Line Approver Maintenance (5.2.1.16)



Site. Enter the site code for which this person is authorized to approve requisitions for inventory items. This field applies to Product Line Approver Maintenance only.

Product Line. Enter the code of the product line for which this person can approve requisitions. This field applies to Product Line Approver Maintenance only.



CHAPTER 13

Creating Purchase Requisitions

This chapter describes Requisition Maintenance (5.2.3), the main application you use to create a requisition and move it into the review and approval cycle.

Introduction

Purchase requisitions come from two sources:

- Manually entered requisitions built in Requisition Maintenance (5.2.3)
- Requisitions created by approving MRP planned orders with Planned Purchase Order Approval (23.11)

This chapter describes the structure of a requisition and discusses how to create a requisition using both of these sources.

Creating a Requisition with Requisition Maintenance

With Requisition Maintenance (5.2.3), you build a requisition in three sections: the header, the line-item detail, and the trailer, as shown in Figure 13.1.

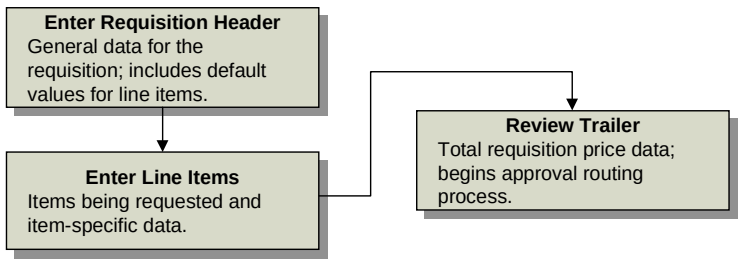


Fig. 13.1
Requisition Entry Flow

This section provides a field-by-field description of each part of the requisition.

Creating the Purchase Requisition Header

Data items you enter in the requisition header become defaults for each line of the purchase requisition. Header information is divided between two frames. You enter most of the data in the first frame; the second includes optional detailed supplier information.

When you begin entering detailed line-item data, you can modify some of these entries on individual lines.

Note Some fields are *required*; valid data must be entered in them or the system does not create the requisition. Other fields are *optional*; they do not require data for the system to create the requisition. Information in optional fields, such as Comments, can be used as follows:

- Explain the purpose of the requisition.
- When applicable, describe why the item being requested does not follow standards.
- Provide other information that might be needed during the approval or purchasing process.

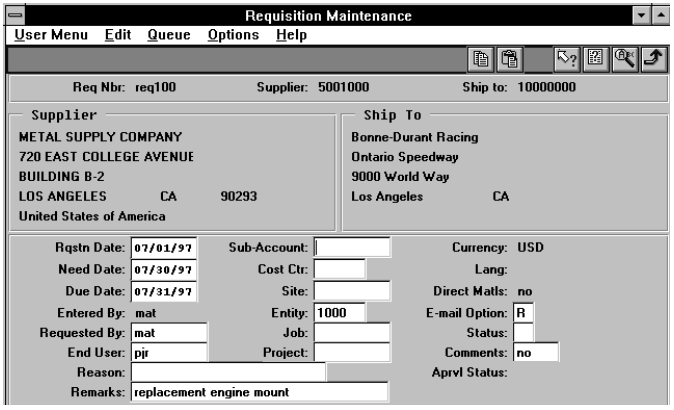


Fig. 13.2 Requisition Maintenance (5.2.3)

Req Nbr. Required. A unique control number assigned to each purchase requisition. You can enter a number of your own or let MFG/PRO assign a number based on settings in the Requisition Control File (5.2.1.24). Press Enter to have the system assign the next number for a new requisition. To modify an existing requisition, enter its number.

Supplier. Optional. If you want to specify a supplier, enter the unique supplier address code assigned to a supplier. If the supplier has not yet been defined in Supplier Maintenance (2.3.1), enter the supplier name, address, phone number, and name of contact in header comments.

If you do not specify a supplier, an approver or the buyer will complete this field during the approval process. If you enter a supplier code in the header, that supplier becomes the default for the entire requisition; you can change it at the line-item level.

Ship To. Optional. The address to which the supplier is to send the goods. The default Ship To is set in the Purchasing Control File (5.24). If the default is not correct for this order, use the look-up browse to display the address master; select the correct Ship-To address.

Requisition Date. Required. Enter the date the requisition is created. Default is the current system date.

Need Date. Required. Enter the date the items are required at the end-user's site. Default is the system date. Need date is used on the purchase order generated from the requisition. It can be later than the due date to allow time for such activities as inspection or transportation from the receiving area to the end user. This date prints on most reports and inquiries. The need date can be changed for each line item. It cannot be earlier than the current date.

Due Date. Required. Enter the date the items are due to be received at the end user's site. Default is the system date. The system uses this date as the default for all line items on this requisition. However, you can change the due date when entering line-item data. It cannot be earlier than the current date.

Entered By. Reference field. The log-in ID of the individual entering the requisition.

Requested By. Required. Enter the ID of the person requesting the items; validated against the user master. The system default is the log-in ID of the person completing the requisition. If you are using system-generated E-mail in the Extended mode, the requestor receives requisition status E-mail.

End User. Required. Enter the ID of the person for whom the requisitioned items are intended; validated against the user master. If you are using system-generated E-mail in the Extended mode, the end user receives requisition status E-mail.

Reason. Optional. Enter a brief explanation of the requisition for the approvers or purchase reviewers who authorize or deny the request. This field does not appear on the purchase order.

Remarks. Optional. Enter any remarks related to the requisition or to the supplier. This information applies to the entire requisition. It appears on system-generated E-mail messages and is also printed on the purchase order. When a supplier is specified in the header, and remarks for that supplier have been added in Supplier Maintenance (2.3.1), those remarks display here.

Sub-Account. An alphanumeric field that identifies the department to be charged with the cost. May be required before final approval, depending on the general ledger (GL) setup of your company.

Cost Center. An alphanumeric field designating the cost center for which the items are being purchased. May be required before final approval, depending on the GL setup of your company.

Site. Required. Enter the site from which the order is being placed. This becomes the default for the line items and can be changed at that level.

Entity. Required. Enter the entity code for the requisition. Entity codes are used to process the GL transactions of a specific part of your company—an office or region, for example.

Job. Optional. An eight-digit alphanumeric code used to track expenses for a specific event or activity. If the items on this requisition are for a specific job, enter the job name. Otherwise, leave it blank.

The system uses jobs to determine appropriate reviewers and approvers for requisitions. When an approved requisition is copied onto a purchase order, the entry in this field is copied into the Sales/ Job field.

Project. Optional. An eight-digit alphanumeric code used to track expenses for a specific event or activity to a GL account. Project is

not the same as the Job field, which is used to assign approval authority for requisitions and is not tied to the general ledger. Project is validated against the project master if Verify Projects is Yes in the System/Account Control File (36.1). When an approved requisition is copied onto a purchase order, the entry in this field is copied into the Project field.

Currency. Required. Enter the currency in which the purchase order will be created. Defaults from the supplier, if specified; otherwise, from the base currency in the System/Account Control File.

Tip
Currency exchange rates are defined in Exchange Rate Maintenance (26.4).

Requisitions can be created using any currency defined in Currency Maintenance (26.1) with a valid exchange rate. Exchange rates are set at the time the requisition is created, then recalculated when the buyer enters the PO price.

See "Out-of-Tolerance Conditions" on page 152.

Fluctuations in exchange rates can create an out-of-tolerance condition; that is, the purchase price exceeds the maximum cost shown on the requisition line item by more than the out-of-tolerance parameters set in the Requisition Control File (5.2.1.24).

Language. Optional. A selection tool used when comments are to be entered in a language other than the default language. A master comment, created in Master Comment Maintenance (1.12), can be stored in multiple languages using the same master reference code. MFG/PRO uses the code in the Language field to select the appropriate language.

Direct Materials. Required. Yes or No flag indicating whether this requisition applies to direct (MRP) materials items. The field defaults to No for all maintenance, repair, and operating supplies (MRO) purchases. GRS uses this flag to determine whether a product line approval is required.

See "System-Generated E-Mail" on page 106.

E-Mail Option. Optional. E-mail mode (None, Regular, or Extended). This setting defaults from the Requisition Control File. If the system administrator has set this field to None, GRS is not using your company's E-mail system.

If it is set to Required or Extended, you can specify the extent to which you want GRS to generate E-mail messages during the approval process. The Regular mode (R) sends a minimum number of messages—mainly to the user to whom the requisition is being

routed. In the Extended mode (E), status messages are sent to the requestor and end user.

Status. Optional. Identifies the status of the requisition. The system uses this code to determine whether a requisition is to be included on some reports and inquiries:

- Blank indicates the requisition is open.
- X indicates the requisition is canceled. No further activity can be entered against a requisition with this status.

If a requisition or line item has been canceled, it can be reopened by changing the status.

Comments. Optional. Yes or No flag indicating whether you want to add header comments. The default is set in the Header Comments field of the Requisition Control File. Enter Yes if you want to enter additional information for approvers, purchase reviewers, and buyers to read when processing the requisition. Use comments for such things as new supplier data, item specifications, or special packaging or delivery requirements.

Aprvl Status. Reference field. Indicates whether the entire requisition is approved, not approved, or out of tolerance. At the header level, this field does not change to Approved until all lines have been approved. If at least one line item is out of tolerance, this field reads Out of Tolerance. If an out-of-tolerance line is changed on an approved requisition, this field reverts to Unapproved.

When you have completed the first frame of the header, press Go; the second frame displays.

Fig. 13.3 Requisition Maintenance, Second Header Frame

Discount %. Optional. The discount percentage the supplier is allowing for the requisitioned items. This discount percentage is the

default for line items; you can change the discount at the line-item level if it varies by item. If a supplier is specified, this defaults from the supplier master.

Tip
These fields are validated against the Price Table Required and Disc Table Required flags in the Purchasing Control File (5.24).

Price Tbl. Optional. The price table GRS uses to find the item's price. If a supplier is specified, this defaults from the supplier master. The entry in this field becomes the default value for the line items.

Disc Tbl. Optional. The discount table GRS uses to look up the discount associated with this item. If a supplier is specified, this defaults from the supplier master. The entry in this field becomes the default value for the line items.

Entering Line Items

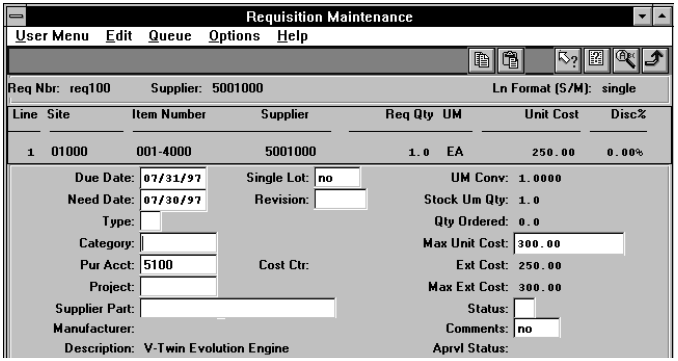
Tip
You can alternate between Single and Multi when you are entering line items.

You can enter line-item data in two modes—single-line or multiple-line—based on the setting of the Ln Format (S/M) flag in the Requisition Control File (5.2.1.24).

In multiple-line mode, you can enter just the basic data for from 8 to 16 items—depending on your computer system—on a single screen. This basic data includes supplier data, site, item number, quantity, unit of measure, unit cost, and discount percentage. All other information defaults from the header.

Note If you need to change any of the other header information for a line item, you must use single-line mode, which displays detailed data for only one line on each screen. To change from multiple- to single-line mode, press End until the cursor appears in the Ln Format field; then enter S and press Go.

Fig. 13.4
Requisition Maintenance, Requisition Line Frame



Line. Required. Unique identifier for each line of the requisition. Press Enter to create a new line number. The line number is used to identify individual requisition lines during the review, approval, and purchase order process. To view or modify an existing line item, enter the number of the line or use the arrow keys to scroll through the list of line items.

Site. Defaults from the header; can be changed for each line item.

Item Number. Optional. The catalog or stock identifier used for the inventory system. For memo item purchases, enter a brief description of the item being purchased. For other purchases, enter the item number from the item master. You can enter additional information in line-item comments, if needed.

Tip
Memo items are not defined in MFG/PRO.

Supplier. Defaults from the header; can be changed for each line item. When you advance to this field, a pop-up window prompts you for an optional price table and discount table.

Fig. 13.5
Requisition Maintenance, Supplier Detail Frame

Pr Tbl. Optional. Defaults from header; can be changed for each line item.

Disc Tbl. Optional. Defaults from header; can be changed for each line item.

Req Qty. Required. The quantity of the item needed.

UM. Optional. Enter the unit of measure in which goods or services are priced, ordered, and received; for example, EA (each), BX (box), DZ (dozen), LT (lot), or HR (hour). UM is used in the search for a price on the associated price list or discount table.

Unit Cost. Optional. Price from the associated price list or discount table. The system uses this information to calculate the extended cost of the line item.

Disc %. Defaults from the header; can be changed for each line item.

Due Date. Defaults from the header; can be changed for each line item.

Need Date. Defaults from the header; can be changed for each line item.

Type. Optional. The type of purchase. If you enter an inventory item code in the Item field, Type defaults to blank. Non-inventory items show M (memo) in this field. Valid item codes with blank types are visible to MRP as a source of supply. To identify an inventory item that should not be placed in inventory when received—for example, an extra quantity ordered for a special event—enter M in this field.

Category. Optional. A logical grouping of related items by GL account number. Used to determine the type of approval required for the item. If you enter an account code in Pur Account or if one defaults from the supplier, the system attempts to determine the category. You can override this entry.

Pur Acct. Required before final approval. The GL account code used to record purchases. The purchases account is a combination of the GL account number and the sub-account number. It defaults from the purchases account in the supplier master when a supplier is specified. The entry in this field depends on the way your company's general ledger is set up.

Project. Defaults from the header, if entered. Can be changed for each line item.

Cost Ctr. Reference field. Cost center that was specified in header, if any.

Supplier Part. Optional. The supplier's item number. If the item has been defined in Supplier Item Maintenance (1.19), the system defaults the supplier's item number to this field so it can be referenced on the purchase order.

Manufacturer. Reference field. The name of a specific manufacturer. If the supplier item master includes a manufacturer, it displays in this field.

Description. Optional. Item master field associated with inventory items. If you enter an inventory line item, Description defaults from the item master. If you enter a non-inventory item, “Item Not In Inventory” displays. Clear the field and enter a brief description of the item. This description prints on formal documents such as POs.

Single Lot. Optional. Yes or No flag indicating whether each receipt requires a unique lot number. This information is copied onto the purchase order with the approved line item. It defaults from the Compliance Control File (1.22.24).

See *User Guide Volume 9: Compliance.*

Revision. Optional. A code identifying the engineering revision of this item. This code defaults from the item master. It is copied with the approved line item onto the purchase order. The code can be changed to indicate that the required revision is not the same as shown in the Item Master.

UM Conv. Optional. Used to calculate the equivalent amount or value from purchase unit to stock unit of measure (default is 1). Defaults from value set in Unit of Measure Maintenance (1.13), if available.

This field allows for correct conversion of both the items and their currency value. For example, your company might control pencils as individual items; however, the supplier might sell them only by boxes containing 24 pencils. In that case, set the value of UM Conv to 24.

Stock Um Qty. Reference field. The requisition quantity converted from the supplier’s unit of measure to the unit of measure in which your company stocks this item.

Qty Ordered. Reference field. The actual quantity ordered. Default is zero; when all or part of a requisition line item quantity is placed on a purchase order, the quantity is reflected in this field.

Max Unit Cost. Required. A field that allows for a higher purchase cost than entered in the Unit Cost field. Default is Unit Cost without regard for the discount percent; this can be changed. The (optionally) higher cost by line item is used to calculate the total cost for which the requisition is approved. The system uses this cost when calculating whether the requisition is within tolerance parameters set in the Requisition Control File (5.2.1.24).

Ext Cost. Reference field. A calculation using the quantity ordered, unit cost, and discount to determine total extended cost.

Max Ext Cost. Reference field. A calculation using the quantity ordered and maximum unit cost to determine total maximum extended cost.

Status. Optional. Identifies the status of the individual requisition line.

- Blank indicates the line item is open.
- X indicates the line item is canceled. No further activity can be entered against a line item with this status.

If a line item has been canceled, it can be reopened by changing the status. When a requisition is canceled at the header level, X displays on all line items.

Comments. Optional. Yes or No flag indicating whether you want to enter comments for this line. This is not the same field as header comments; you can add different comments for each line item if you choose.

- Enter Yes if you want to enter additional information about this line item—for example, item specifications or special packaging or delivery requirements.
- Enter No if you do not want to enter comments.

MFG/PRO maintains a minimum audit trail of changes to purchase requisitions, so you can use comments to record changes to line items that might be important later for informational or tracking purposes. Line item comments can be copied onto the PO in Build PO from Requisitions (5.2.18); the buyer can then choose to print them on the PO.

Completing the Trailer

In the final section of Requisition Maintenance, the trailer, you decide whether the requisition is ready to enter the approval process. The first trailer screen displays the total extended cost and maximum extended cost in both the requisition currency (left column) and the approval currency (right column).

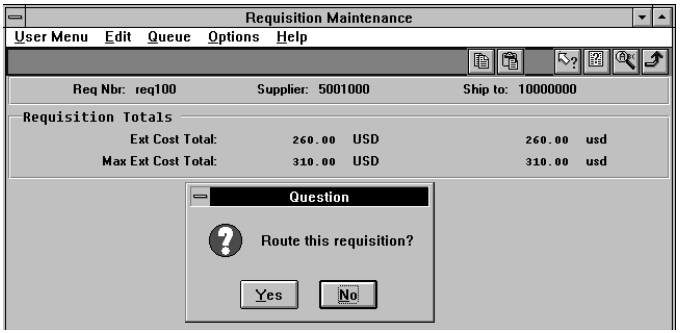


Fig. 13.6 Requisition Maintenance, Summary Frame

If you are satisfied that the requisition is correct, choose Yes. A routing frame lets you send the requisition into the approval process.

If you choose not to route the requisition at this time—for example, if you want to wait for additional information on a line item—then exit without adding any routing information. The requisition remains in your queue. You can return to it later by entering its number on the first screen of Requisition Maintenance, or you can use Requisition Routing Maintenance (5.2.14) if the requisition is ready to route. The approval process does not start until you route the requisition to the first approver or reviewer.

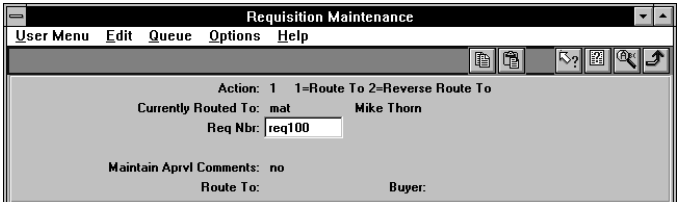


Fig. 13.7 Requisition Maintenance, Routing Frame

Action. The routing action you want to take. For new requisitions entering the approval process, select 1 to route the requisition to the first approver.

See “Requisition Routing Maintenance” on page 142.

Currently Routed To. The user in whose queue the requisition resides. You can change this only if you are an alternate or administrative approver for the current routed-to user.

Req Nbr. The requisition you want to route. This defaults from the requisition you have just completed.

Maintain Aprvl Comments. Yes or No flag; defaults to No. Change this flag to Yes if you want to add comments for the next person on the routing to read.

Route To. The first person in the approval process. Use the look-up browse to view the list of appropriate approvers determined by the system based on sub-account, cost center, category, and job information. On MRP orders, this is a product-line approver.

Buyer. The employee responsible for issuing a purchase order for approved requisition items. You can leave this field blank. However, a purchase reviewer or approver must complete the field before final approval.

If your company uses the system-generated E-mail feature, the buyer is informed by E-mail when the requisition has been approved. If a default supplier was entered for the requisition, and if a buyer was defined for that supplier in Supplier Maintenance (2.3.1), that buyer's user ID appears in this field. It can be changed to any valid buyer.

When you have completed the routing frame and added approval comments (if any), you are prompted to confirm your actions. This routes the requisition into the approval process.

Approving MRP Planned Orders

You can also create a purchase requisition by approving MRP planned orders using Planned Purchase Order Approval (23.11).

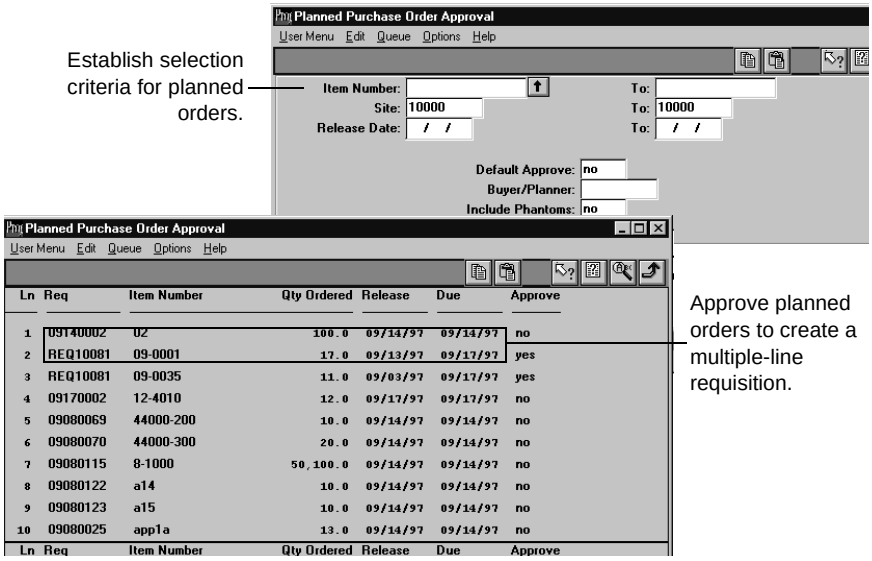
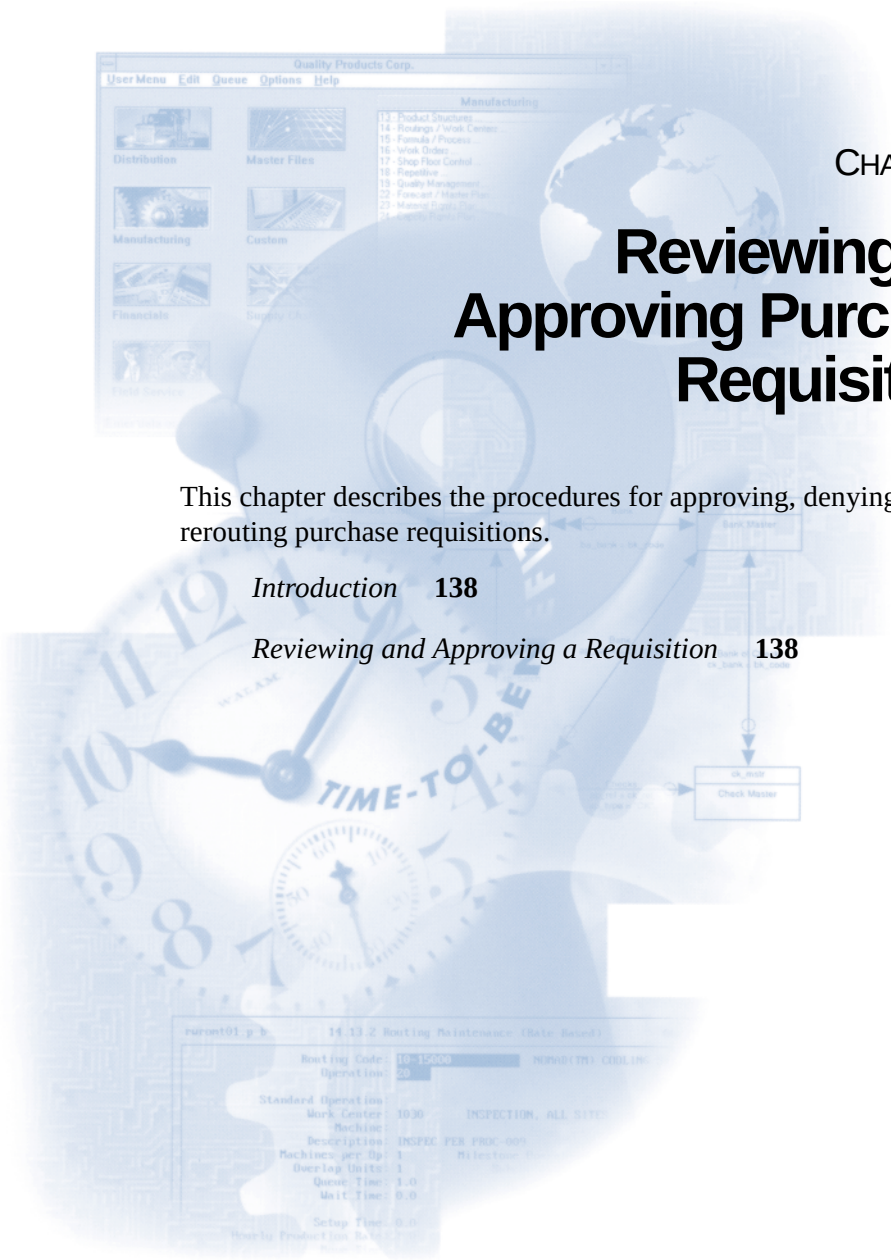


Fig. 13.8 Planned Purchase Order Approval (23.11)

In the first screen of Planned Purchase Order Approval, you set selection criteria for MRP planned orders. You then set the Approve field to Yes or No for each planned order, as appropriate. The system creates one multiple-line requisition that includes all the approved planned orders. The new requisition number appears on all approved lines.

Use Requisition Maintenance (5.2.3) to make any required changes to the new requisition before beginning the approval process.



CHAPTER 14

Reviewing and Approving Purchase Requisitions

This chapter describes the procedures for approving, denying, or rerouting purchase requisitions.

Introduction

As a requisition reviewer or approver, you are informed by system-generated E-mail—assuming your company is using that feature—that a requisition is awaiting action. You use Requisition Approval Maintenance (5.2.13) to review the requisition and then approve, deny, or reroute it. If you find incorrect or incomplete information, you can go from the approval screen directly into Requisition Maintenance (5.2.3) to make corrections and additions.

When you have completed your review, if you have a high enough approval level, you can approve the requisition for release and forward it to Purchasing. Or you can deny the requisition, reroute it to the originator for additional work, or reroute it to another approver.

This chapter describes the procedures used for routing and approving requisitions.

Reviewing and Approving a Requisition

Requisition Approval Maintenance (5.2.13) is used to review and approve or deny a requisition. It also provides tools for viewing and modifying the requisition. When you have completed your approval, you use the program to forward the requisition to the next person in the approval process; additional routing options are provided by Requisition Routing Maintenance. (5.2.14)

Requisition Approval Maintenance

See “Approver’s Open Req. Inquiry” on page 164.

When a requisition is ready to be reviewed, the originator begins the approval process as described in Chapter 13. If your company uses automated E-mail, the first person in the approval process receives a message that a requisition is awaiting action. The approver then uses Requisition Approval Maintenance (5.2.13) to look at the requisition. To see a list of requisitions waiting for an approver’s disposition, use Approver’s Open Req. Inquiry (5.2.16).

Use the View Queue/Dispositioned field in Requisition Approval Maintenance to select a requisition from the queue of items awaiting your attention.

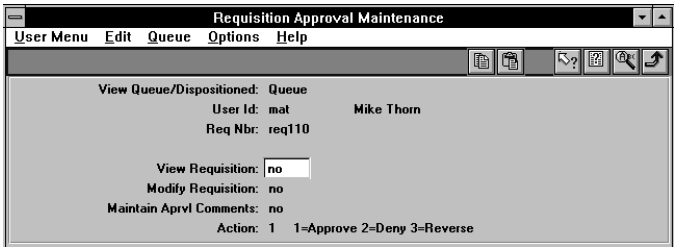


Fig. 14.1 Requisition Approval Maintenance (5.2.13)

View Queue/Dispositioned. Specify which list of requisitions you want to select from. The setting in this field determines which list you see when you use the arrow keys or the look-up browse.

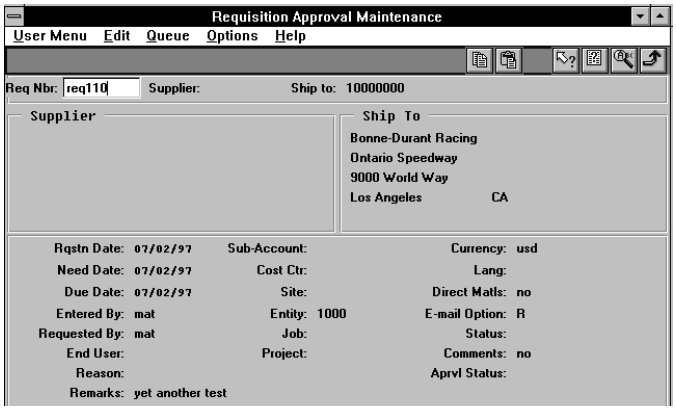
- Queue: The list of requisitions that are currently routed to you
- Dispositioned: The list of requisitions that you have already acted on

User Id. Displays the user ID of the reviewer or approver. This field defaults to the individual logged on to the system. You can change this to another person's ID only if you have been designated as this person's alternate or administrative approver in an approver maintenance program.

Req Nbr. Enter the number of the requisition you want to approve. Use the arrow keys to select from the Queue or Dispositioned list.

View Requisition. Yes or No flag indicating whether the system should display the requisition in read-only mode, as shown in Figure 14.2. If you select Yes, the requisition is immediately displayed. At the line level, use the arrow keys to scroll through line numbers; press Enter to select a line to be displayed.

Fig. 14.2
Requisition Approval Maintenance, View Requisition Screen



When you are finished viewing the requisition, press Exit to return to the Requisition Approval Maintenance screen.

See “Creating a Requisition with Requisition Maintenance” on page 122.

Modify Requisition. Yes or No flag indicating whether you want to change the requisition. If you select Yes, the requisition is immediately displayed, as shown in Figure 14.3. Although the screen label still says Requisition Approval Maintenance, the program can perform all the functions of Requisition Maintenance. Modify the requisition as needed.

Fig. 14.3
Requisition Approval Maintenance, Modify Requisition Screen

When you have completed the changes, press Exit to return to the Requisition Approval Maintenance screen (Figure 14.1).

Maintain Aprvl Comments. Yes or No flag indicating whether you want to add comments for subsequent approvers to read. If you select Yes, you can enter comments.

Action. Enter the code for one of three possible actions. Enter 1 to approve the requisition, 2 to deny it, or 3 to reverse an earlier action.

After you review, modify, and take action on the requisition, you are prompted to confirm that all the information is correct; if you select Yes, you are prompted to route the requisition. No returns you to the Requisition Approval Maintenance screen.

If you select Yes on the routing prompt, a routing screen (Figure 14.4) lets you route the requisition to the next reviewer. If you select No, the action you indicated takes effect, but the requisition stays in your queue until you route it.

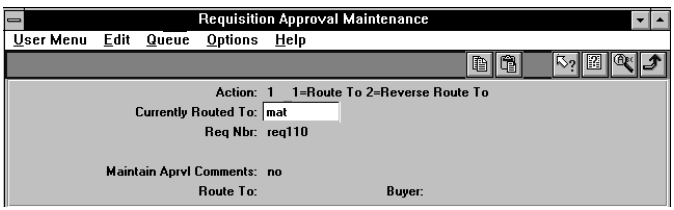


Fig. 14.4 Requisition Approval Maintenance, Routing Screen

Action. Specify the routing action you want to take.

- Select 1 to route the requisition to the person whose user ID you enter in Route To.
- If you change your mind or route the requisition to the wrong person, select 2 to return the requisition to your queue.

Currently Routed To. Displays the ID of the user in whose queue the requisition resides. You can change this only if you are an alternate or administrative approver for the current routed-to user.

Req Nbr. Enter the number of the requisition you want to route. This defaults to the requisition you have just reviewed.

Maintain Aprvl Comments. Yes or No flag; defaults to No. Change this flag to Yes if you want to add comments for the next person on the routing to read.

Route To. Enter the ID of the next person in the approval process. Use the look-up browse to view the list of appropriate approvers determined by the system based on sub-account, category, and job information.

Buyer. Enter the ID of the person responsible for issuing a purchase order for approved requisition items. Buyers are defined with Buyer Maintenance (5.2.1.20). Unless you are the final person to approve the requisition, you can leave this field blank. However, a reviewer or approver must complete the field before final approval. The buyer is informed by system-generated E-mail when the requisition has been approved.

Final Approval

If your approval is the last one needed, the system displays a message that the requisition is approved and prompts you to route the requisition to Purchasing. If you choose Yes and the Buyer field has not been completed, the cursor advances to Buyer. When you enter the user ID of a valid buyer, the approval process is finished.

However, you can override this system action. If you want another person to review the requisition, choose No. The cursor then moves to the Route To field, and you can specify another user.

Requisition Routing Maintenance

Requisition Routing Maintenance (5.2.14) can be used instead of Requisition Approval Maintenance to route a requisition to another user. It also offers the ability to reverse a previous routing. For example, you, as a reviewer or approver, might accidentally route a requisition to the wrong person, or you might change your mind about the routing after it has been completed. When you reverse a previous routing, the recipient receives a second E-mail with the message that the requisition is no longer awaiting action.

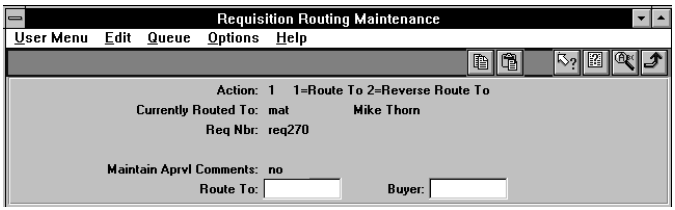
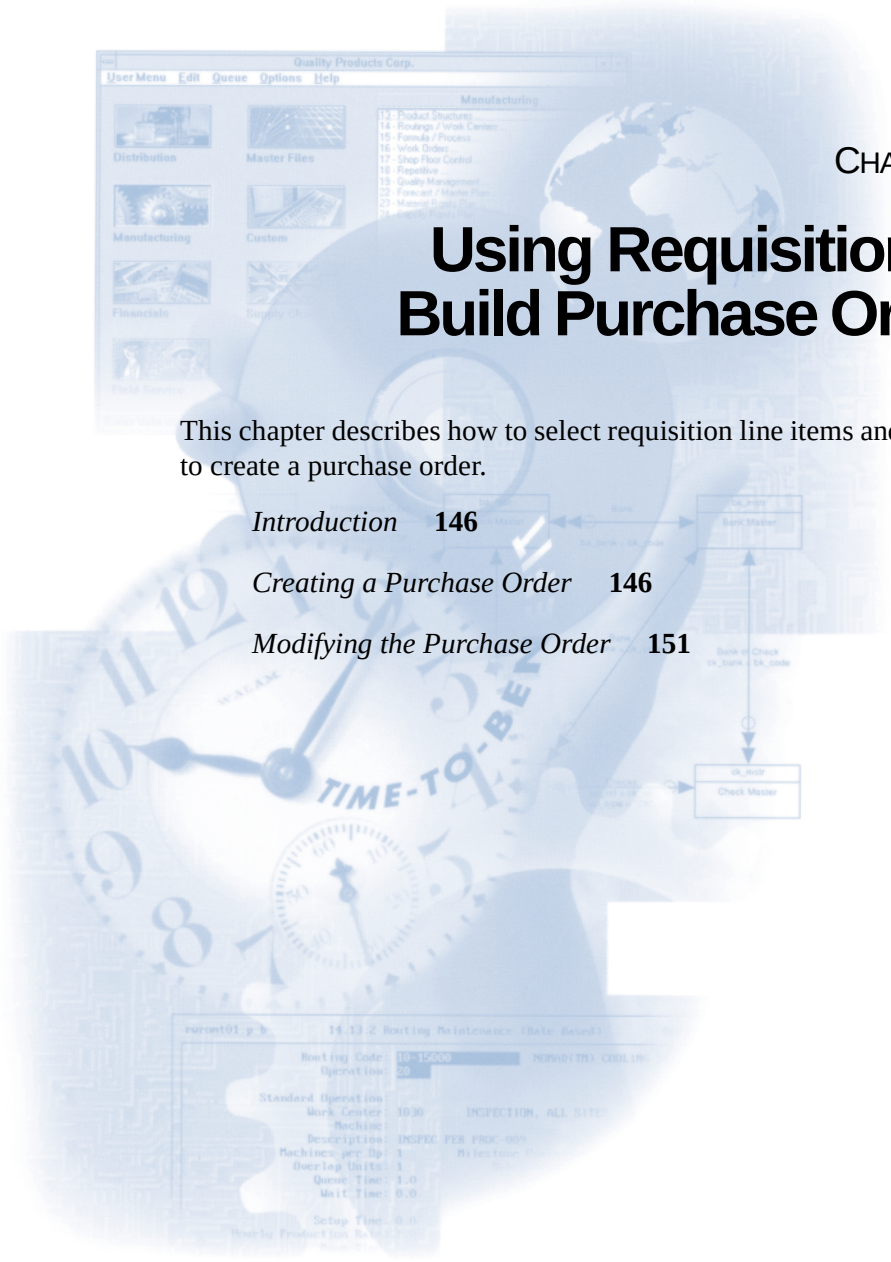


Fig. 14.5
Requisition Routing Maintenance (5.2.14)

The fields in Requisition Routing Maintenance are the same as those in the routing screen of Requisition Approval Maintenance.

See page 141.

This completes the approval process. The next chapter describes how the buyer creates a purchase order from the approved requisition lines.



CHAPTER 15

Using Requisitions to Build Purchase Orders

This chapter describes how to select requisition line items and use them to create a purchase order.

Introduction

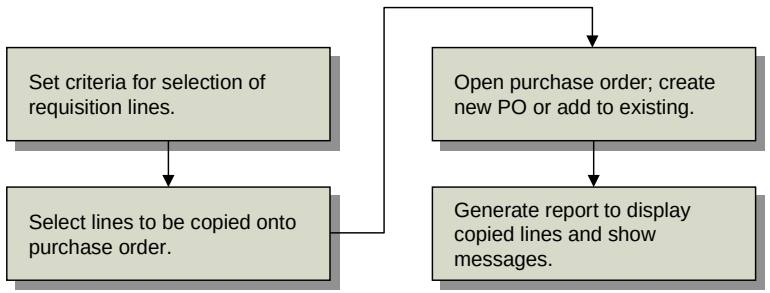
When a requisition has been approved, you can reference the requisition line items on a purchase order in two ways:

See “Modifying the Purchase Order” on page 151 and “Out-of-Tolerance Conditions” on page 152.

- Create a purchase order in Purchase Order Maintenance (5.7), enter header data, then reference each individual requisition line on a PO line. This is the same process described in *MFG/PRO User Guide Volume 2: Distribution*. This chapter also includes changes GRS has made to Purchase Order Maintenance.
- Copy requisition lines directly to a new or existing purchase order using Build PO from Requisitions (5.2.18).

This chapter discusses the second option. Figure 15.1 summarizes the task flow.

Fig. 15.1
Build PO from Requisitions Task Flow



Creating a Purchase Order

Build PO from Requisitions (5.2.18) consists of a series of frames that lead you through the build process:

1. Set the criteria you want to use for selecting appropriate requisition lines.
2. Select the lines you want to copy to the purchase order.
3. Open a purchase order; either create a new PO or open an existing one where you want to append the requisition lines.
4. Generate a report on the copy process. This report displays the lines that you copied, as well as any warning messages GRS has generated.

Establishing Selection Criteria

The first screen lets you specify a number of selection criteria for the system to use in displaying approved requisition line items. You do not have to use all the criteria; use only the fields appropriate to the selection you want to make. You also specify on this screen whether you want the default setting for copying line items to the new PO to be Yes or No.

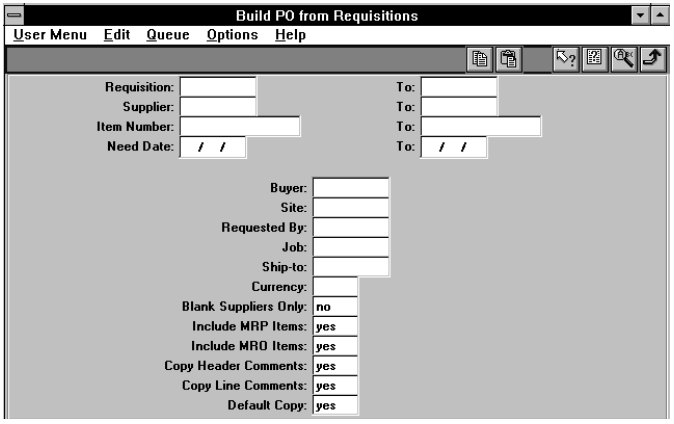


Fig. 15.2
Build PO from Requisitions (5.2.18)

Requisition. First of the range of requisition numbers you want to include in the selection. Enter the same number in the To field to limit the selection to one requisition.

Supplier. First of the range of supplier numbers you want to include in the selection. Enter the same number in the To field to limit the selection to requisitions including only that supplier.

Tip
To include only requisitions that do not have a supplier specified, set Blank Suppliers Only to Yes.

Item Number. First of the range of item numbers you want to include in the selection. Enter the same number in the To field to limit the selection to requisitions including only that item.

Need Date. First in the range of need dates you want to include in the selection. Enter the same date in the To field to limit the selection to requisitions including only that need date.

Buyer. Enter the user ID of the buyer. This defaults to the user who logged on. Clear this field to display the selection list for all buyers. You can also enter another buyer's user ID.

Site. Enter a specific site code to be included in the selection criteria.

Requested By. Enter the user ID of a specific requestor to be included in the selection criteria.

Job. Enter a specific job code to be included in the selection criteria.

Ship-to. Enter a specific ship-to address to be included in the selection criteria.

Currency. Enter a specific requisition currency to be included in the selection criteria.

Blank Suppliers Only. Yes or No flag indicating whether you want to view only those requisitions that *do not* have a supplier specified; defaults to No.

Note If you have also made an entry in the Supplier field, changing Blank Suppliers Only to Yes takes precedence—only requisitions without a supplier are selected.

Tip
MRP items are received into inventory and considered by MRP as a source of supply.

Include MRP Items. Yes or No flag indicating whether you want to include direct materials items in the selection criteria; defaults to Yes. If you do not want to include requisitions for direct materials in the selection criteria, change this flag to No. If you set this to No and leave Include MRO Items set to Yes, the selection screen includes only MRO items.

Tip
MRO items include maintenance, repair, and operating supplies.

Include MRO Items. Yes or No flag indicating whether you want to include MRO items in the selection criteria; defaults to Yes. If you do not want to include requisitions for MRO items in the selection criteria, change this flag to No. If you set this to No and leave Include MRP Items set to Yes, the selection screen includes only direct-materials items.

Copy Header Comments. Yes or No flag indicating whether to copy header comments onto a new PO; defaults to Yes. If set to Yes and you are creating a new purchase order, the header comments from the first requisition you selected for copying become the header comments on the PO. This only applies the first time you copy lines to a new purchase order. If you are appending lines to an existing PO, the flag is ignored. Once you have copied the header comments, you can modify them in Purchase Order Maintenance (5.7).

Copy Line Comments. Yes or No flag indicating whether to copy requisition line comments into PO line comments; defaults to Yes.

Default Copy. Yes or No flag indicating the default value for the Copy field on the line items listed on the next screen as a result of the criteria selection; defaults to Yes.

Selecting Purchase Requisition Line Items

After you have completed the first screen, GRS shows a list of approved, open requisition line items that meet your selection criteria. You can scroll through this list and determine whether you want to copy each line to a new purchase order; set the Copy flag to Yes for lines you want to copy. The Copy field is the only field on this screen that can be changed.

1. Press Tab to move down the list and Enter to advance to the Copy field.
2. When the Yes or No flag is correct, press Go, then Tab to move to the next line.

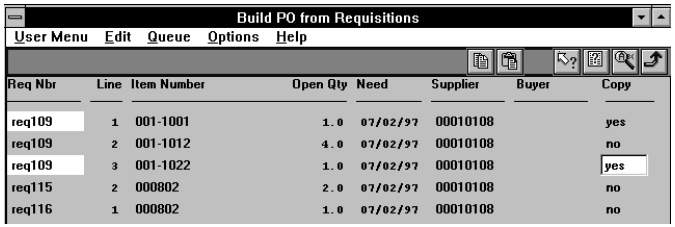


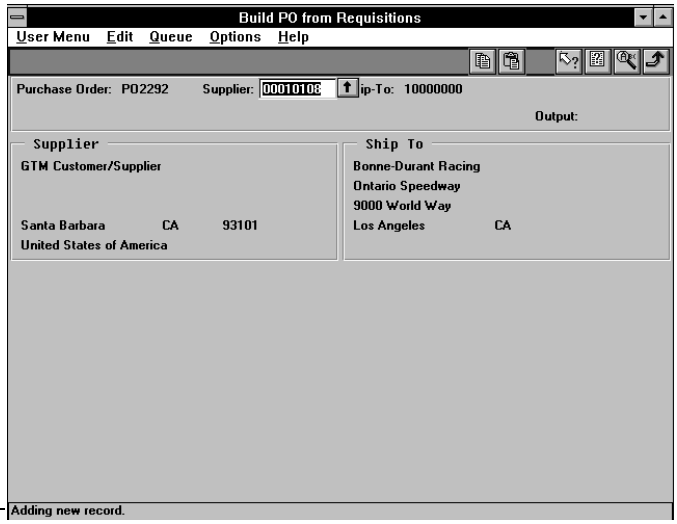
Fig. 15.3 Build PO from Requisitions, Selection Screen

When you have selected the lines you want to copy to the PO, you are prompted to confirm that all the information is correct. Select Yes to advance to the next screen; No returns the cursor to the selection screen.

Adding Requisition Lines to the Purchase Order

After you select the approved requisition lines you want to copy, a purchase order header frame appears. If you want to copy the requisition items to a new purchase order, press Enter and the system assigns a new PO number. To append the copied requisition lines to an existing purchase order, enter the PO number.

Fig. 15.4
Build PO from Requisitions, First Header Frame



A message at the bottom of the screen indicates whether this PO is new or existing. If it is a new purchase order, the Supplier and Ship-To fields default from the first requisition you selected for copying. You can change these fields as required. If this is an existing purchase order, that PO's Supplier and Ship-To values are displayed. If you want to change one of these fields, you must use Purchase Order Maintenance (5.7).

Use the Output field to select the way you want to display the PO report. You can route it to a printer, a window, a terminal, or a file.

Note Sending this report to a printer is *not* the same as printing the PO for the supplier. When you are ready to issue the PO, print it with Purchase Order Maintenance (5.7) or Purchase Order Print (5.10).

Using the PO Report

The PO report shows a line-by-line summary of all the requisition items you copied to the purchase order. Warnings, if any, are displayed after each line item. Review the report and make changes as needed in Purchase Order Maintenance (5.7).

Among other things, the report indicates conflicts between the header supplier and line-item supplier.

Fig. 15.5
PO Build Report

```
rgpdold.p                5.2.18 Build PO From Requisition                Page: 1

NeedSite  Req     Byeq  NJob    Item Number  Open QTY   UM Unit Cost  Disc

10000     REQ2700               0009000             1   EA   20.00    0.004%

site100

WARNING: PO LINE SITE IS DIFFERENT FROM PO HEADER SITE.
Record Added
```

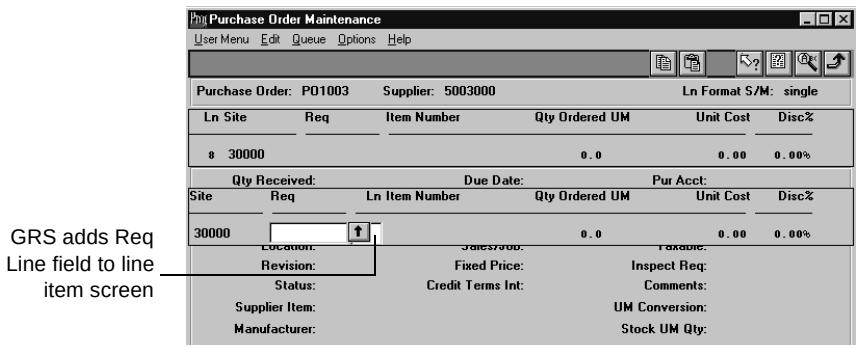
Modifying the Purchase Order

Use Purchase Order Maintenance (5.7) to make any changes required to the new purchase order and continue the purchasing process. GRS modifies the Purchase Order Maintenance line detail screen slightly, as shown in Figure 15.6, adding a requisition line field to accommodate the multiple-line requisitions built in GRS.

PO Maintenance is described in *User Guide Volume 2: Distribution*.

A look-up browse on the Req field lists the approved requisitions currently routed to Purchasing so that they can be added directly to the PO without using Build PO from Requisitions (5.2.18).

Fig. 15.6
Purchase Order Maintenance (5.7), Line Item Frame



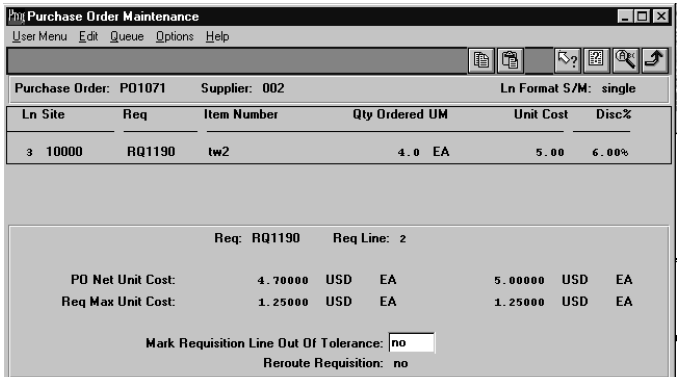
Out-of-Tolerance Conditions

Control file settings for out of tolerance are described beginning on page 111.

Your company defines the way it wants to deal with out-of-tolerance conditions in the Requisition Control File (5.2.1.24). Two flags—Use Tolerance Value and Use Tolerance Percent—enable the system administrator to control if and how GRS calculates out of tolerance. Out-of-tolerance processing works only if one of those flags is set to Yes.

A requisition line becomes out of tolerance if the buyer changes the Unit Cost field on a PO line to exceed the requisition maximum cost by more than the tolerance percent or tolerance value. When this happens, GRS displays the out-of-tolerance cost along with a Mark Requisition Line Out of Tolerance flag.

Fig. 15.7
Purchase Order Maintenance, Out-of-Tolerance Frame



If the buyer selects No, the cursor returns to the Unit Cost field—offering the buyer a chance to enter a lower value to bring the line back into tolerance. The line cannot be placed on a PO if its cost is higher than the maximum approved cost plus the tolerance value or percent, if one has been assigned.

When the buyer selects Yes, the cursor advances to the Reroute Requisition flag. If the buyer sets the flag to Yes, a Routing Maintenance screen appears. The Route To defaults from the setting in the Out of Tolerance Routing field in the Requisition Control File; the buyer can change this to any valid user. If the buyer chooses not to route the out-of-tolerance requisition at this time, it stays in the buyer's queue.

Note When the buyer marks a line out of tolerance, the Aprvl Status fields in the requisition header and the requisition line detail change from Approved to Out of Tolerance. If the requisition maximum cost is changed to bring the line back into tolerance, the status changes to Unapproved, and the requisition must repeat the approval process for that line before it can be placed on a purchase order. While the status is Out of Tolerance, the line can still be placed on a PO if the buyer enters a cost that is within the tolerance parameters.

CHAPTER 16

GRS Reports and Inquiries

Several report and inquiry programs are available from the Global Requisition Menu (5.2) and Setup Menu (5.2.1). Reports and inquiries are useful for viewing approval levels and profiles, determining the status of in-process requisitions, examining the history of a requisition, and so forth.

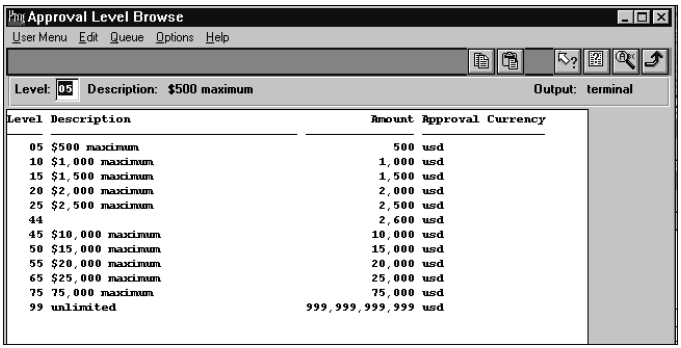
This chapter describes these reports and inquiries. Samples of the outputs are also included.

Viewing GRS Setup Data

Approval Level Browse

Use Approval Level Browse (5.2.1.2) to display the approval currency amounts and descriptions associated with approval codes.

Fig. 16.1
Approval Level Browse (5.2.1.2)



Category Report

Use Category Report (5.2.1.5) to display information about the categories defined in Category Maintenance (5.2.1.4). To show a single category description, enter the same value in both the Category and To fields. Otherwise, enter a range of categories. Leaving both fields blank produces a report on all categories.

If you set the Print Details Flag to No, the report shows the category description as well as the accounts included in the category and their descriptions. If you set the flag to Yes, the report also includes numbers and descriptions of all the accounts within the ranges assigned to the category.

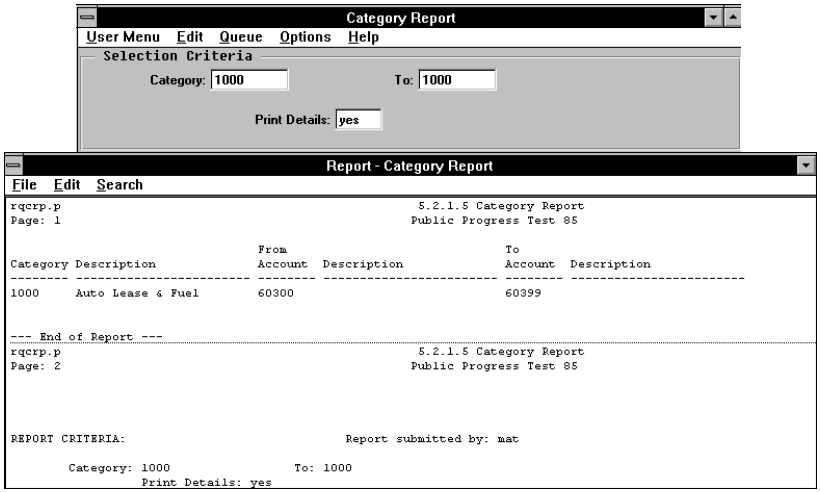


Fig. 16.2
Category Report (5.2.1.5)

Job Browse

If your company sets up approvals by job, use Job Browse (5.2.1.8) to display job codes and descriptions.

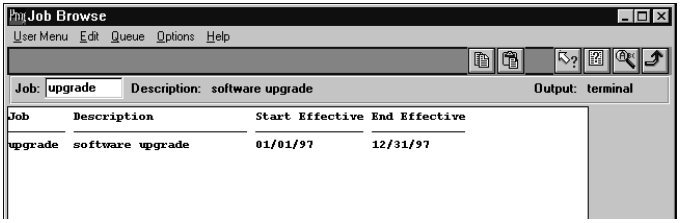


Fig. 16.3
Job Browse (5.2.1.8)

Approver Report

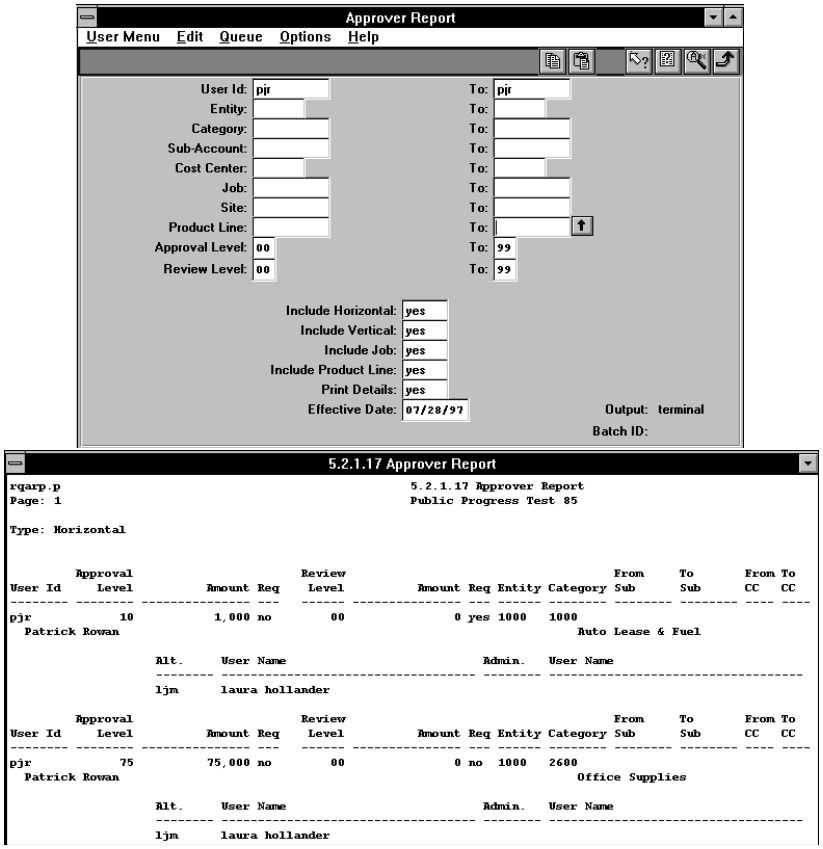
Use Approver Report (5.2.1.17) to display a variety of information about approvers, grouped by approver type (horizontal, vertical, job, product line) and name. You can request a report on a single approver by entering the same user ID in both the User Id and To fields. To view a report on specific levels, categories, and so forth, enter ranges of data in the appropriate fields. Leaving all fields blank produces a complete report on all approvers sorted by type.

Set the Yes or No flags as required to include information on the four types of approvers (horizontal, vertical, job, and product line) in the report.

The Print Details flag lets you specify how much detail you want to see. If you choose No, the report includes approval and review levels, sub-account and cost center ranges, categories, jobs, sites, product lines, and effective dates. If you choose Yes, the report adds the names of alternate and administrative approvers.

To view only those approvers whose profiles are in effect on a given date, complete the Effective Date field. The default is the current system date.

Fig. 16.4
Approver Report (5.2.1.17)



Viewing Requisition Data

Requisition Inquiry

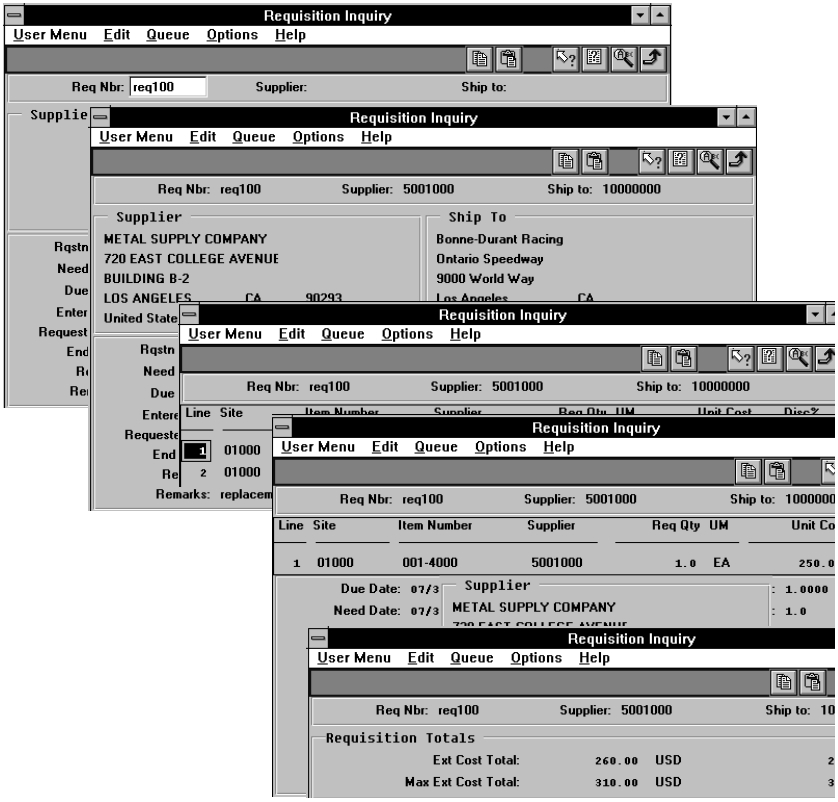
Requisition Inquiry (5.2.4) cycles through the Requisition Maintenance (5.2.3) frames for a selected requisition in read-only mode.

To select a requisition, enter a valid requisition number in the Req Nbr field (use the arrow keys to scroll through the list of open requisitions) and press Go.

The first frame shows the first header frame. Press Space to move to the second header frame and to the line item detail. To select a line item, use the arrow keys to scroll through the list of line numbers. Then, press Enter to show the detail on the selected line.

When you are finished viewing the requisition, press End until the Requisition Inquiry screen appears.

Fig. 16.5
Requisition Inquiry (5.2.4)



Requisition Browse

Use Requisition Browse (5.2.5) to display various data about requisitions, including supplier, requisition date, entered by, requested by, and end user.

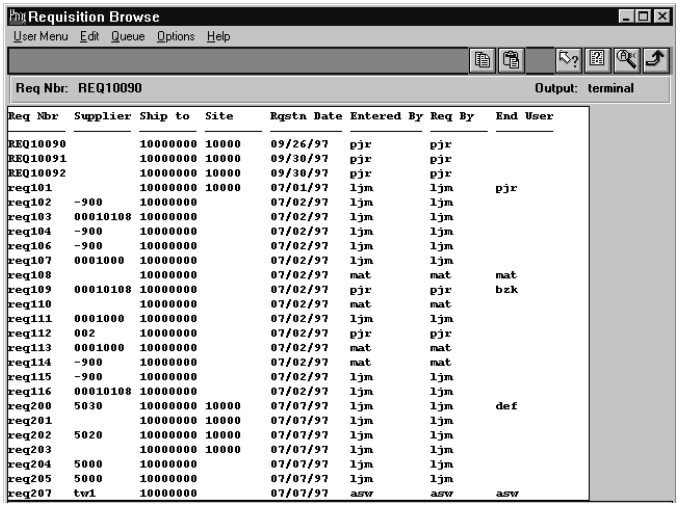
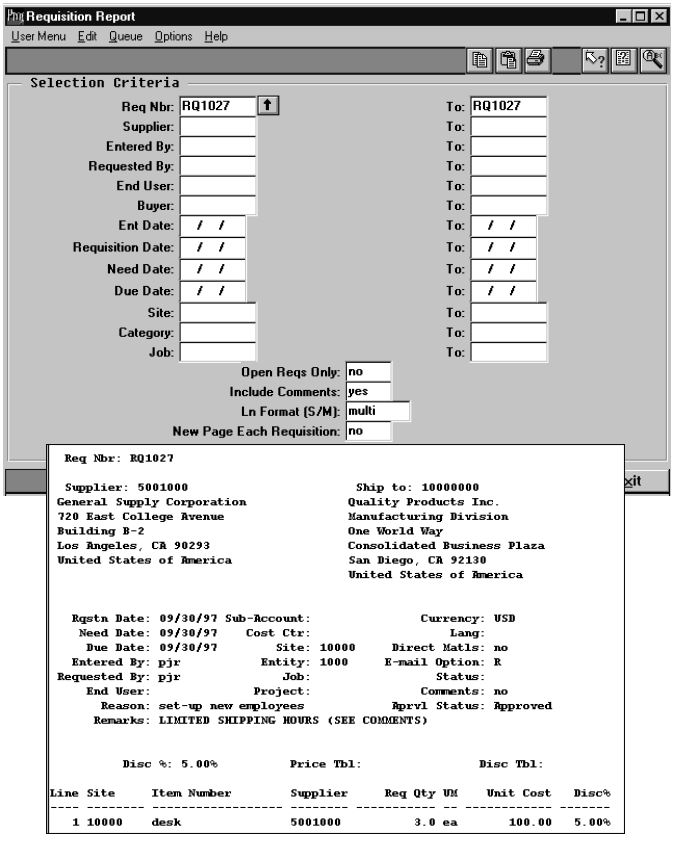


Fig. 16.6
Requisition Browse (5.2.5)

Requisition Report

Use Requisition Report (5.2.6) to display one or more requisitions you determine by entering various selection criteria. After entering ranges of selection criteria, you can set flags to include only open requisitions, include header and line comments in the report, output the report in single- or multiple-line format, or start each requisition on a new page.

Fig. 16.7
Requisition Report (5.2.6)



Requisition History Log

Use Requisition History Log (5.2.8) to track the routing and action history of a single requisition or range of requisitions. Use the Date and User Id fields as needed to narrow the results to a range of activity dates or users.

Set the Display E-mail Ids field to Yes to display a list of users who received E-mail as a result of each action.

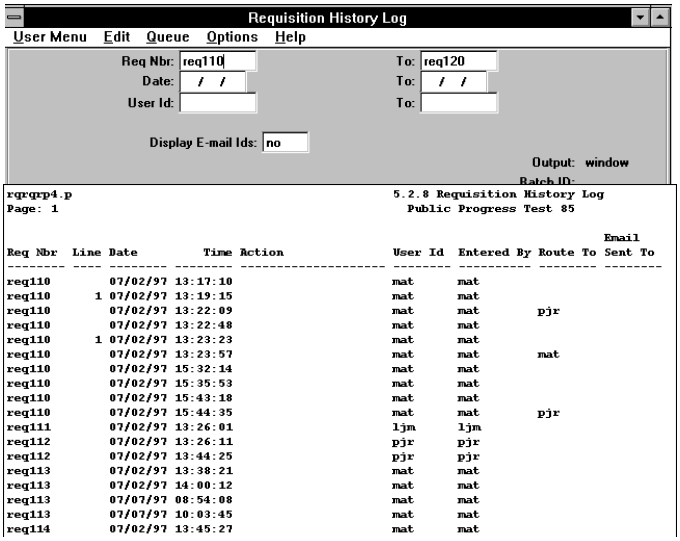
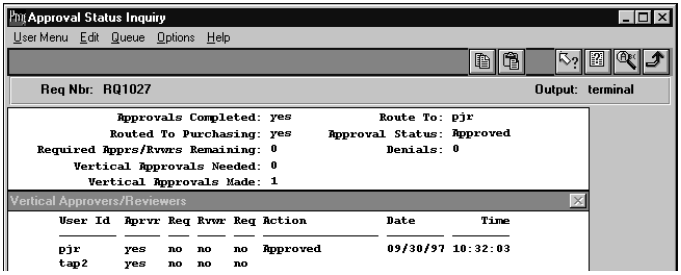


Fig. 16.8
Requisition History Log (5.2.8)

Approval Status Inquiry

The Approval Status Inquiry (5.2.15) indicates the current routing and approval status of a requisition. It includes the types and numbers of approvals defined in the control file, as well as the number still needed for this requisition. If any approvers have entered approval comments, they are displayed on this inquiry.

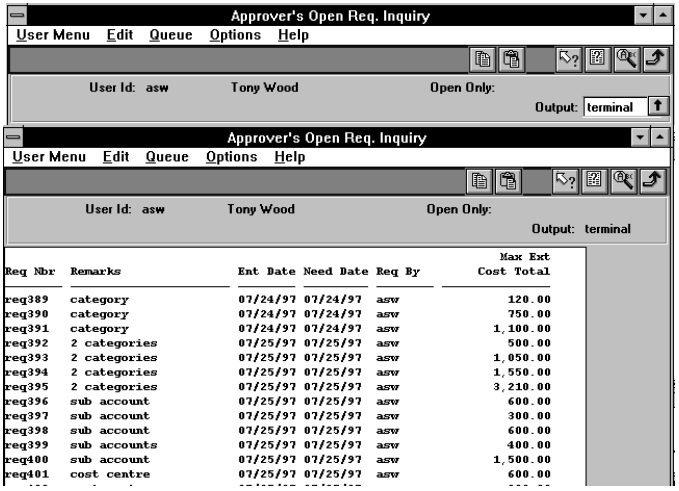
Fig. 16.9
Approval Status Inquiry (5.2.15)



Approver's Open Req. Inquiry

The Approver's Open Req. Inquiry (5.2.16) shows which requisitions are currently routed into an approver's queue.

Fig. 16.10
Approver's Open Req. Inquiry (5.2.16)



PO and Req. Cross Reference

The PO and Req. Cross Reference (5.2.17) lets you enter a purchase order number and see which requisition numbers have been placed on it. Or, you can enter a requisition number and see the purchase orders where the requisition lines have been placed.

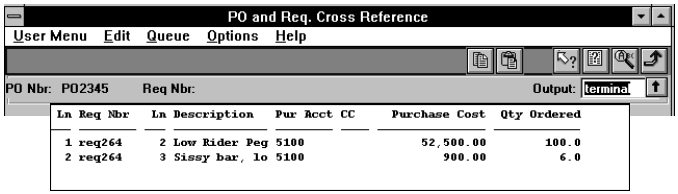


Fig. 16.11
PO and Req. Cross Reference (5.2.17)

Out of Tolerance Inquiry

Use Out of Tolerance Inquiry (5.2.21) to display out-of-tolerance requisition lines. Optionally, you can fill in selection criteria to narrow the list of lines displayed. Leaving all the fields blank displays all out-of-tolerance lines. Data displayed includes both PO cost and requisition cost and unit of measure.

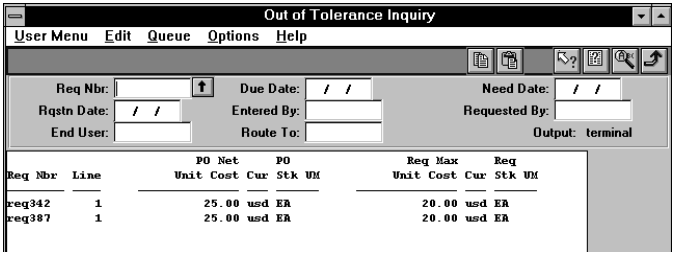


Fig. 16.12
Out of Tolerance Inquiry (5.2.21)

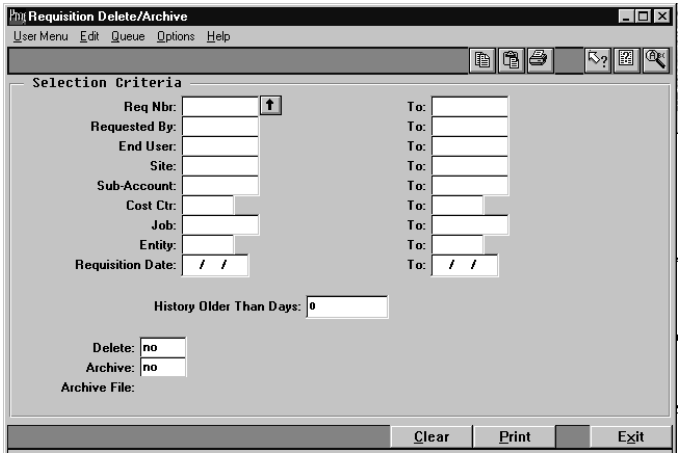
Deleting and Archiving Requisitions

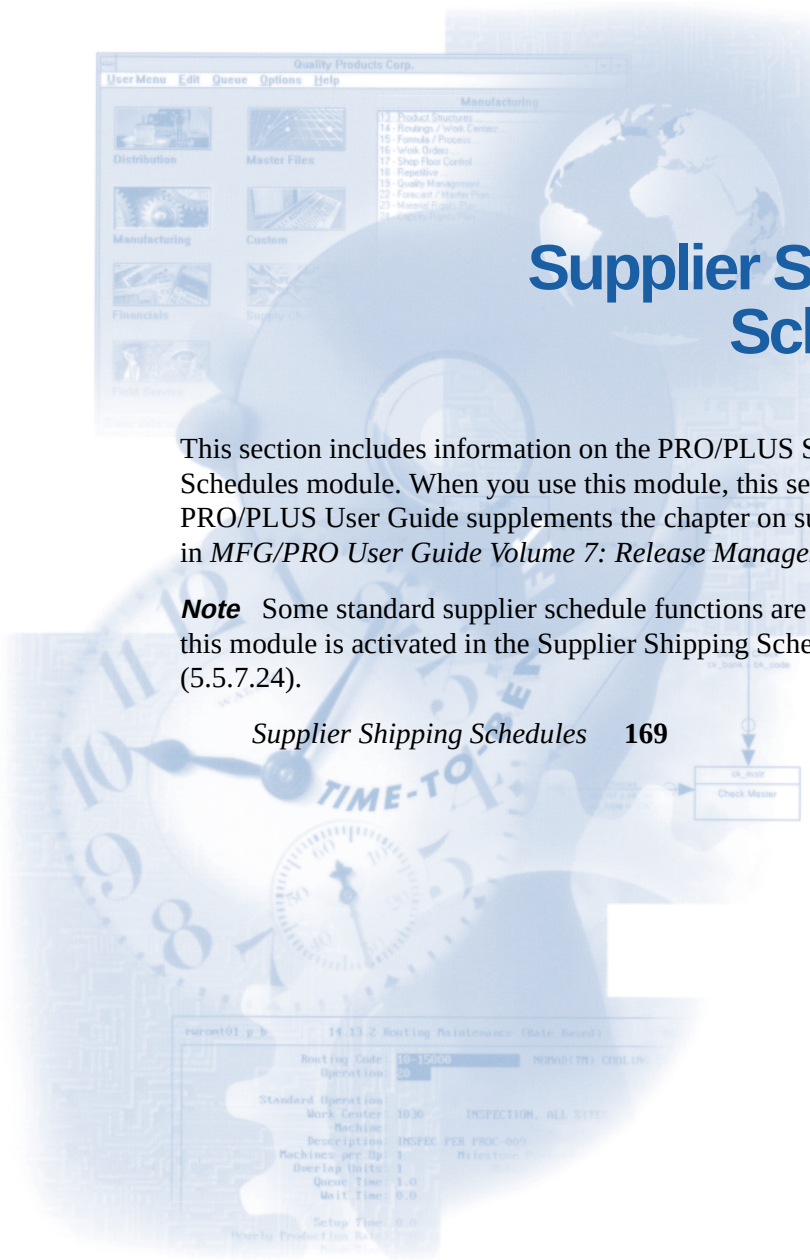
Use Requisition Delete/Archive (5.2.23) to archive and delete closed purchase requisitions—those for which all lines have been received or canceled.

Run the program twice, establishing selection criteria and leaving the Delete flag set to No the first time. You can then review the resulting report and adjust the selection criteria until they are correct. Then, run the program with both the Delete and Archive flags set to Yes. The system archives historical data and deletes all requisitions meeting the selection criteria.

For each deleted requisition, you can delete all history records that are older than the number of days entered in History Older Than Days. For example, if you enter 100, the system deletes history records that are over 100 days old for each requisition meeting the selection criteria.

Fig. 16.13
Requisition Delete/ Archive (5.2.23)





SECTION 5

Supplier Shipping Schedules

This section includes information on the PRO/PLUS Supplier Shipping Schedules module. When you use this module, this section of the PRO/PLUS User Guide supplements the chapter on supplier schedules in *MFG/PRO User Guide Volume 7: Release Management*.

Note Some standard supplier schedule functions are disabled when this module is activated in the Supplier Shipping Schedule Control File (5.5.7.24).

CHAPTER 17

Supplier Shipping Schedules

This chapter describes how to set up and use features of the PRO/PLUS Supplier Shipping Schedules module.

Introduction

Standard MFG/PRO supports one type of supplier schedule (type 4) that combines short-term and long-term requirements. The PRO/PLUS Supplier Shipping Schedules module lets you generate separate supplier planning and shipping schedules. To facilitate this, this module adds two additional supplier schedules types to standard MFG/PRO:

Type 5: Supplier Planning Schedules

Type 6: Supplier Shipping Schedules

Note This module does not affect customer schedule functions in MFG/PRO.

Type 4 schedules are described in *User Guide Volume 7: Release Management*.

When the Supplier Shipping Schedules module is active, only supplier schedules of type 5 and 6 can be edited using maintenance programs. Standard supplier schedules (schedule type 4) continue to exist, but are maintained by the system.

Supplier shipping schedules and supplier planning schedules can be used alone or in coordination with each other. They communicate requirements for multiple deliveries from a supplier who may need to adjust production to accommodate your orders.

Planning schedules are used to record weekly and monthly item requirements, while shipping schedules record daily item requirements divided into hour and minute buckets.

Companies with long-term supplier contracts that require regular weekly, daily, or even hourly deliveries typically use both planning and shipping schedules.

By themselves, planning schedules can be used in the same way standard supplier schedules are used in MFG/PRO. For example, some manufacturing environments do not require the detailed bucketing features of the shipping schedule for all of their suppliers. When this is true, the planning schedule is used instead. When you generate a planning schedule without generating a corresponding shipping schedule, the planning schedule includes the daily item requirements, but without the automatic time bucketing of the shipping schedule.

Supplier shipping and planning schedules can be created manually. However, typically they are generated automatically based on item requirements from Material Requirements Planning (MRP).

Note When supplier shipping and planning schedules are updated manually, MRP is not directly affected. However, any manual changes to a shipping or planning schedule are used to automatically update the system-maintained supplier schedule (type 4). The next time MRP is run, the modified schedule data are considered by MRP.

Types of Purchase Orders

Table 17.1 contrasts the characteristics of PRO/PLUS supplier schedules with other kinds of purchase orders in MFG/PRO.

Table 17.1 Summary of Purchase Order Characteristics

	Supplier Shipping Schedules	**Supplier Planning Schedules**	**Supplier Schedules**	**Purchase Orders**	**Blanket Orders**
Delivery Dates	Multiple	Multiple	Multiple	Single for order/item	Multiple
Delivery Times	Multiple—System-Generated	Multiple—Entered Manually	Multiple—Entered Manually	No	No
Seen by MRP	Indirectly, through type 4 schedule	Indirectly, through type 4 schedule	Yes	Yes	No
Receipts	Yes	Yes	Yes	Yes	No
Duration	Short- and Medium-Term	Medium- and Long-Term	Short-, Medium-, and Long-Term	One-Time	Short- and Medium-term
Elements	Header Shipping Schedule Trailer	Header Planning Schedule Trailer	Header Planning Schedule Shipping Schedule Trailer	Header Line Items Trailer	Header Line Items Trailer POs

Supplier Schedules Example

A manufacturer of circuit boards needs blank boards supplied on each day of the week. The manufacturer knows the exact quantities they require for the next few days, can estimate their requirements for the next few weeks, and knows the approximate requirements for the next 12 months.

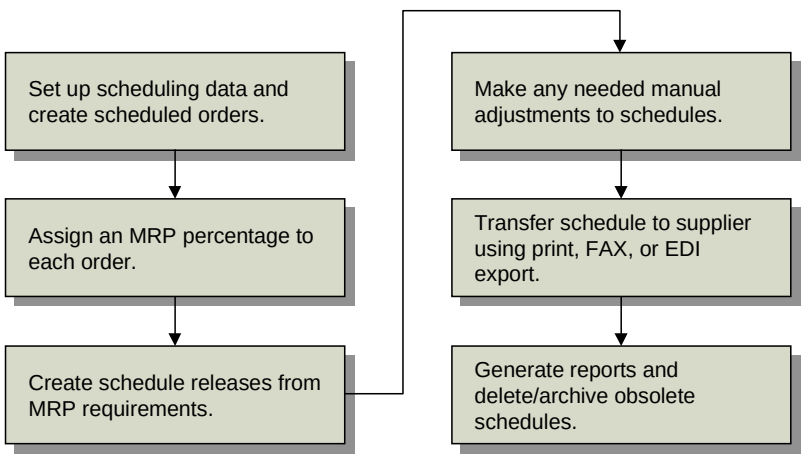
The supplier of these circuit board blanks uses the planning information provided by the manufacturer to place its orders for raw materials and to plan production. It can use planning schedules to help define its delivery and planning schedules and shipping schedules to schedule the day-to-day deliveries required by the circuit board manufacturer.

The same manufacturer also needs to order the solder used to weld circuits to the board. Since the solder is sold in bulk quantities and a large supply is always on hand, the manufacturer does not generate shipping schedules for it. Instead, a planning schedule for solder requirements is generated for the next twelve months. The planning schedule indicates that solder should be delivered only once per week.

Supplier Schedules Work Flow

Figure 17.1 illustrates the steps required to set up and process supplier planning and shipping schedules. Each of these steps is described in detail in the following sections.

Fig. 17.1
Supplier Schedules Work Flow



Menu Listing

The PRO/PLUS Supplier Schedules Menu (5.5.7) is a submodule on the Purchasing menu at the same level as the standard MFG/PRO Supplier Schedules module.

See *User Guide Volume 2: Distribution* for details about Purchasing.

Table 17.2 lists the programs added to MFG/PRO by the Supplier Shipping Schedules module.

Table 17.2 PRO/PLUS Supplier Schedules (5.5.7)

Menu Number	Description	Program Name
5.5.7.1	Ship Delivery Time Maintenance	rssdtmt.p
5.5.7.2	Ship Delivery Time Inquiry	rssdtiq.p
5.5.7.4	Supplier Controls Maintenance	adssmt.p
5.5.7.6	Supplier Planning Schedule Maint	rspsmt.p
5.5.7.7	Supplier Shipping Schedule Maint	rsssmt.p
5.5.7.13	Ship Schedule Variance Compare	rsrp10.p
5.5.7.14	Ship to Plan Schedule Compare	rsrp11.p
5.5.7.24	Supplier Schedule Control File	rspm.p

When you activate this module, new features are added to some existing MFG/PRO programs, and Schedule Maintenance (5.5.3.3) cannot be used to maintain schedules. The added features help to create, process, export, and report data for supplier shipping and planning schedules.

For information on how to activate Supplier Shipping Schedules, see page 175.

When you deactivate the Supplier Shipping Schedules module, the modified programs again operate as in standard MFG/PRO, and Schedule Maintenance can be used to modify type 4 schedules. When Supplier Shipping Schedules is inactive, you cannot update supplier schedules of type 5 or 6.

Programs modified by Supplier Shipping Schedules are listed in Table 17.3.

Table 17.3 PRO/PLUS Supplier Shipping Schedules, Modified Programs

Menu Number	Description	Program Name
5.5.1.13	Scheduled Order Maintenance	rspomt.p
5.5.3.1	Schedule Update from MRP	rssup.p
5.5.3.3	Schedule Maintenance	rssmt.p
5.5.3.4	Schedule Inquiry	rsiq01.p
5.5.3.5	Schedule History Inquiry	rsiq02.p

Menu Number	Description	Program Name
5.5.3.8	Schedule Print	rsrp05.p
5.5.3.9	Schedule Print in Fax Format	rsrp09.p
5.5.3.13	Schedule Report	rsrp01.p
5.5.3.15	Schedule Comparative	rsrp02.p
5.5.3.17	Schedule Authorization Report	rsrp03.p
5.5.3.23	Schedule Delete/Archive	rsdel.p
35.18	Supplier Schedule Export	edexsch.p
35.19	Supplier Schedule Export Aud Rpt	edexrp04.p

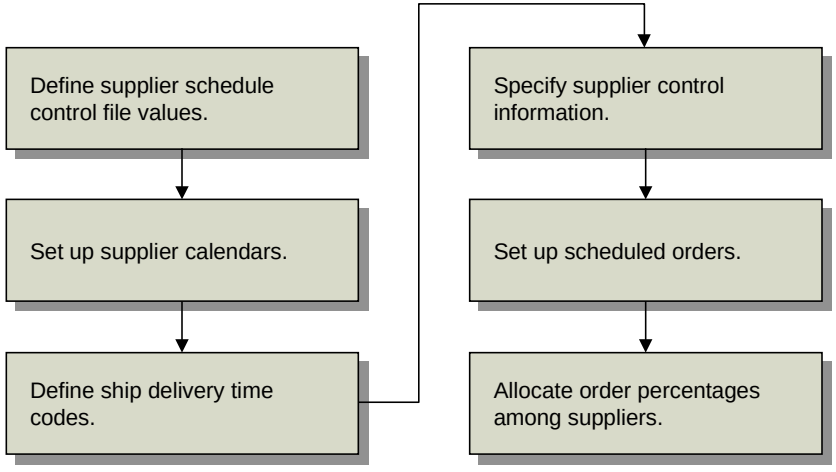
Setting Up Supplier Schedules

For information on setting up and running MRP, see *User Guide Volume 3: Manufacturing*.

To use supplier shipping and planning schedules, you must set up the same base data required for purchase orders, including purchased items and supplier addresses. In addition, to automatically generate schedules based on item requirements from MRP, you must set up the base data and parameter values required by MRP, including item planning data.

Figure 17.2 illustrates a typical work flow for setting up the additional schedule-related data required to use supplier planning and shipping schedules. Each of these steps is discussed in detail in the following sections.

Fig. 17.2
Supplier Schedules Setup Flow



Setting Control File Values

Use settings in the Supplier Schedule Control File (5.5.7.24) to activate the PRO/PLUS Supplier Shipping Schedules module and define generic default values for scheduled orders and generated schedules.

Many of the field values in the Supplier Schedule Control File default to corresponding fields in Supplier Controls Maintenance (5.5.7.4). The control-file values also default to scheduled orders for suppliers that do not have supplier-specific defaults. You can modify the defaults you define here as needed for individual suppliers and scheduled orders.

See “Defining Scheduled Order Defaults for Specific Suppliers” on page 178.

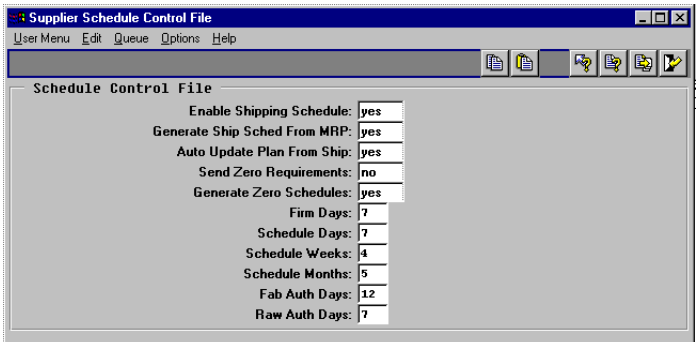


Fig. 17.3 Supplier Schedule Control File (5.5.7.24)

Enable Shipping Schedule. Enter Yes to activate the Supplier Shipping Schedules module.

Note When this value is Yes, you cannot manually update standard supplier schedules (type 4).

Generate Ship Sched From MRP, Firm Days, Schedule Days, Schedule Weeks, Schedule Months, Fab Auth Days, Raw Auth Days. These fields set the default values for their corresponding fields in Supplier Controls Maintenance. In addition, they default to corresponding fields in scheduled orders created for suppliers that do not have supplier-specific defaults set up in Supplier Controls Maintenance.

See “Creating Scheduled Orders” on page 180.

Auto Update Plan From Ship. This field indicates whether planning schedules are automatically updated by the system when you make manual changes to their associated shipping schedules.

No: Planning schedules are not updated when their associated shipping schedules are changed.

Yes: When a requirement on a shipping schedule is manually changed, the requirement on the associated planning schedule for the active release ID is automatically updated.

Automatic update occurs only when the shipping and planning schedules have the same release ID and have not been sent to the supplier.

Setting this flag to Yes ensures that the requirements in the two schedules always correspond.

Example On a typical Monday, you generate both a planning schedule for weeks and months and a shipping schedule for the next one or two weeks. One of your customers sends a rush order, and you must adjust the shipping schedule. As a result, the current shipping schedule no longer corresponds to the planning schedule. When Auto Update Plan From Ship is Yes, the system automatically updates your planning schedule with the changes you made to the shipping schedule.

Send Zero Requirements, Generate Zero Schedules. These fields set the default values for their corresponding fields in Supplier Controls Maintenance.

See “Defining Scheduled Order Defaults for Specific Suppliers” on page 178.

Setting Up Supplier Calendars

See “Quantity and Date Calculations” on page 191.

If your supplier works different days than you do, set up a supplier-specific calendar for them in Supplier Calendar Maintenance (5.5.1.1). Schedule Update from MRP considers these calendars when generating schedule releases. For suppliers that do not have supplier-specific calendars, MFG/PRO uses the applicable shop calendar defined in Calendar Maintenance (36.2.5).

Defining Ship Delivery Time (SDT) Codes

Use Ship Delivery Time Maintenance (5.5.7.1) to define ship delivery time (SDT) codes and associate one or more delivery times with them.

SDT codes specify exact delivery times on supplier shipping schedules. Daily item requirements are divided into hour and minute buckets based on these delivery times.

Note SDT codes are not used on supplier planning schedules. You can specify an interval code, as needed.

Associate SDT codes with individual scheduled orders to avoid having to manually enter delivery times on supplier shipping schedules. You can also use Supplier Controls Maintenance (5.5.7.4) to associate default SDT codes with individual suppliers. Schedule Update from MRP (5.5.3.1) uses the delivery times associated with SDT codes on scheduled orders to bucket daily item requirements on supplier shipping schedules.

See "Requirement Bucketing" on page 189.

Residual quantities from multiple deliveries are always added to the first delivery of the day. Also, pack quantities are not split. For example, if an item is delivered in lots of 50 and your delivery time buckets indicate that 25 items should be delivered in the morning and 25 in the afternoon, the standard lot of 50 is planned for the morning delivery.

See "Quantity and Date Calculations" on page 191.

Use Ship Delivery Time Inquiry (5.5.7.2) to review SDT codes and their associated delivery times.

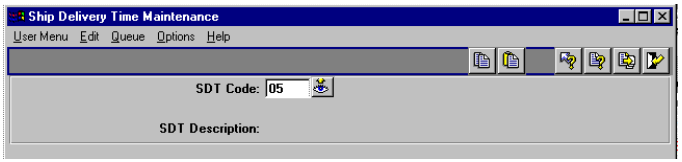


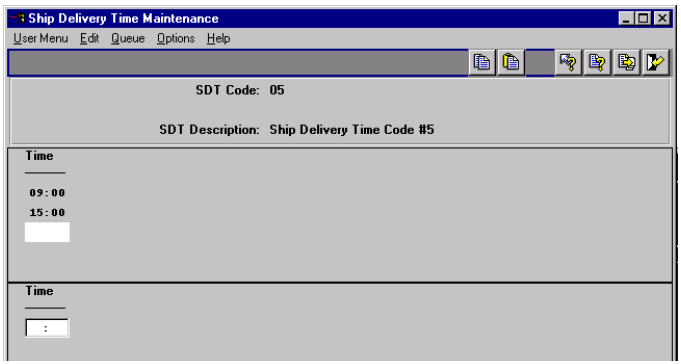
Fig. 17.4
Ship Delivery Time Maintenance (5.5.7.1)

SDT Code. Specify a one- to three-character identifier for this SDT code.

SDT Description. Optionally enter a description for this SDT code.

Press Go to proceed to the next frame. When you are modifying an existing SDT code, this frame displays the delivery times already associated with the SDT code. To associate delivery times with an SDT code, press Insert in this frame and specify a new delivery time in the Time field that displays.

Fig. 17.5
Ship Delivery Time Maintenance, Second Frame



Time. Specify a delivery time to associate with this SDT code using the 24-hour time format. For example, 9:00 AM is 09:00, 3:00 PM is 15:00, and 9:00 PM is 21:00.

In the example shown in Figure 17.5, for supplier shipping schedules with SDT code 05, you expect deliveries to be made twice per day, once at 9:00 AM and once at 3:00 PM.

Defining Scheduled Order Defaults for Specific Suppliers

See “Line Items” on page 181.

Use Supplier Controls Maintenance (5.5.7.4) to define scheduled order defaults for individual suppliers. Most of the values you enter here default to fields in the order line data frame of Scheduled Order Maintenance (5.5.1.13).

See “Setting Control File Values” on page 175.

You should define scheduled order defaults to avoid repetitive entry of the same supplier shipping and authorization information when creating scheduled orders. However, you only need to define supplier-specific control records for suppliers with special processing requirements. When you create a scheduled order for a supplier that does not have an associated set of defaults in Supplier Controls Maintenance, the system uses the default values defined in the Supplier Schedule Control File (5.5.7.24).

The Send Zero Requirements and Generate Zero Schedules values do not default to scheduled orders. These values indicate:

- Whether schedules that contain no item requirements are generated for the associated supplier by Schedule Update from MRP (5.5.3.1)

- Whether schedule detail lines with quantities of zero are included in schedules sent to the associated supplier

Most of the field values in this program initially default from the Supplier Schedule Control File.

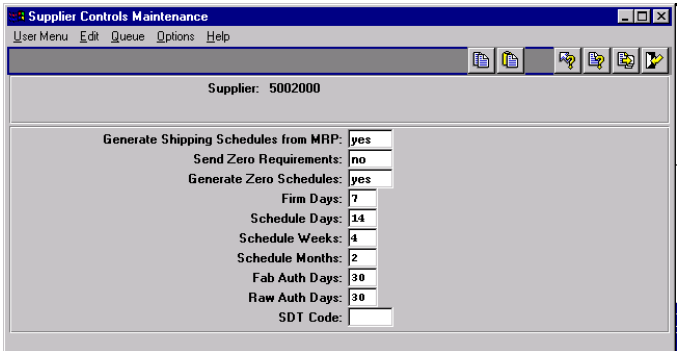


Fig. 17.6. Supplier Controls Maintenance (5.5.7.4)

Generate Shipping Schedules from MRP. This value indicates whether you typically generate shipping schedules for this supplier based on item requirement data from MRP. It sets the default for the corresponding field on scheduled orders created for this supplier.

See “Generate Ship Schedule From MRP” on page 186.

Send Zero Requirements. This field indicates whether schedule detail lines that do not contain item quantities (requirements) are included when a schedule is sent to this supplier using:

- Schedule Print (5.5.3.8)
- Schedule Print in Fax Format (5.5.3.9)
- Supplier Schedule Export (35.18)

Yes: Schedules sent to suppliers can contain detail lines with zero requirements.

No: Only detail lines with nonzero quantities are included.

Generate Zero Schedules. This field indicates whether a schedule is created for this supplier when all detail line quantities (requirements) on that schedule are zero.

No: The system does not generate a supplier schedule when there are no detail line item requirements.

Yes: The system generates supplier schedules even when there are no detail line requirements. These schedules are called zero schedules.

When a zero schedule is generated, only one line of data is printed on it. This detail line has a quantity of zero. Zero schedules are generated only once for an item and supplier combination. Additional schedules are not generated for that item unless requirements exist for it.

In many environments, sending a zero schedule to a supplier indicates that the associated items are no longer needed. If this is true in your manufacturing environment, set this field to Yes.

See “Line Items” on page 181.

Firm Days, Schedule Days, Schedule Weeks, Schedule Months, Fab Auth Days, Raw Auth Days, SDT Code. These fields set the default values for their corresponding fields in Scheduled Order Maintenance (5.5.1.13) when a scheduled order is created for this supplier.

Creating Scheduled Orders

Scheduled orders define the parameters that MFG/PRO uses to generate planning and shipping schedules for individual items that have been entered on separate scheduled order lines. They provide the framework for a shipping contract between customer and supplier, but have no delivery dates. When you run Schedule Update from MRP, the system uses item demand data from MRP to create planning and shipping schedules for scheduled order line items.

Use Scheduled Order Maintenance (5.5.1.13) to set up scheduled orders. After you enter an order ID and supplier code, five frames display. The first contains shipping and credit information for the whole order. The next four contain line item information such as item numbers, ship-to data, line item details, schedule details, and optional comments.

Header

See *User Guide Volume 7: Release Management* for details.

Several values in the header frame indicate how schedules generated based on this order will be delivered to suppliers. Schedules can be printed, transmitted via EDI, or sent via FAX, depending on the values you specify. If you use EDI, some field values default from the values defined for the associated supplier in Trading Partner Parameters Maint (35.1).

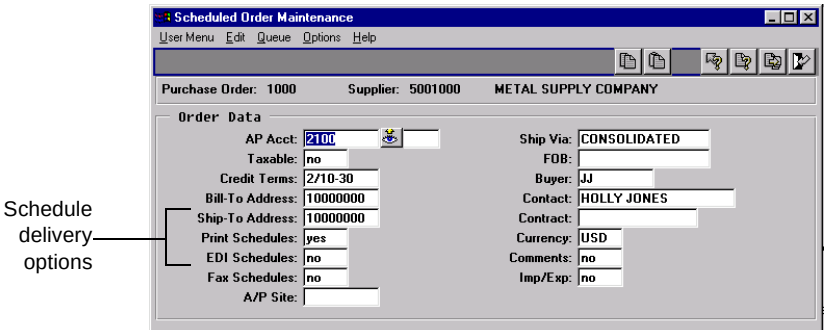


Fig. 17.7 Scheduled Order Maintenance (5.5.1.13), Header Frame

When you are finished entering values in the header frame, press Go to display the line item frame.

Line Items

Use fields in the first line item frame to specify an item to be ordered from the supplier and the site to receive that item. Unique line numbers enable you to enter more than one schedule line for the same item, if needed.

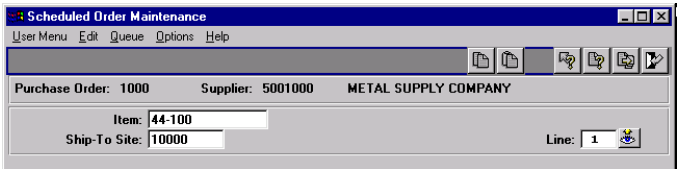


Fig. 17.8 Scheduled Order Maintenance, Item and Ship-To Site

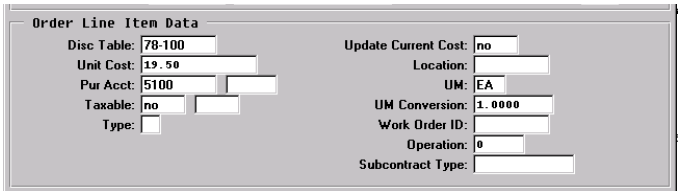
First Order Line Item Data Frame

Use fields in the first Order Line Item Data frame to specify pricing and inventory data for the item referenced in the previous frame.

Use the list/discount table pricing functions in the PO/RTS/Sched/RMA Rcpt Price Menu (1.10.2) to set up price lists for scheduled orders. The price from the applicable list displays in the Unit Cost field. Effective prices can be updated in Purchase Order Receipts (5.13.1) and PO Shipper Receipt (5.5.5.11). Set Update Current Cost to Yes to update current costs for inventory items during receipt.

See *User Guide Volume 6: Master Files* for details on price lists.

Fig. 17.9
Scheduled Order Maintenance, First Order Line Item Data Frame



Type. This value determines whether the associated line item is received into inventory and considered by planning.

- When Type is blank, the associated line item is received into inventory. When the receipt is processed, inventory balances are increased and a GL transaction debits the inventory account.
- A Type value of S indicates a subcontract operation. A work order number and operation are specified on the order and on the receipt. Rather than updating inventory, the receipt updates the work order operation status and creates a GL transaction debiting the WIP account from the work order. Use Subcontract Type to describe the type of operation performed by the subcontractor.

Second Order Line Item Data Frame

Use fields in the second Order Line Item Data frame to record data that impact the requirements and schedules generated for the associated line item. When you are finished specifying values in this frame, press Go to display the Shipping Schedule Info pop-up.

See “Defining Scheduled Order Defaults for Specific Suppliers” on page 178.

The values in Firm Days, Schedule Days, Schedule Weeks, Schedule Months, Fab Auth Days, and Raw Auth Days default from Supplier Controls Maintenance (5.5.7.4), if a record exists for the supplier. Otherwise, these field values default from the Supplier Schedule Control File (5.5.7.24).

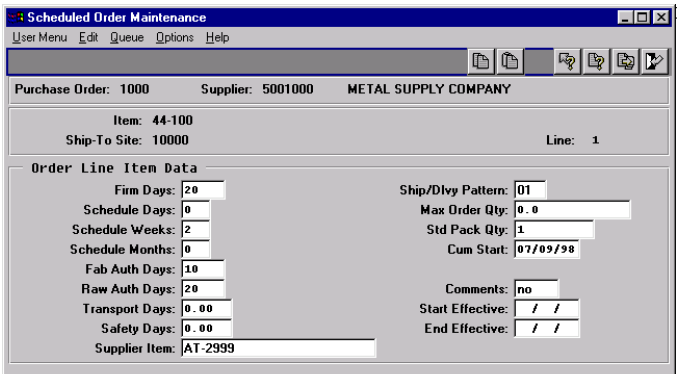


Fig. 17.10 Scheduled Order Maintenance, Second Order Line Item Data Frame

Firm Days. Specify the number of days in the schedule firm interval. For supplier shipping schedules, quantities and dates within this period are not changed by Schedule Update from MRP.

Enter a positive value in this field if you want to explicitly track cumulative received quantities, or if you have an agreement with your supplier stipulating that requirements cannot change within a specific interval.

For further details, see “Firm and Planned Requirements” on page 188.

Note This value does not affect how MRP uses the Time Fence value defined for the item. Firm Days controls order releases by date and quantity. The item master Time Fence field controls planned orders by date and quantity.

Schedule Days, Schedule Weeks, Schedule Months. Schedule Update from MRP uses these values to determine the number of days, weeks, and months that display on schedules based on this order line. Shipping schedules are generated for the number of days specified in the Schedule Days field for this line. Planning schedules are generated to cover the sum of schedule weeks and schedule months.

For details on how these fields are used, see “Requirement Bucketing” on page 189.

When Schedule Days is zero on an order line, supplier shipping schedules are not generated for that line. When both Schedule Weeks and Schedule Months are zero for an order line, supplier planning schedules are not generated for that line.

Fab Auth Days, Raw Auth Days. These fields indicate the number of days the system uses to calculate fabrication authorization quantities (fab quantities) and raw authorization quantities (raw quantities) on supplier planning schedules. The values you specify here are called *authorization horizons*.

Fab and raw quantities represent cumulative item requirements within the specified number of days since the active start date of their associated planning schedules. These authorization quantities help protect suppliers against sudden and unforeseen reductions in demand.

- Raw quantity is the quantity of product you commit to covering the component costs.
- Fab quantity is the quantity of product you commit to covering manufacturing costs.

These data are sent to the supplier as part of the planning schedule.

Note Schedule Update from MRP uses these values only if scheduled requirements extend beyond the number of days in the authorization horizon. Otherwise, authorization horizons are equal to the number of schedule days specified on the applicable scheduled order line.

Transport Days. This field is normally blank. Specify a value for suppliers who do not ship or take responsibility for shipping, but from whom you pick up or schedule the pickup of orders. Entering a value in Transport Days converts all order dates from receipt dates to shipment dates.

Schedule Update from MRP uses this value to set shipment dates based on delivery dates (delivery date – transport days). It then checks the supplier's calendar, if one exists, to verify that the shipment date is a workday for the supplier. If not, the update back-schedules to the next supplier workday.

All reports and inquiries check this field to verify whether to print or display delivery dates or shipment dates. When this value is positive, the system uses shipment dates.

Ship/Dlvy Pattern. This code specifies the default ship/delivery pattern (SDP). These industry-defined codes indicate the days of the week or month that a supplier is open to make shipments.

See "Quantity and Date Calculations" on page 191.

Ship/delivery patterns are used by Schedule Update from MRP to calculate the actual required dates that are used on supplier schedules. Once the required ship dates have been calculated, the required quantities are divided into daily buckets according to the ship/delivery pattern specified on the scheduled order, if any.

SDP codes support both the Organization for Data Exchange by Teletransmission in Europe (ODETTE) and the Automotive Industry Action Group (AIAG) ship/delivery patterns. They are translated to the appropriate industry-standard codes during EDI conversion and transmission.

Std Pack Qty. Enter the multiple in which orders for this item are shipped. This is similar to Order Multiple in the item master. It displays here because the standard shipment multiple for an item can vary among suppliers. Schedule Update from MRP rounds order quantities up to this multiple.

Order Multiple should generally be blank in the item master for items that are referenced on scheduled orders, since both values are applied to orders during different MFG/PRO planning functions (MRP and Schedule Update from MRP).

Cum Start. The date on which this order began to accumulate quantities. This may or may not be the date on which the order was created in MFG/PRO.

When a line item is first scheduled, the cumulative receipt quantity is zero and the cumulative start date is set to the active start date of the schedule. As receipts are processed, the system updates the cumulative receipt quantity.

Sometimes cumulative receipt quantities must be adjusted manually, usually as dictated by policy. For example, you may reset them to zero at the start of your new fiscal year using Cum Received Reset to Zero (5.5.5.14). The affected cumulative start dates are then changed to that date.

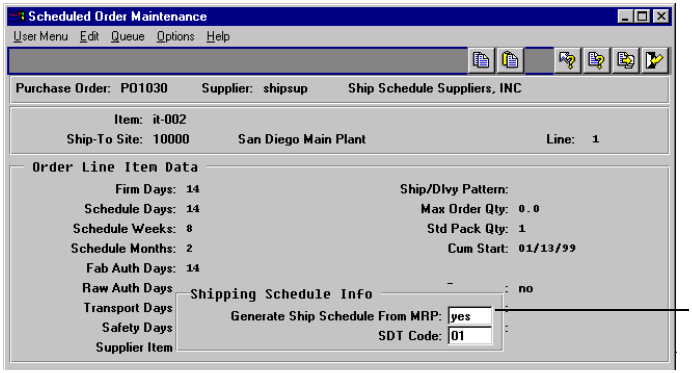
You can also adjust cumulative receipts manually to reflect returned or defective items or losses due to theft using Cumulative Received Maintenance (5.5.5.13). For example, when defective items are returned to the supplier, you may want to process a return and credit without decreasing cumulative quantity.

Shipping Schedule Info Pop-Up

Tip
The pop-up displays only when the Supplier Shipping Schedules module is active.

After the second order line item data frame, the Shipping Schedule Info pop-up displays. Values in this pop-up default from the corresponding fields in Supplier Controls Maintenance (5.5.7.4) when values have been defined for the supplier on the order. Otherwise, they default from the Supplier Schedule Control File (5.5.7.24).

Fig. 17.11
Shipping Schedule Info Pop-Up



This pop-up displays when Supplier Shipping Schedules is active.

See “Creating a Schedule Release from MRP” on page 187.

Generate Ship Schedule From MRP. This field indicates whether you generate supplier shipping schedules based on this order line.

Important To generate a shipping schedule for a scheduled order line, Schedule Days must have a nonzero value for that line.

Yes: When you run Schedule Update from MRP (5.5.3.1) with Generate Shipping Schedules set to Yes, a supplier shipping schedule is generated for this line. This shipping schedule covers item requirements for the specified number of schedule days.

No: Only planning schedules are generated for this line.

Note When you run Schedule Update from MRP with Generate Shipping Schedules set to No, shipping schedules are not generated for any scheduled order lines, regardless of how this field is set.

See page 176.

SDT Code. Enter the SDT code for Schedule Update from MRP to use to calculate exact delivery times on supplier shipping schedules.

Allocating Percentages for MRP

After you have set up the required supplier data and scheduled orders for each item, you must allocate order percentages among suppliers using Scheduled Order MRP % Maint (5.5.1.17). Total percentages for each item must equal 100%.

Schedule Update from MRP (5.5.3.1) uses the percentages you define for an item to allocate MRP planned orders for that item among suppliers.

See "Quantity and Date Calculations" on page 191.

Creating a Schedule Release from MRP

Use Schedule Update from MRP (5.5.3.1) to create releases of supplier schedules. A release is a set of item quantities (requirements) and requirement dates identified by a release ID number, which is then sent to your supplier. A single schedule release can include both planning and shipping schedules.

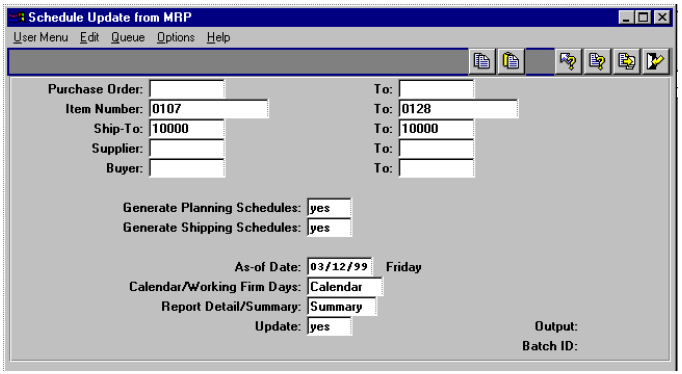
Schedule Update from MRP generates releases based on the following data:

- Planned purchase orders generated by MRP based on item requirements and due dates
- Item planning data, such as safety days
- Scheduled order percentages defined for items and ship-to sites in Scheduled Order MRP % Maint (5.5.1.17)
- Scheduled order data from Scheduled Order Maintenance (5.5.1.13)
- Supplier calendars, defined in Supplier Calendar Maintenance (5.5.1.1)

Note MRP planned orders for a co-product/by-product or a base process item cannot be used to update supplier schedules.

You can run Schedule Update from MRP for combinations of items, suppliers, scheduled orders, receiving sites, or buyers.

Fig. 17.12
Schedule Update from MRP (5.5.3.1)



Firm and Planned Requirements

On supplier schedules, item requirements can be either *firm* or *planned*. Requirements designated as firm are:

- Not replanned when Schedule Update from MRP is run
- Visible to MRP as scheduled supply, like discrete purchase orders

Requirements designated as planned are not considered sources of supply by MRP and may change when MRP is rerun. The schedules you send to suppliers can contain firm requirements only, planned requirements only, or a combination of both.

The schedule update process automatically applies a status of firm to item requirements that are:

See page 183.

- Within the number of firm days (firm interval) specified on the associated scheduled order line

See page 183.

- Within the schedule days specified on the scheduled order line

See “Manually Updating a Schedule Release” on page 193.

Schedule Update from MRP only designates shipping schedule requirements as firm. It does not designate item requirements on planning schedules as firm, even when planning schedule active dates are within the schedule firm interval. However, you can manually designate detail line quantities as firm on individual planning schedules, if required.

Any unreceived firm requirements from one release are automatically carried forward to the next release during schedule update. These quantities are maintained as a prior cumulative requirement.

Planned orders outside the firm days period are approved, but maintained as planned requirements. This means that they are not seen by MRP as sources of supply and can be replanned. When you rerun MRP, it plans or replans orders for scheduled requirements that are now within its planning horizon. Executing Schedule Update from MRP adds the new and updated planned orders, designating as firm any requirements that now fall within the Firm Days period.

If requirements change, you may need to manually adjust firm quantities in Supplier Shipping Schedule Maint (5.5.7.7) or Planning Schedule Maint (5.5.7.6).

See “Manually Updating a Schedule Release” on page 193.

- When increased demands create additional requirements within the Firm Days period, MRP creates planned orders in that period. When you regenerate the schedule, the system does not select any planned orders falling within the firm period covered by a schedule. The warning message `Order not selected` displays in the report.
- When requirements decrease due to decreased demands, MRP sees the supply as excessive and produces action messages.

You can avoid rescheduling problems due to fluctuations in short-term MRP data by setting Firm Days to zero on scheduled order lines. When Firm Days is zero:

See “Firm Days” on page 183.

- Firm requirements are not generated or carried forward from one release to the next.
- The system sets Prior Cum Req equal to Prior Cum Received.
- Each schedule release is based on the most recent MRP planned-order data available.

Requirement Bucketing

Item requirements on standard supplier schedules (type 4) are maintained as discrete dates and quantities in the database. The system does not bucket item requirements on these schedules until they are printed or transmitted to the supplier. Item requirements on supplier planning (type 5) and shipping schedules (type 6), however, are stored differently than those for type 4 schedules.

For information on type 4 schedules, see *User Guide Volume 7: Release Management*.

See “Schedule Days, Schedule Weeks, Schedule Months” on page 183.

When Schedule Update from MRP generates a schedule release, it uses the Schedule Days, Schedule Weeks, and Schedule Months values defined for applicable scheduled order lines to:

- Determine the length of time covered by the item requirements in planning and shipping schedules.

  Shipping schedules cover item requirements for the specified number of schedule days, while planning schedules cover requirements for the sum of schedule weeks and schedule months.

- Bucket item quantities on planning and shipping schedules.

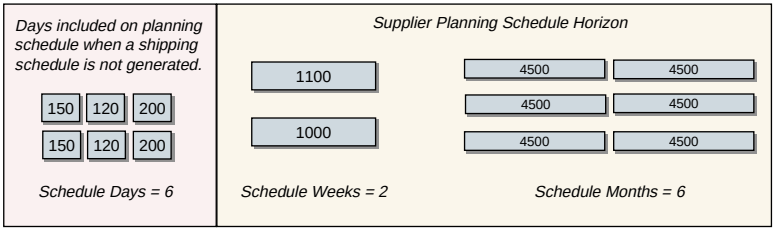
  Requirement buckets display on planning and shipping schedules as schedule detail lines. On shipping schedules, daily requirements are further divided into hour and minute buckets based on the SDT code associated with the applicable order line.

See “Defining Ship Delivery Time (SDT) Codes” on page 176.

Planning schedule requirements for the number of schedule weeks and months specified on the applicable order line reside in discrete bucketed quantities, as shown in Figure 17.13.

Note When you generate only planning schedules, applicable schedule days requirements are also included on each planning schedule.

Fig. 17.13
Supplier Planning Schedule Bucketing



See “Setting Up Supplier Calendars” on page 176.

Schedule Update from MRP always assigns the entire quantity in each weekly requirement bucket to the first day of the week on which the supplier is available, based on the supplier calendar set up in Supplier Calendar Maintenance (5.5.1.1). For suppliers that do not have supplier-specific calendars, the standard shop calendar set up in Calendar Maintenance (36.3.5) is used.

When both Schedule Days and Schedule Weeks are positive on a scheduled order line, the number of daily buckets may extend beyond the number of schedule days defined on that line. This occurs so that the first schedule week will always begin on the first day the supplier is available.

Example A scheduled order, SCD 128, is created for supplier SUP886. For line 1 on this order, Schedule Days is 14 and Schedule Weeks is 4. Schedule Update from MRP is run with As-of Date set to 03/09/99, a Tuesday. The supplier calendar for SUP886 indicates that the first day of the week on which the supplier is available is Monday. So that weekly bucketing will start on a Monday, the system generates a shipping schedule covering 20 days rather than just 14.

For each monthly requirement bucket on a planning schedule, the system assigns the entire item quantity to the first Monday of the applicable month. When schedule weeks do not end on the last Sunday of the month, the number of weekly buckets on the planning schedule may extend beyond the number of schedule weeks specified for the applicable scheduled order line.

Shipping schedule requirements are stored in time buckets based on the SDT code for the number of schedule days indicated on the associated order line. An example is shown in Figure 17.14.

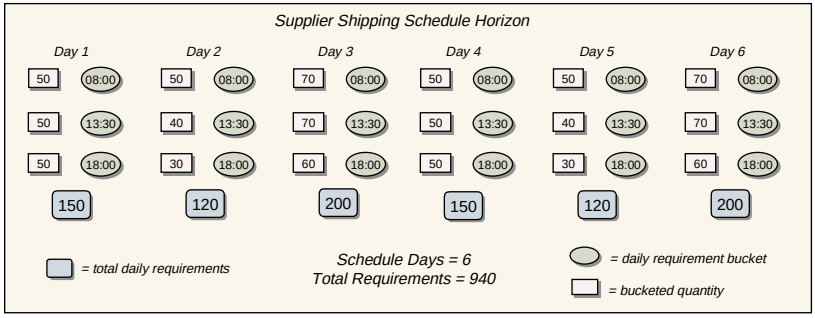


Fig. 17.14
Supplier Shipping Schedule Bucketing

Quantity and Date Calculations

Schedule Update from MRP performs the following calculations:

1. Back-schedule for safety days from planned order due dates.
2. Back-schedule for ship/delivery pattern from safety day schedule. See page 184.
3. Back-schedule for supplier calendar from ship/delivery schedule. See page 176.
4. Allocate planned order quantities by percentage to each supplier based on Scheduled Order MRP % Maint (5.5.1.17) to create new quantities by planned order. See page 187.

See page 185.

5 Revise quantities to Std Pack Qty multiple.

6 Display any unfulfilled prior cumulative requirements.

See page 193.

7 Create a release, assign a Release ID and determine whether quantities are firm (within the Firm Days time fence) or planned.

See page 183.

8 Calculate fabrication and raw authorization quantities and start and end dates.

The start date is the active start date. The end date is calculated by adding the number of days specified in Raw Auth Days and Fab Auth Days to this date. The quantity requirements between the active start date and the calculated end date are the schedule quantities displayed on the shipping schedule.

9 Generate a shipping schedule containing daily requirements. When an SDT code is specified, bucket quantities into the ship delivery times for each day.

Shipping schedules are generated only when:

- Scheduled days are specified in the scheduled order.
- Generate Ship Schedules from MRP is Yes on the scheduled order line.
- Generate Shipping Schedules is Yes in Schedule Update from MRP.

10 Allocate quantities using ship/delivery pattern.

See page 179.

11 Generate zero schedules if Generate Zero Schedules is Yes in Supplier Controls Maintenance (5.5.7.4). Once a zero schedule is created, it is not regenerated by any subsequent runs of Schedule Update from MRP, unless MRP finds demand for the item. Zero requirement schedules are sent to the supplier only when Send Zero Requirements is Yes in Supplier Controls Maintenance.

12 Generate a planning schedule.

When you create a planning schedule but not the corresponding shipping schedule, the daily requirements display on the planning schedule as planned requirements. This only occurs when Schedule Days is greater than 1 on the applicable scheduled order line.

Release IDs

When Generate Date Based Release ID is Yes in the Purchasing Control File (5.24), Schedule Update from MRP generates supplier schedule release IDs based on the date their associated schedules were created or updated.

Tip
Date-based release IDs are not generated for manually created supplier schedules.

Eleven-digit date-based release IDs of the form YYYMMDD-xxx are generated using the following components:

- The four-digit year (YYYY)
- The two-digit month (MM)
- The two-digit day (DD)
- A three-digit incrementing release number (-xxx)

Example A schedule is generated on November 24, 1998, using Schedule Update from MRP. Based on this date, the system generates the following release ID: 19981124-001. If you generate a second release of the same schedule on that same day, the release ID is set to 19981124-002.

Report Options

When Report Detail/Summary is set to Detail, an audit report of the entire calculation is printed. Execute the function with Update set to No to preview the results before generating any schedules.

When Update is Yes, selected planned orders are automatically approved and a release is created. The new release can then be modified in Supplier Planning Schedule Maint (5.5.7.6) or Supplier Shipping Schedule Maint (5.5.7.7), or sent to your supplier.

Note Schedules cannot be updated in Schedule Maintenance (5.5.3.3) when the Supplier Shipping Schedules module is active.

Manually Updating a Schedule Release

Use Supplier Planning Schedule Maint (5.5.7.6) or Supplier Shipping Schedule Maint (5.5.7.7) to modify planning or shipping schedules. You can change schedule detail data such as requirement dates, quantities, firm or planned status, and fab and raw authorization quantities and dates.

Typically, Schedule Update from MRP (5.5.3.1) is used to generate planning and shipping schedules, but these two maintenance programs can also be used to manually create them.

See “Auto Update Plan From Ship” on page 175.

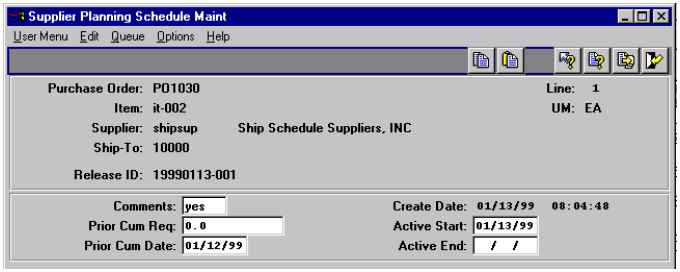
When Auto Update Plan From Ship is Yes in the Supplier Schedule Control File (5.5.7.24), supplier planning schedules are automatically updated by the system when you make changes to their associated shipping schedules.

When manual changes are made to the shipping schedule or the planning schedule, these changes are used to automatically update the corresponding type 4 supplier schedule so they can be taken into account by MRP the next time it is run. This update takes place regardless of any control-file setting.

The following discussion focuses on Supplier Planning Schedule Maintenance. Navigation and data entry in Supplier Shipping Schedule Maintenance is almost the same. Any differences are noted.

1 In the first frame, use the Purchase Order, Item, Supplier, Ship-To, and Line fields to identify a scheduled order. Enter the release to modify or leave Release ID blank and the current release ID defaults. If you are manually creating a new release for this schedule, enter a new release ID.

Fig. 17.15 Cumulative information Frame



The next frame shows the prior cumulative required and cumulative date. This is the total quantity you have requested from the supplier as of a certain date. The active start and end dates show when this release was active. The current active release has no date in the Active End field.

2 The Schedule Detail Data frame displays next. In Supplier Shipping Schedule Maint this frame displays without the Int field.

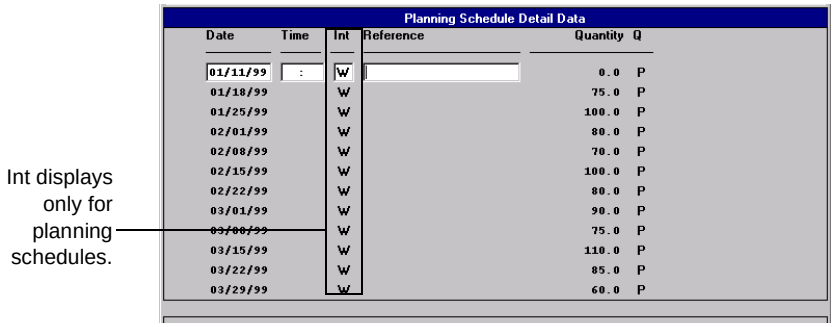


Fig. 17.16
Planning Schedule Detail Data Frame

Use this frame to create or modify schedule delivery dates, times, references, and firm or planned quantities. For planning schedules, you can also change the delivery interval type.

This is the last frame of Supplier Shipping Schedule Maint.

3 For planning schedules, the Resource Authorization Data frame displays next. The dates and quantities in this frame default from information in the scheduled order header (see Figure 17.17).

The fab and raw start and end dates indicate when the supplier is authorized to begin manufacturing or to begin purchasing raw materials to fill this order.

The Fab Qty indicates the quantity of finished items the supplier is authorized to produce for the time period. The Raw Qty indicates the quantity of manufactured items for which the supplier is authorized to purchase raw materials for the time period.

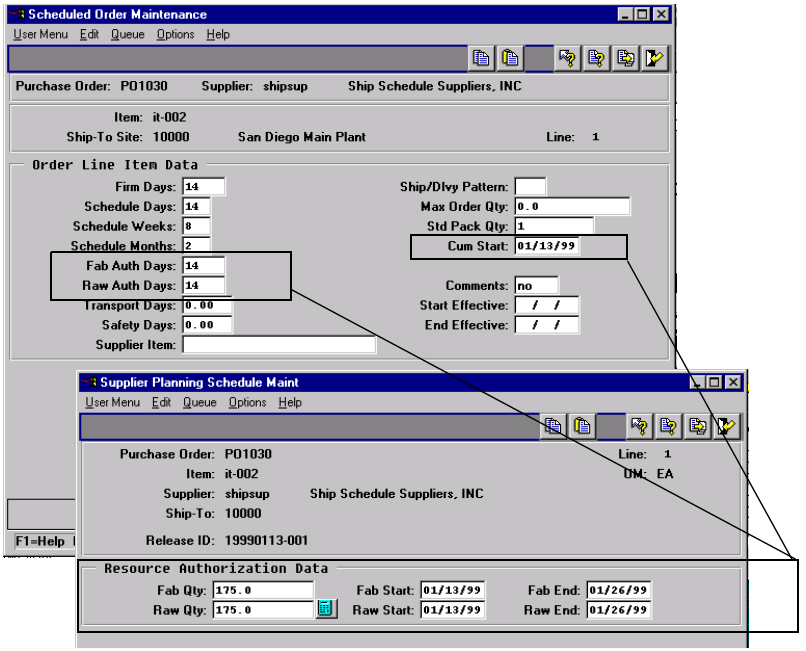


Fig. 17.17
Scheduled Order Maintenance (5.5.1.13) and Resource Authorization Frame (5.5.7.7)

Any changes you make in the Resource Authorization Data frame are applied only to this release of the planning schedule. To make changes that affect other releases, update the order in Scheduled Order Maintenance.

Transmitting Supplier Schedules

Transmitting a schedule release is the last step of the release process. You can transmit a release in various ways: using EDI, sending it as hard copy, or via FAX.

Transmit the schedule release using:

- Supplier Schedule Export (35.18)
- Schedule Print (5.5.3.8)
- Schedule Print in Fax Format (5.5.3.9)

A schedule that has been transmitted with Supplier Schedule Export is considered sent by the system. When you print a schedule release with

Schedule Print or Schedule Print in Fax Format, you can optionally designate the printed schedule release as sent.

You cannot edit schedule releases designated as sent. This ensures that the release received by the supplier and the release in your system are identical.

Exporting for EDI

Use Supplier Schedule Export to export the schedule release to an ASCII text file that can be used for an EDI system transaction. Only supplier schedule type 5 and type 6 can be exported when the Supplier Shipping Schedules module is active. Only schedule type 4 can be exported when this module is not active.

Schedules are exported only if EDI Schedules is Yes in the header of Scheduled Order Maintenance (5.5.1.13). Set up supplier-specific EDI information, including the EDI Schedules field default value, in Trading Partner Parameters Maint (35.1).

See *User Guide Volume 7: Release Management* for details on trading partners.

Outbound supplier shipping schedules use EDI document format 830. Supplier planning schedules use format 862. These formats are described in Table 17.4 and Table 17.5 on page 198.

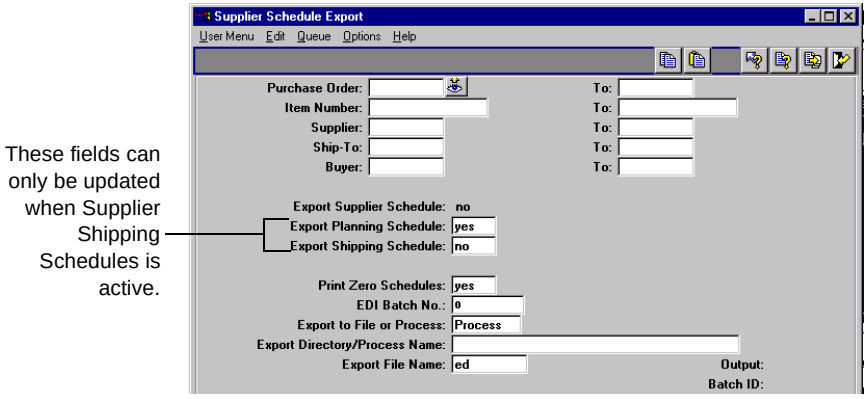


Fig. 17.18 Supplier Schedule Export (35.18)

Export Supplier Schedule. This value determines whether standard MFG/PRO supplier schedules are exported via EDI. When the Supplier Shipping Schedules module is activated, this field is always No and cannot be updated. When the Supplier Shipping Schedules module is disabled, the default is Yes.

Export Planning Schedule. Enter Yes to export supplier planning schedules that match the selection criteria. When the Supplier Shipping Schedules module is deactivated, the default value is No and cannot be updated. When the Supplier Shipping Schedules module is activated, the default is Yes.

Export Shipping Schedule. Enter Yes to export supplier shipping schedules that match the selection criteria. When the Supplier Shipping Schedules module is deactivated the default value is No and cannot be updated. When the Supplier Shipping Schedules module is activated, the default is No.

EDI File Format

The following file layout is used for outbound supplier schedules, which include supplier shipping schedules (862) and supplier planning schedules (830). This format is also used for inbound customer schedules, which include customer shipping schedules (862) and customer planning schedules (830).

Table 17.4
First Record for 830 or 862 Documents

	POS	Width	Value/DB Field/Local Var
New Document Indicator	1	2	//
File Identification	3	7	MFG/PRO
Document Type	10	3	“830” or “862”
Trading Partner Interface ID	13	24	ad_edi_tpid
EDI Standard Version	37	30	ad_edi_std

Table 17.5 lists the record format for each section of a plan or ship schedule.

Table 17.5
830/862 Planning/Shipping Schedules

Description	POS	Width	Value/DB Field/Local Var
“01” Header Information			
Record Type Indicator	1	2	01
Release ID	5	30	sch_rlse_id
Ship/Deliver Date Indicator	35	2	“SH” = Shipment “ ” = Delivery
Cumulative Flag	37	1	so_cumulative (only for 830)
Purpose Code Ext	38	2	edi_ext

Description	POS	Width	Value/DB Field/Local Var
"02" Header Comments			
Record Type Indicator	1	2	02
Comment	3	76	cmt_cmmt
"03" Ship To—Ship From			
Record Type Indicator	1	2	03
Trading Partner Ship To	3	24	po_shipto
Trading Partner Ship From	37	15	po_site
"04" PO Item			
Record Type Indicator	1	2	04
Part Number	3	30	pod_part
Purchase Order Number	33	30	po_nbr
"09" Comments			
Record Type Indicator	1	2	09
Comment	3	76	cmt_cmmt
"10" SDP Code—Prior Cum Req Date			
Record Type Indicator	1	2	10
Ship/Deliver Pattern	3	1	sch_sd_pat (only for 830)
Prior Cum Quantity	4	12	sch_pcr_qty
Prior Cum Date	16	6	sch_pcs_date
"11" Comments			
Record Type Indicator	1	2	11
Comment	3	76	cmt_cmmt
"12" Schedule Detail			
Record Type Indicator	1	2	12
Discrete Quantity	3	12	schd_discr_qty
Interval	15	1	schd_interval
Schedule Date (Less PO Lead Time)	16	6	schd_date – pod_translt_days pod_translt_days = 0 for delivery schedules, or > 0 for shipping schedules
Schedule Time	28	4	schd_time
Schedule FC Quality	32	1	schd_fc_qual
Reference	33	20	schd_reference

Description	POS	Width	Value/DB Field/Local Var
“13” Requirement Detail (Customer Schedules Only)			
Record Type Indicator	1	2	13
Requirement Value	3	20	wf_rqm_value
Requirement Category	23	10	wf_rqm_cat
“15” Fab Authorization Start/End Date—Quantity (830 only)			
Record Type Indicator	1	2	15
Fab Authorized End Date	3	6	sch_fab_end
Fab Authorized Quantity	9	12	sch_fab_qty
Fab Authorized Start Date	21	6	sch_fab_strt
“16” Raw Authorization Start/End Date—Quantity (830 only)			
Record Type Indicator	1	2	16
Raw Authorized End Date	3	6	sch_raw_end
Raw Authorized Quantity	9	12	sch_raw_qty
Raw Authorized Start Date	21	6	sch_raw_strt
“17” Last Receipt Information			
Record Type Indicator	1	2	17
Last Receipt Quantity	5	12	prh_rcvd
Last Receipt Date	17	6	prh_rcp_date
Last Receipt ID	35	20	prh_ps_nbr

Printing Supplier Schedules

Use Schedule Print (5.5.3.8) to print a schedule release as a material release to the supplier. Use the Schedule Type field to print type 5 or type 6 schedules. When the Supplier Shipping Schedules module is inactive, selection is limited to type 4 schedules only.

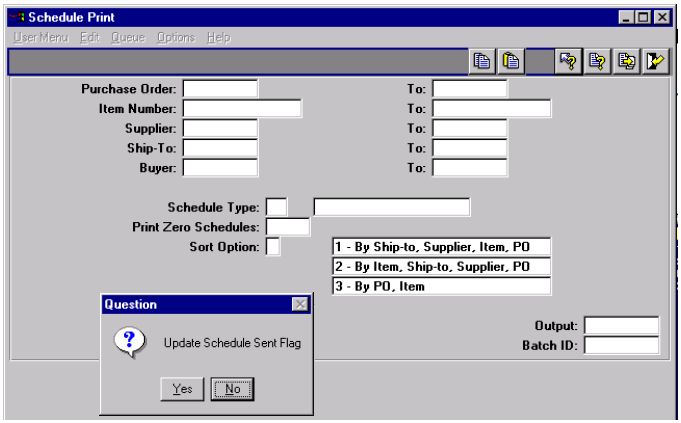


Fig. 17.19
Schedule Print
(5.5.3.8)

You can print and review a schedule release any number of times before you actually transmit it. Indicate when the schedule has been sent to the supplier by responding Yes when prompted to update the Schedule Sent flag. To transmit the release, you can mail or deliver it.

Schedule Print creates the printed supplier schedule. The header of this document includes supplier and ship-to information, the release ID, purchase order number, item number, receipt quantity, and cumulative receipts. The ship/delivery pattern displays, then the order detail. The detail shows any prior open quantities, including quantities in transit, and then each scheduled requirement.

For each line on the printed schedule:

- Req Qty is the discrete or bucketed quantity for that schedule line.
- Cum Req Qty is the total cumulative requirement, including that line quantity, for the entire life of the order.
- Net Req Qty is the total open quantity including that line quantity.

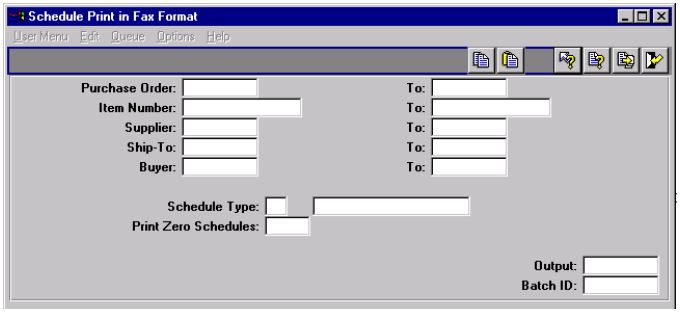
Fig. 17.20
Supplier Schedule Print Output

```
SUPPLIER SHIPPING SCHEDULE

  Supplier: 10032                              Ship-To: 10000
                                               Quality Products Inc.
                                               Manufacturing Division
                                               One World Way
                                               Consolidated Business Plaza
                                               Mount Laurel, NJ
                                               United States of America
  Attention:                                   Attention:
  Telephone:                                   Telephone:
  Fax/Telex:                                   Fax/Telex:

   Release ID: supt1s2                         Release Date: 12/18/98
Purchase Order: supt1                                Buyer:
  Item Number: car-0             UM: EA     In Transit Qty: 0.0
                                               Receipt Date:          13:15
                                                Receipt Qty: 0.0
 Supplier Item:                                Cum Received: 0.0
      Contact:
                                        Packing Slip/Shipper:

         Deliver  Deliver
Interval Date     Time    Reference  Q      Req Qty   Cum Req Qty  Net Req Qty
-------- -------- ------- ---------- - ------------ ------------ ------------
         Prior                                              0.0          0.0
         12/21/98                    f         500.0        500.0        500.0
         12/22/98                    f          60.0        560.0         60.0
         12/23/98                    f          30.0        590.0         30.0
         12/24/98                    f          55.0        645.0         55.0
         12/25/98                    f          30.0        675.0         30.0
```

Transmitting the Release by FAX

When you need to transmit a schedule release by FAX, use Schedule Print in Fax Format (5.5.3.9) to produce it. The orders printed by this program are sorted by supplier rather than by site/supplier. At the top of the first schedule for each supplier, a pound sign (#) prints, followed by the supplier's FAX number. The remainder of the information is the same as Schedule Print.

Fig. 17.21
Schedule Print in Fax Format (5.5.3.9)



Reviewing and Comparing Releases

PRO/PLUS offers updated review and comparison reports for viewing and analyzing schedule releases. Activating the Supplier Shipping Schedules module lets you use the Schedule Type field in the following programs to select the type of schedule to review.

- Supplier Schedule Export Aud Rpt (35.19)
- Schedule Comparative (5.5.3.15)
- Schedule Inquiry (5.5.3.4)
- Schedule Report (5.5.3.13)
- Schedule History Inquiry (5.5.3.5)

Note When the Supplier Shipping Schedules module is inactive, these programs continue to display PRO/PLUS-specific fields, but these fields are not editable.

In addition, the following reports and inquiries are added by this module:

- Ship Delivery Time Inquiry (5.5.7.2)
- Ship Schedule Variance Compare (5.5.7.13)
- Ship to Plan Schedule Compare (5.5.7.14)

Comparing Shipping to Planning Schedules

Use Ship to Plan Schedule Compare (5.5.7.14) to compare active shipping schedules with their corresponding active planning schedules.

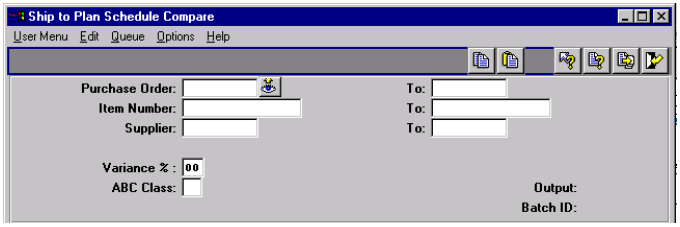


Fig. 17.22
Ship to Plan Schedule Compare (5.5.7.14)

Variance %. Optionally specify a variance percentage (1 to 99 percent) to report only item quantities on schedule detail lines that differ by this percentage or more. When this value is 0 (zero), any quantity variance is reported, regardless of variance percentage.

Variance percentage indicates the extent to which one schedule detail line varies from another, expressed as a percentage value. For example, if you execute a comparison program with all fields left blank, but with Variance % set to 5, the resulting report only includes releases where the schedules differ by five percent or more.

Tip
Assign ABC class codes to individual items using Item Master Maintenance (1.4.1).

ABC Class. Optionally specify an item ABC class to compare only schedule detail lines containing items that belong to that class. Valid values are A, B, or C.

You can combine this code with a variance percentage for reporting. For example, class A items might be reported at a two-percent variance while class C items are reported at a ten-percent variance.

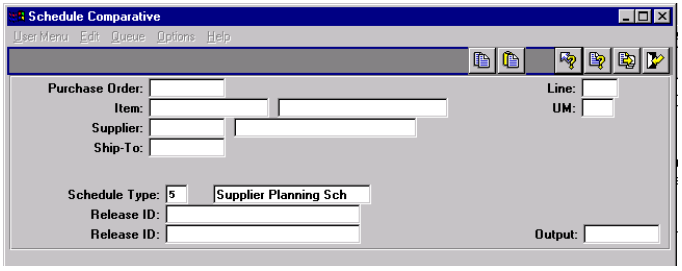
Fig. 17.23
Ship to Plan Schedule Compare Output (5.5.7.14)

```
rsrp11.p            5.5.7.14 Ship to Plan Schedule Compare        Date: 01/19/99
Page: 1                          Global Industries                Time: 16:49:06


Order     Ln Item Number        Ship Release Id                Plan Release Id
--------- -- ------------------ ------------------------------ ------------------------------
po862b     1 862b               19990118-001                   19990118-001

Date     Ship Discrete Qty Plan Discrete Qty  Qty Diff Variance% Ship Cum Qty  Plan Cum Qty Cum Qty Diff Variance%
-------- ----------------- ----------------- --------- --------- ------------ ------------ ------------ ----------
01/18/99             105.0             100.0      -5.0        05        105.0        100.0         -5.0          05

Order     Ln Item Number        Ship Release Id                Plan Release Id
--------- -- ------------------ ------------------------------ ------------------------------
PO1127     1 kwc-a              19990118-005                   19990118-005
```

Comparing Schedule Releases

Use Schedule Comparative (5.5.3.15) to compare any two releases of the same schedule that reside in the system.

Fig. 17.24
Schedule Comparative (5.5.3.15)



```
Purchase Order: PO1030                                    Line:  1
          Item: it-002                                      UM: EA
      Supplier: shipsup   Ship Schedule Suppliers, INC
       Ship-To: 10000

                                  Release ID                   Release ID
                                  ---------------------------  ---------------------------
                                  19990111-001                 19990113-005

Date     Time  Int Reference            Discrete    Cumulative       Discrete    Cumulative
                                            Qty          Qty Q            Qty          Qty Q     Qty Diff Cum Qty Diff
-------- ----- --- ------------------ ---------- ------------ - ---------- ------------ - ---------- ----------
Prior                                                      0.0                        0.0
01/11/99       W                            0.0          0.0 P
01/13/99 08:00 D                            0.0          0.0 F
01/14/99 08:00 D                            0.0          0.0 F
01/18/99                                                                75.0         75.0 F       75.0       75.0
01/18/99       W                           75.0          0.0 P                                    -75.0       75.0
01/25/99                                                               100.0        175.0 F      100.0      175.0
01/25/99       W                          100.0          0.0 P                                   -100.0      175.0
02/01/99                                                                80.0        255.0 P       80.0      255.0
02/01/99       W                           80.0          0.0 P                                    -80.0      255.0
02/08/99                                                                70.0        325.0 P       70.0      325.0
02/08/99       W                           70.0          0.0 P                                    -70.0      325.0
02/15/99                                                               100.0        425.0 P      100.0      425.0
02/15/99       W                          100.0          0.0 P                                   -100.0      425.0
02/22/99                                                                80.0        505.0 P       80.0      505.0
```

Fig. 17.25
Schedule Comparative Output

Use Schedule Type to select which schedule type to compare. You must specify two specific release IDs for the schedule releases you are comparing.

Note When the Supplier Shipping Schedules module is inactive, you cannot compare type 5 or type 6 schedules.

Comparing the Current Release with the Prior Release

Use Ship Schedule Variance Compare (5.5.7.13) to compare the current type 6 shipping schedule release with the prior shipping schedule release.

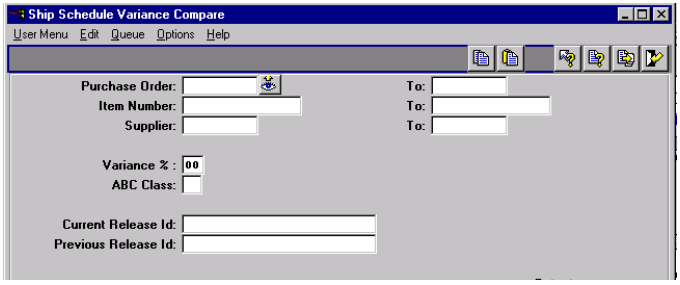
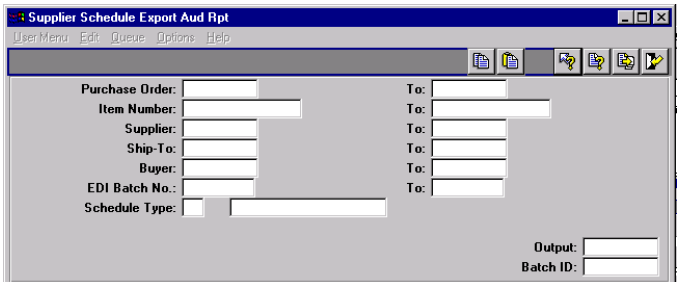


Fig. 17.26
Ship Schedule Variance Compare (5.5.7.13)

Reviewing EDI Data

Use Supplier Schedule Export Aud Rpt (35.19) to review EDI data details for any exported schedules. You can search and review schedules by EDI batch number, buyer, or any other selection criteria.

Fig. 17.27
Supplier Schedule Export Aud Rpt (35.19)



When the Supplier Shipping Schedules module is active, the audit report output displays an additional data column that details the type of schedule being reported (see Figure 17.28). When this module is inactive, the extra detail column does not display.

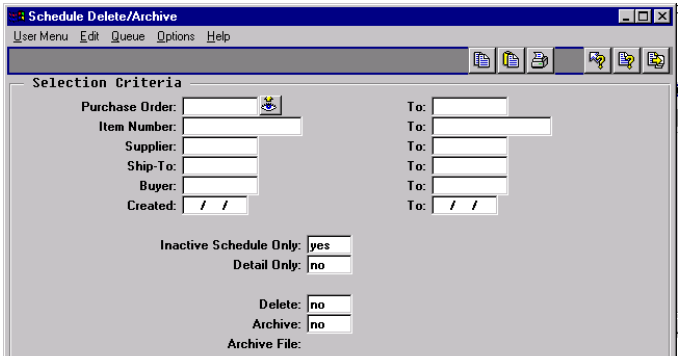
Fig. 17.28
Supplier Schedule Export Aud Rpt Output

```
edexrp04.p              35.19 Supplier Schedule Export Aud Rpt        Date: 03/15/99
Page: 1                             Quality Products Corp.            Time: 15:26:55

Supplier Item No Ship-To Order Ln Release ID   EDI Date   EDI Time   Batch Type
-------- ------- ------- ----- -- ----------   ---------  ---------  ----- ----
00201    88-100  10000   PO111  1 19990225-001 02/25/98   15:11:30   41    36 Plan
00201    88-100  10000   PO111  1 19990225-001 02/25/98   15:11:30   41    36 Ship
```

Deleting and Archiving Schedules

Use Schedule Delete/Archive (5.5.3.23) to delete and archive unneeded or inactive schedule releases. When you delete or archive schedules while the Supplier Shipping Schedules module is active, your changes affect all three supplier schedule types. When this module is inactive, the delete/archive program affects only supplier schedules (type 4).

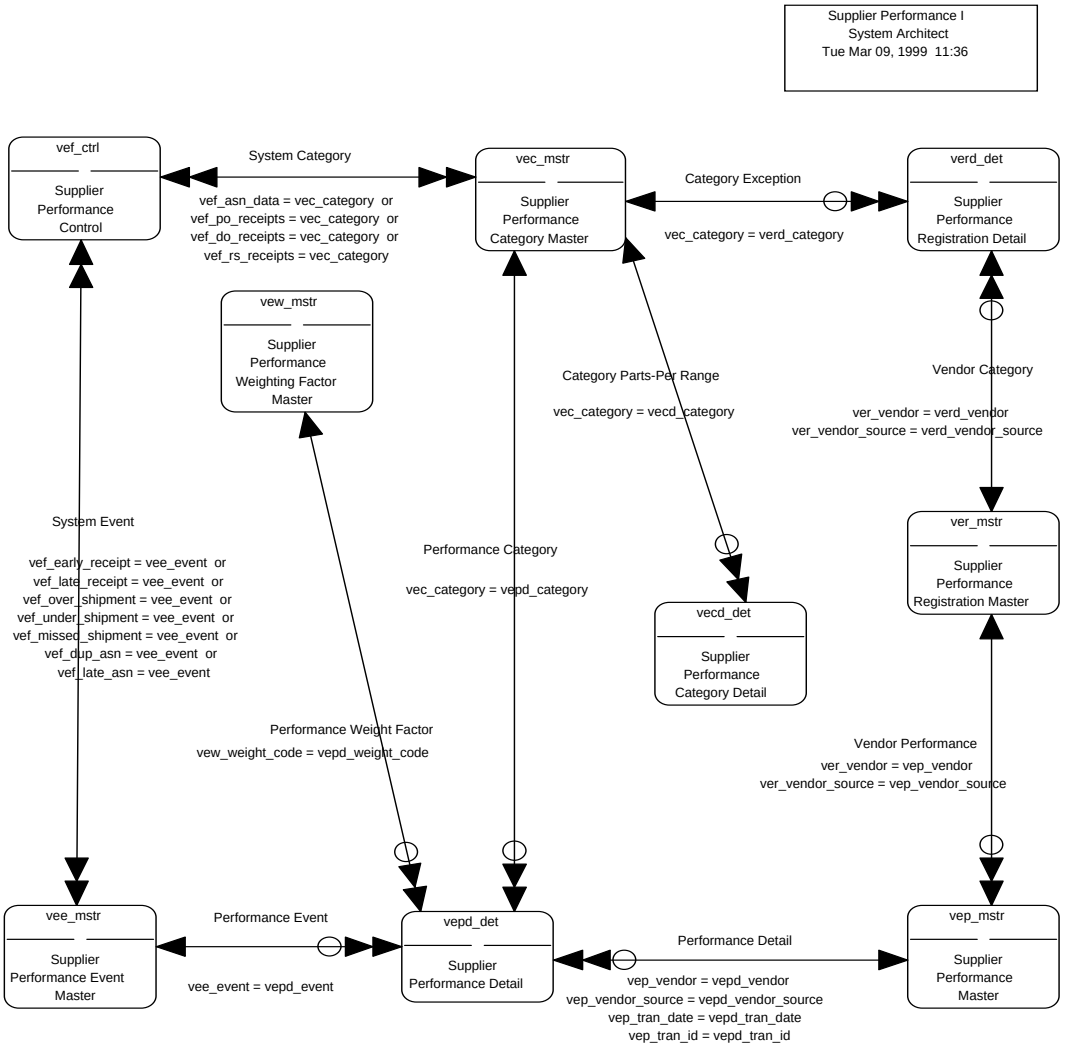
Fig. 17.29
Schedule Delete/Archive (5.5.3.23)



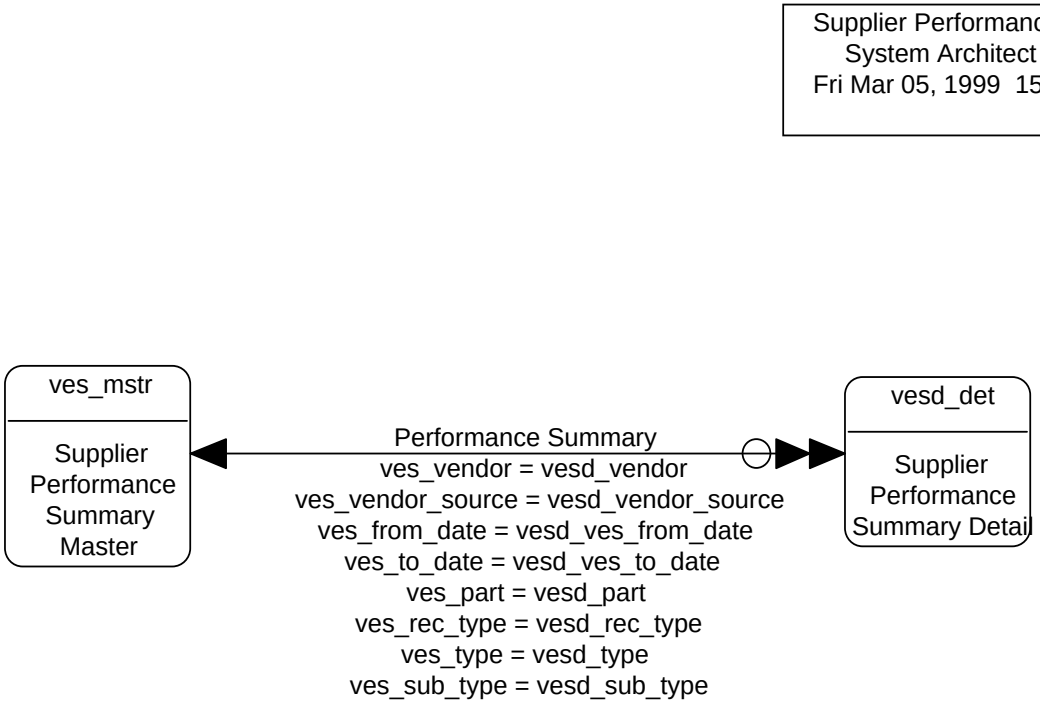
APPENDIX A

File Relationship Diagrams

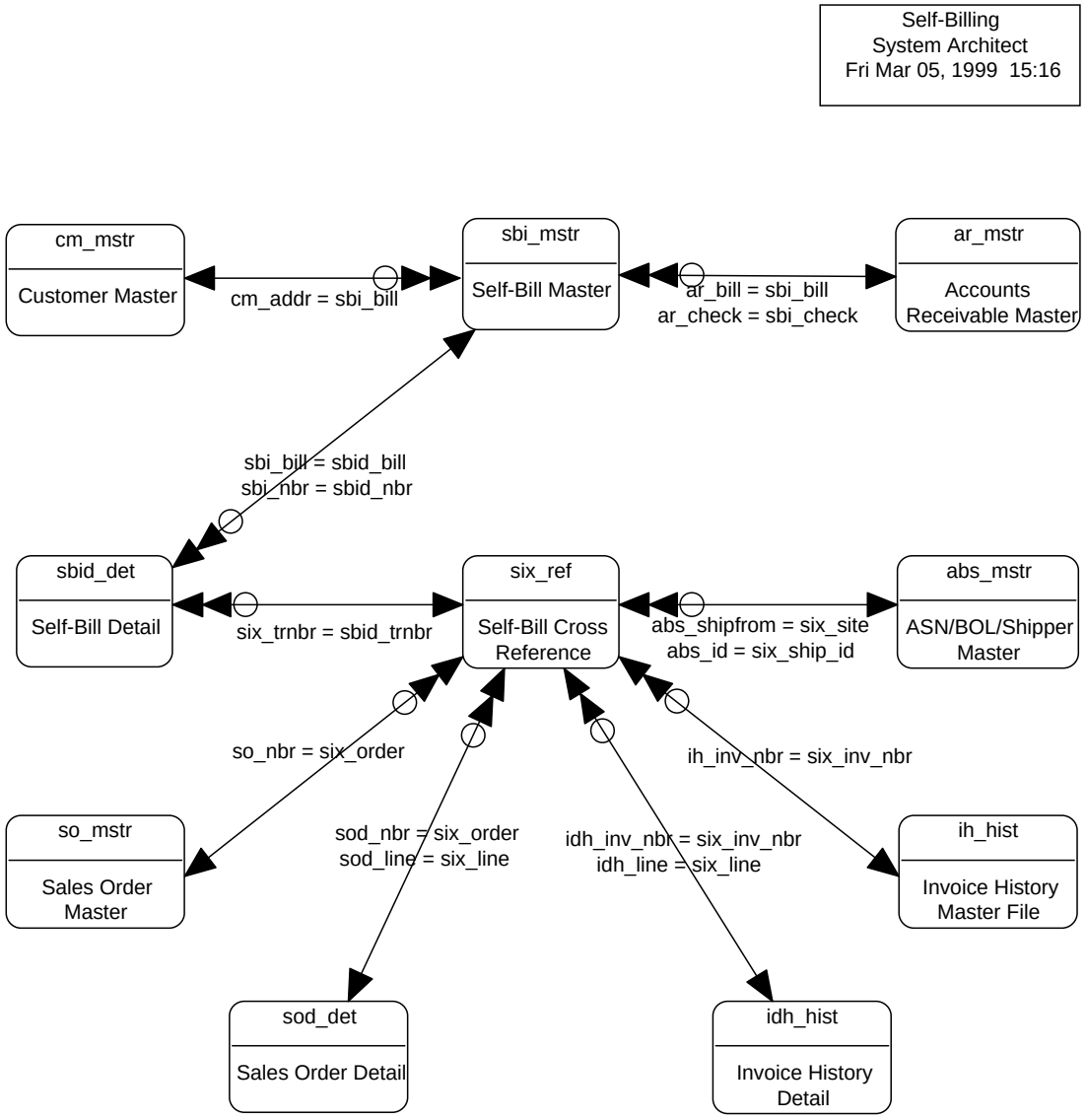
Supplier Performance I



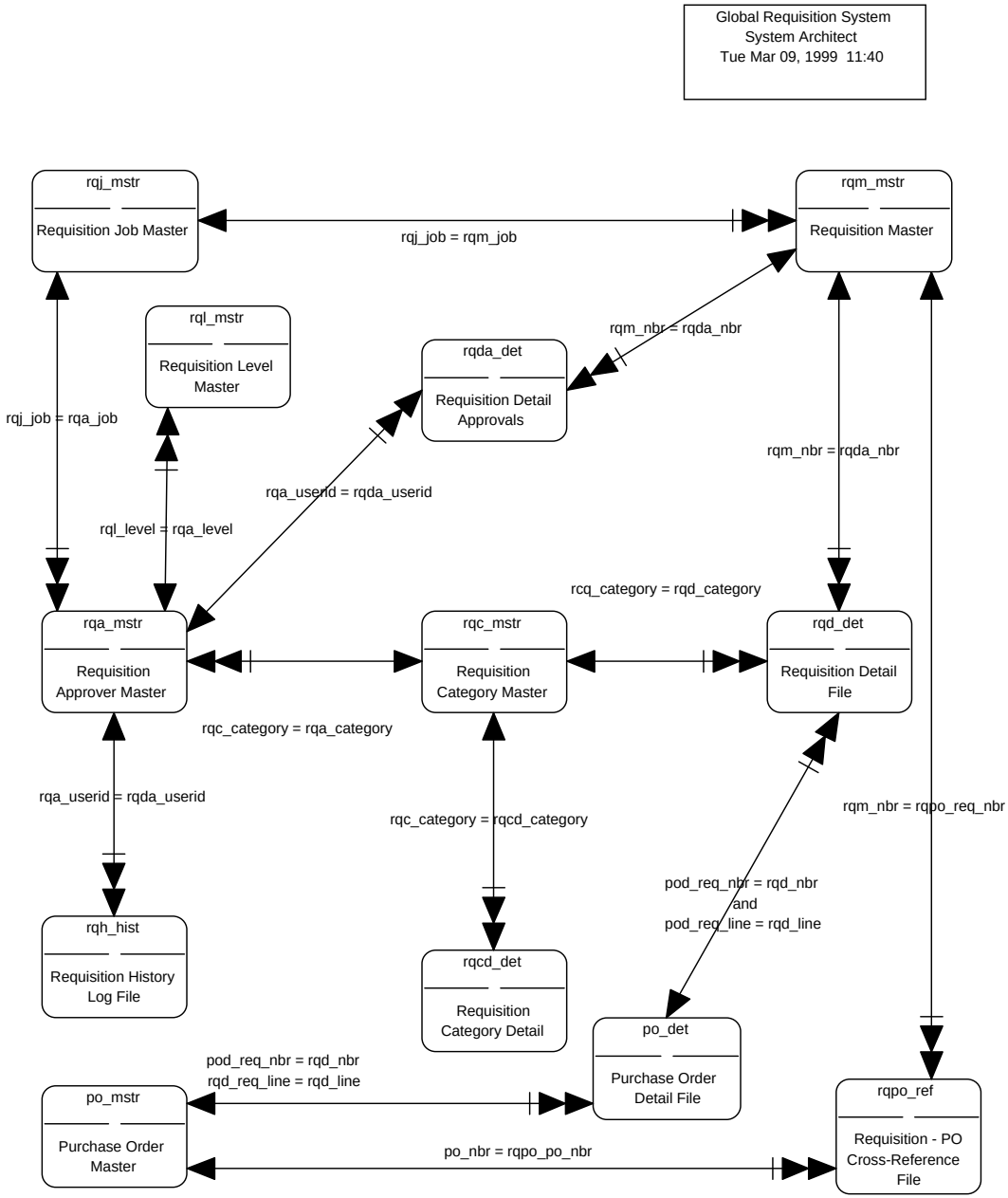
Supplier Performance II



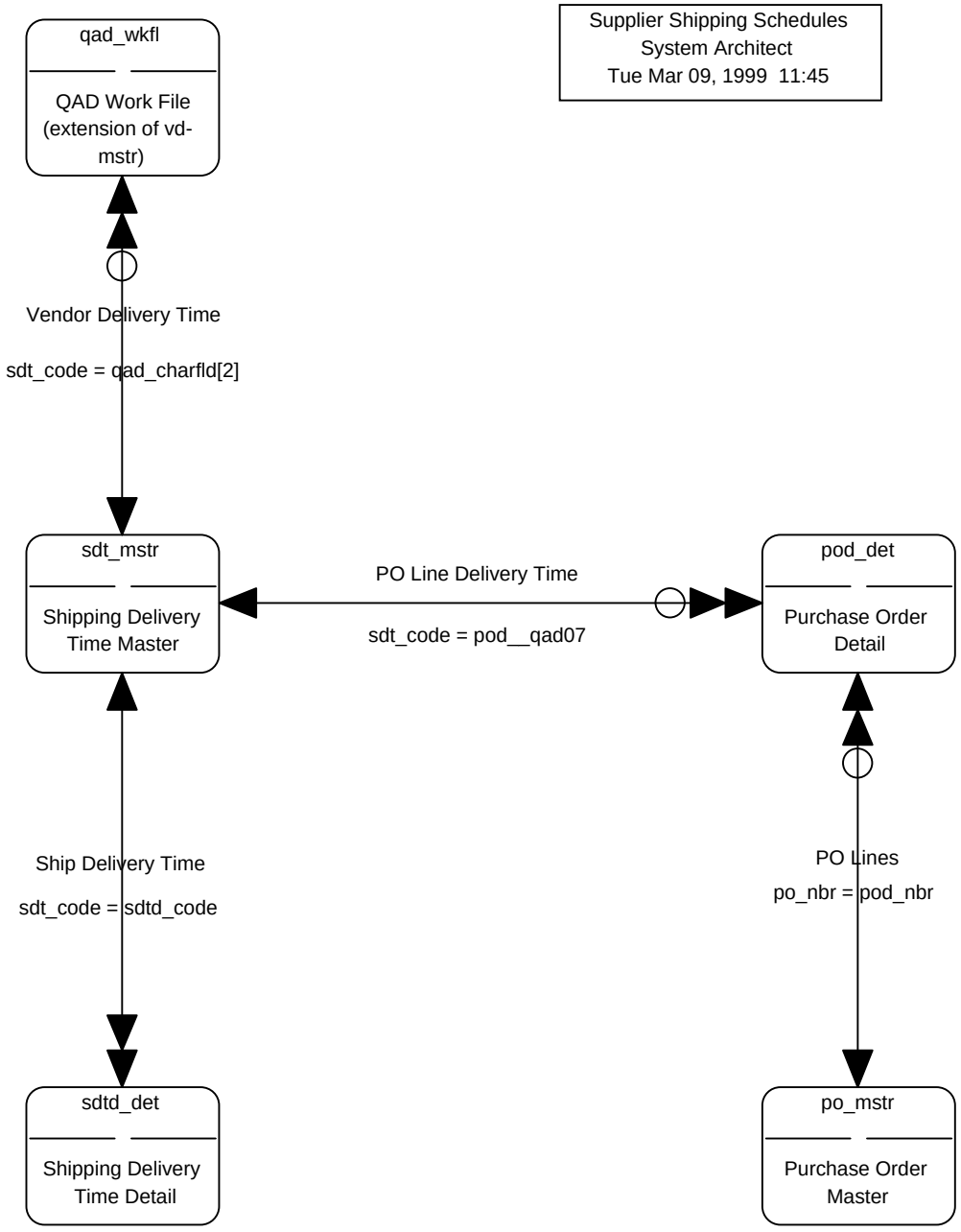
Self-Billing



Global Requisition System



Supplier Shipping Schedules



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