



Release Bulletin

MFG/PRO VERSION 9.0



78-0442A
MFG/PRO Version 9.0
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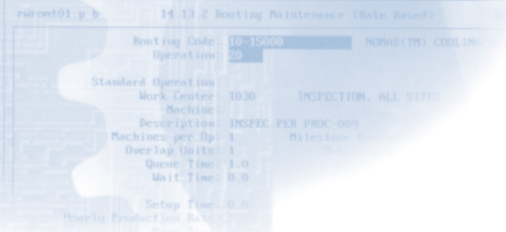
Introduction to MFG/PRO Version 9.0

The chapter provides an overview of major updates included with MFG/PRO Version 9.0.

Overview 2

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Features by Functional Area 4



Routing Maintenance (Date Based)

Routing Code:	10-15000	MANUFACT: COBLIN
Operation:	20	
Standard Operation:		
Work Center:	1030	INSPECTION, ALL SITE
Machines:		
Description:	INSPEC PER PROC-000	
Machines per Op:	1	
Overlap Units:	1	
Queue Time:	1.0	
Wait Time:	0.0	
Setup Time:	0.0	
Ready to Production:		

Overview

MFG/PRO Version 9.0 is a major release, introducing a number of new enhancements and incorporating significant features introduced in previous versions.

This Release Bulletin provides a high-level overview of the major features in MFG/PRO Version 9.0. New enhancements are discussed in detail in Chapter 2. Other significant features are discussed in Chapter 3. Within each chapter, features are discussed in alphabetical order.

Information for each feature is presented in a common format:

- Business need
- MFG/PRO solution
- Key features
- New menu-level programs
- Modified programs

QAD Web Site

This Release Bulletin describes major enhancements only. To ensure complete and up-to-date information on minor updates, ECO listings are available at the QAD Web site. To view ECO listings, use the following address:

http://support.qad.com/software_update_information/eco/

To access the ECO listings, you must have a QAD Web account. 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.

Other 9.0 Documentation

Complete details regarding new features are contained in the standard set of MFG/PRO documentation describing the entire system.

- 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 instructions on accessing MFG/PRO programs with a Web browser over the Internet or an intranet, refer to the *Network 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*.

What's New in 9.0?

- The Advanced Pricing Management (APM) Application Program Interface (API) lets you use the APM 2.2 application to price sales transactions in MFG/PRO.
- ECommerce Gateway is an improved method of managing electronic data interchange (EDI) communications between MFG/PRO and trading partners.
- The Factory Optimizer API lets users take advantage of the features of an advanced planning and scheduling (APS) tool to generate optimized production schedules in MFG/PRO.
- Material Requirements Planning (MRP) to Repetitive Approval enables QAD customers to approve MRP planned orders for repetitive manufacture.
- QAD's Network User Interface (NetUI) for the Java™ platform provides direct access to MFG/PRO programs over the Internet or an intranet.

- PRO/PLUS now includes a Supplier Shipping Schedules module that enhances functions in MFG/PRO Release Management. These enhancements let users generate supplier planning and shipping schedules.
- Q/LinQ provides a complete set of features for the development, administration, and management of application program interfaces to facilitate data exchange between MFG/PRO and external applications.

Features by Functional Area

All of the features listed in Table 1.1 are included in MFG/PRO Version 9.0. The table summarizes features by functional area and indicates in which version of MFG/PRO the feature became available.

Use this table to quickly find the key features introduced in each functional area. For further details on each feature, see the reference listed in the last column of the table.

Table 1.1
Features by
Function

MFG/PRO Area	New Feature	Version	Described On...
Distribution	ECommerce Gateway	9.0	See page 8.
Financials	Multicurrency Enhancements	8.6E	See page 31.
	Integrated Support for Euro	8.6E	See page 36.
General	Externalized Labels	8.6E	See page 42.
Interfaces/APIs	APM API	9.0	See page 6.
	Factory Optimizer API	9.0	See page 12.
	Q/LinQ	9.0	See page 23.
Manager Functions	User Licensing	8.6D	See page 51.
Manufacturing	MRP to Repetitive Approval	9.0	See page 14.
Master Files	Corporate Commodity Codes	8.6E	See page 31.
PRO/PLUS	Global Requisition System	8.6D	See page 43.
	AR Self-Billing	8.6D	See page 46.
	Supplier Performance	8.6D	See page 48.
	Cumulative Ship Reset	8.6D	See page 50.
	Supplier Shipping Schedules	9.0	See page 20.
User Interface	Network User Interface	9.0	See page 16.

New Features in MFG/PRO Version 9.0

This chapter gives you an overview of new features introduced in MFG/PRO Version 9.0.

Advanced Pricing Management (APM) API 6

ECommerce Gateway 8

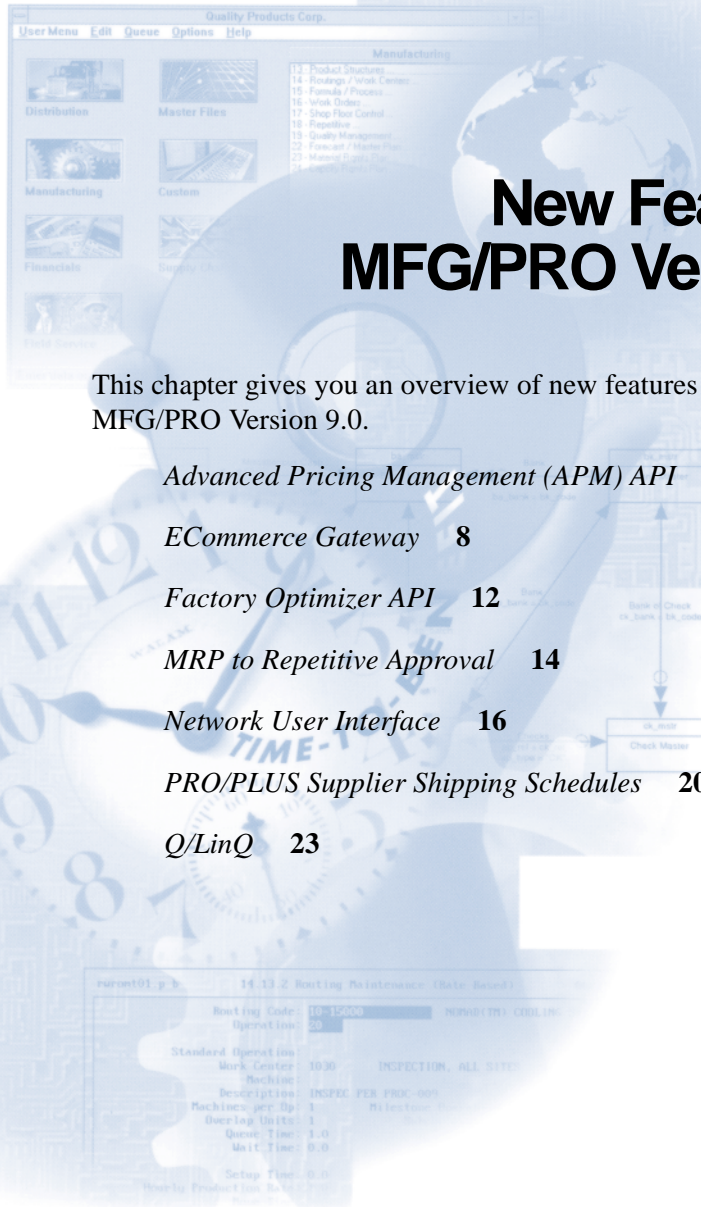
Factory Optimizer API 12

MRP to Repetitive Approval 14

Network User Interface 16

PRO/PLUS Supplier Shipping Schedules 20

Q/LinQ 23



Advanced Pricing Management (APM) API

▶ See *User Guide Volume 10A: External Interfaces*.

The APM application program interface (API) lets you use features of Advanced Pricing Management to price sales transactions in MFG/PRO.

Business Need

Some companies frequently offer promotional discounts or rebate incentives to qualifying customers or groups of customers. In such environments, the same customer may belong to multiple customer groups and qualify for different discounts in each group.

Such companies require a flexible and sophisticated discount pricing and tracking tool to:

- Define complex discount pricing structures for individual customers and groups of customers.
- Correctly price sales transactions based on the promotional discounts that apply to a customer and any groups to which they belong.
- Visibly track amounts spent on promotions and rebates to calculate return on investment and assess the effectiveness of a promotion.

MFG/PRO Solution

Advanced Pricing Management (APM) is an advanced sales transaction pricing application that lets you:

- Set up and maintain simple or complex promotional pricing structures and apply them to user-defined groups of items and customers.
- Record and expedite customer claims.
- Track and analyze promotional spending in detail.

The APM API lets you:

- Generate APM product, customer, and supplier records using master file maintenance programs in MFG/PRO.
- Use APM features to price sales transactions in MFG/PRO.
- Update APM with invoiced item quantities and net prices for tracking against promotions, rebates, budgets, and so on.

- Generate vouchers and credit memos to pay customer claims against promotions and rebates.

Key Features

Using the APM API, you can:

- Categorize customers and items into user- and system-defined groups for easier inclusion in discount pricing structures and to aid budget tracking in APM.
- Use MFG/PRO programs to automatically generate master file records in APM.
- Automatically update applicable APM records when you change or delete master file details in MFG/PRO.
- Associate sales transactions and line items with APM divisions and customer groups to ensure pricing and promotion-tracking accuracy.
- Price MFG/PRO sales transactions based on MFG/PRO price lists generated by APM.
- Issue bonus items to MFG/PRO sales transactions based on bonus stock promotions in APM.
- Automatically update APM with posted invoice data from MFG/PRO, which is used to track promotions, rebates, and budgets in APM.
- Automatically generate Accounts Payable (AP) vouchers or Accounts Receivable (AR) credit memos in MFG/PRO to pay customer claims against APM promotions and rebates.

Modified Programs

Table 2.1 lists MFG/PRO programs that were modified to support the APM API.

Note The following list includes only programs with modifications that are visible in the user interface. Other programs in the Items/Sites, Sales Quotations, Sales Orders/Invoices, and Service/Support Management modules were also modified to exchange pricing and sales data with APM.

Table 2.1
APM API Modified
Programs

Menu Number	Description	Program Name
1.4.1	Item Master Maintenance	ppptmt.p
1.4.3	Item Data Maintenance	ppptmt04.p
1.4.12	Item Master Copy	ppptcp.p
1.10.1.24	Pricing Control File	pppipm.p
2.1.1	Customer Maintenance	adcsmt.p
2.3.1	Supplier Maintenance	advnmt.p
6.1	Sales Quote Maintenance	sqqomt.p
7.1.1	Sales Order Maintenance	sosomt.p
7.1.24	Sales Order Control File	sosopm.p
7.13.1	Pending Invoice Maintenance	soivmt.p
11.7.1.1	RMA Maintenance	fsrmamt.p

ECommerce Gateway

▶ See *User Guide*
Volume 7:
Release
Management.

ECommerce Gateway is an improved method of managing electronic data interchange (EDI) communications between MFG/PRO and trading partners.

Business Need

For many companies, EDI is an increasingly critical element of doing business. These companies need to be able to set up and run EDI simply, efficiently, and effectively without requiring high levels of support.

MFG/PRO Solution

ECommerce is a globally deployable product that provides EDI for MFG/PRO with reduced installation and support requirements.

This module lets you process documents that conform to international EDI document standards. You can exchange documents with most major third-party EDI communications or translation software—referred to collectively as EC subsystems—currently on the market.

Document types supported by ECommerce are sales orders, invoices, advance ship notices, and planning schedules.

Note Because its initial release supports only the document types listed above, ECommerce does not replace standard EDI functions in MFG/PRO.

Key Features

Using ECommerce Gateway, you can:

- Manage documents written for all major EDI standards with a table-based logical structure.
- Store processing logic, EDI document specifications, and trading partner specifications in database tables that you can modify with a set of maintenance programs.
- Use a general file format to move data between systems, supporting interface with any EDI translator that has basic mapping capability.
- Access a predefined library of trading-partner specific documents developed with assistance from key customers and business partners.
- Create new trading partners or documents based on custom specifications.

New Programs

Table 2.2 lists the new programs added to MFG/PRO to support ECommerce.

Menu Number	Description	Program Name
35.21	ECommerce Gateway Menu ...	
35.21.1	Document Import	edixsnf.p
35.21.4	Document Export Menu ...	
35.21.4.1	Shipment ASN Export	edomasn.p
35.21.4.3	Invoice Export	edominv.p
35.21.4.23	Export Reprocessing	edoxrpr.p
35.21.7	Session Report	edpsrp.p
35.21.9	Import/Export Session Menu ...	
35.21.9.1	Exchange Doc Status Inquiry	edxfsiq.p
35.21.9.2	Exchange Doc Status Report	edxfsrp.p
35.21.9.3	Exchange Data Repository Maint	edxrmt.p

Table 2.2
ECommerce
Gateway Programs

Menu Number	Description	Program Name
35.21.9.4	Exchange Data Repository Inquiry	edxriq.p
35.21.9.5	Exchange Data Repository Report	edxrrp.p
35.21.9.8	MFG/PRO Doc Status Inquiry	edmfisiq.p
35.21.9.9	MFG/PRO Doc Status Report	edmfisrp.p
35.21.9.10	MFG/PRO Data Repository Maint	edmfrrmt.p
35.21.9.11	MFG/PRO Data Repository Inquiry	edmfriq.p
35.21.9.12	MFG/PRO Data Repository Report	edmfrrp.p
35.21.9.13	Exchange–MFG/PRO Xref Browse	edbr021.p
35.21.9.14	Exchange–MFG/PRO Xref Report	edrrxrp.p
35.21.9.17	Turnaround Data Maintenance	edtarmt.p
35.21.9.18	Turnaround Data Browse	edbr028.p
35.21.9.19	Turnaround Data Report	edtarrp.p
35.21.9.21	Import Reprocessing	edixrpr.p
35.21.9.22	Export Reprocessing	edoxrpr.p
35.21.13	ECommerce Setup Menu ...	
35.21.13.1	EC Subsystem Definition Maint	edssmt.p
35.21.13.2	EC Subsystem Report	edssrp.p
35.21.13.4	EC Subsystem/Exchange Maint	edsxxmt.p
35.21.13.5	EC Subsystem/Exchange Report	edsxxrp.p
35.21.13.7	Trading Partner Maintenance	edtrptmt.p
35.21.13.8	Trading Partner Browse	edbr024.p
35.21.13.9	Trading Partner Report	edtrprp.p
35.21.13.10	Trading Partner Parameter Maint	edtpmmmt.p
35.21.13.11	Trading Partner Parameter Inq	edtppmiq.p
35.21.13.12	Trading Partner Parameter Report	edtpprp.p
35.21.13.13	Transmission Group Maintenance	edtgmt.p
35.21.13.14	Transmission Group Browse	edbr027.p
35.21.13.15	Transmission Group Report	edtgrp.p
35.21.13.16	Data Cross-Reference Maintenance	edxrefmt.p
35.21.13.17	Data Cross-Reference Browse	edbr022.p
35.21.13.18	Data Cross-Reference Report	edxrefrp.p
35.21.13.21	Data Validation Maintenance	edvalmt.p
35.21.13.22	Data Validation Browse	edbr023.p

Menu Number	Description	Program Name
35.21.13.23	Data Validation Report	edvalrp.p
35.21.13.24	ECommerce Control File	edcpm.p
35.21.15	Transformation Setup Menu ...	
35.21.15.1	Exchange Definition Copy	edxfcp.p
35.21.15.2	MFG/PRO Definition Copy	edmfcp.p
35.21.15.3	Implementation Definition Copy	edmicp.p
35.21.15.6	Exchange Definition Maintenance	edxfmt.p
35.21.15.7	Exchange Definition Inquiry	edxfiq.p
35.21.15.8	Exchange Definition Report	edxfrp.p
35.21.15.10	MFG/PRO Definition Maintenance	edmfmt.p
35.21.15.11	MFG/PRO Definition Inquiry	edmfqi.p
35.21.15.12	MFG/PRO Definition Report	edmfrp.p
35.21.15.13	Implementation Definition Maint	edmimt.p
35.21.15.14	Implementation Definition Inq	edmiiq.p
35.21.15.15	Implementation Definition Report	edmirp.p
35.21.15.17	Transformation Definition Maint	edtrmt.p
35.21.15.18	Transformation Definition Inq	edtriq.p
35.21.15.19	Transformation Definition Report	edtrrp.p
35.21.15.21	ECommerce Function Maintenance	edtrfmt.p
35.21.15.22	ECommerce Function Inquiry	edtrfiq.p
35.21.15.23	ECommerce Function Report	edtrfrp.p
35.21.17	ECommerce Utilities Menu ...	
35.21.17.1	Transformation Definition Copy	edtrcp.p
35.21.17.2	ECommerce Function Copy	edtrfcp.p
35.21.17.5	Export/Import Controller	ediocrl.p
35.21.17.7	Trading Partner Library Load	edtpload.p
35.21.17.8	Trading Partner Library Unload	edtpdstr.p
35.21.17.13	Inbound Delete/Archive	edxfarch.p
35.21.17.14	Outbound Delete/Archive	edmfarch.p
35.21.17.24	ECommerce Control File	edcpm.p

Factory Optimizer API

▶ See *User Guide Volume 10A: External Interfaces*.

MFG/PRO Version 9.0 provides access to advanced planning and scheduling tools for constraint-based planning and optimization within a plant.

The advanced planning and scheduling (APS) tool, Factory Optimizer, is a decision-making framework for creating an optimal production scenario using optimization techniques based on users' constraints and objectives.

Note The Factory Optimizer API is part of the MFG/PRO 9.0 release. The Factory Optimizer application is packaged and distributed separately.

Business Need

Supply chain management has become a strategic imperative for QAD customers. They need global visibility and synchronization, global strategic decision making and optimization, as well as global planning with local execution.

QAD customers require effective cost and asset management to improve profitability in a production environment that is increasingly complex and dynamic. They are facing shorter design and production cycles, shorter product life cycles, and global competition with emerging markets and channels.

MFG/PRO Solution

The Factory Optimizer API gives MFG/PRO users direct access to APS tools for enhanced planning and scheduling:

- To minimize inventory and planning cycle time
- To evaluate trade-offs among due date, cycle time, and utilization
- To support dynamic lead times

Key Features

The Factory Optimizer API enables communication between Factory Optimizer and MFG/PRO, letting you:

- Export factory-floor data required for creating optimized schedules from MFG/PRO to Factory Optimizer.
- Transfer optimized production schedules from Factory Optimizer to MFG/PRO for execution.

The API lets you access the following Factory Optimizer functions:

- **Material Capacity Planner (MCP)** does real-time, plant-level planning based on dynamic and simultaneous resource and material constraints. To optimize manufacturing operations, the modeling takes into account complex bills-of-material, machine setup, alternate routings, and extensive pegging.
- **Reactive Dynamic Scheduler (RDS)** does detailed scheduling for production synchronization and resource optimization at the shop-floor level. Optimization is based on global objectives, cycle time, customer responsiveness, and resource utilization. Users can select among many algorithms. Rescheduling is fast and easy.
- **Real-Time Event Monitor (REM)** tracks events on the shop floor and generates real-time equipment dispatch. It is a series of smart APIs that connect to commercial or in-house shop floor control systems.

New Programs

Table 2.3 lists the new programs added to MFG/PRO to support the Factory Optimizer interface.

Menu Number	Description	Program Name
36.5.5	Planning Interfaces...	
36.5.5.1	Planning Data Export	giapexp.p
36.5.5.2	Planning Schedule Import	giapimp.p

Table 2.3
Factory Optimizer
API Programs

MRP to Repetitive Approval

▶ See *User Guide Volume 3: Manufacturing*.

Material Requirements Planning (MRP) to Repetitive Approval enables QAD customers to approve MRP planned orders for repetitive manufacture.

Business Need

Customers who typically use production lines rather than discrete work orders need to be able to quickly update line schedules based on planned orders generated by MRP.

MFG/PRO Solution

MRP to Repetitive Approval eliminates the need to manually move MRP planned orders for manufactured items onto production line schedules.

Users can now identify items as typically manufactured on production lines. When MRP plans production for these items, users can approve the planned orders for line-manufactured items much as they do for work and purchase orders.

Items on approved orders are added to the production schedule, and are visible in Line Sequence Workbench (18.1.10 and 18.22.1.10) for one or more designated lines. The production sequence for items on a production line can then be modified, tested, and finally placed on a repetitive schedule.

Key Features

Using MRP to Repetitive Approval, you can:

- Identify items typically manufactured on a production line.
- Indicate whether an item has one primary production line or can be produced on several.
- Specify allocation percentages for items with split-line production.
- Approve MRP planned orders and automatically update related production-line schedules.

New Programs

Table 2.4 lists the new programs added to MFG/PRO to support MRP to Repetitive Approval.

Menu Number	Description	Program Name
18.1.11	Line Allocation Maintenance	splamt.p
18.1.12	Line Allocation Inquiry	splaiq.p
18.22.1.11	Line Allocation Maintenance	splamt.p
18.22.1.12	Line Allocation Inquiry	splaiq.p
18.22.25.4	Production Line Update	spcvln.p
18.25.4	Production Line Update	spcvln.p
23.8	Planned Repetitive Sched Approve	mrwoln.p

Table 2.4
MRP to Repetitive
Approval Programs

Modified Programs

The following programs have been modified to support MRP to Repetitive Approval.

- Item Master Maintenance (1.4.1), Item Inventory Data Maintenance (1.4.7), and Item-Site Inventory Data Maintenance (1.4.16) let you specify L (line) for the Pur/Mfg field.
- All programs that use the Pur/Mfg field have been adjusted to accommodate the L (line) value.
- Production Line Maintenance (18.1.1 and 18.22.1.1) has an additional field for designating a line as an item's primary line.
- Planned Work Order Approval (23.10) has an additional field for approving line-manufactured items.
- Planned Purchase Order Approval (23.11) has been modified to allow the approval of both manufactured and line-manufactured items.

Conversion

To implement MRP to Repetitive Approval for a converted or upgraded system, run the Production Line Update utility (18.25.4 or 18.22.25.4) after completing your conversion or upgrade.

If you have set up generalized codes for the Pur/Mfg field, you must add L (line) as a valid code for *pt_pm_code* using Generalized Codes Maintenance (36.2.13).

You can modify Pur/Mfg codes for existing items one at a time using item maintenance functions, or use a batch file to update some or all of them automatically.

For more information on implementing MRP to Repetitive Approval for a converted or upgraded database, see the section on performing post-conversion steps in the chapter titled “Convert an Existing Database” in the *MFG/PRO Installation Guide* for your system.

Network User Interface

▶ See the *Network User Interface Guide* for details.

QAD’s Network User Interface for the Java platform provides direct access to MFG/PRO programs over an intranet or the Internet.

Business Need

In today’s fast-paced business environments, companies need easy and efficient methods of implementing MFG/PRO. Users require rapid access to MFG/PRO applications, with optimized performance.

In addition, companies providing access to MFG/PRO in Internet or intranet environments require improved data security methods to prevent valuable corporate resources from being compromised.

MFG/PRO Solution

The Network User Interface (NetUI) lets users access MFG/PRO programs from a Web browser, eliminating the need to install MFG/PRO components on client machines. Traffic between client and server is minimized as only information requested by end users is transferred from server to client. NetUI provides fast and secure access to MFG/PRO functions.

NetUI can be used in two forms: a full interface and an embedded interface.

- The full interface follows a dual-pane model, similar to Windows Explorer, that is familiar to PC users. It includes a tree menu, ability to access multiple programs simultaneously, and a consistent Windows-based interface.
- The embedded interface is designed to allow users to access one or more specific programs from another Web page. Using this interface reduces training costs for the occasional user, since they do not need to know anything about navigating the MFG/PRO system. Simply clicking on a link displays the information they need.

NetUI browse, inquiry, and report programs display in a full graphical user interface. Maintenance programs display in terminal-emulation windows in a character interface.

Key Features

Using the features of the Network User Interface, you can:

- Execute MFG/PRO programs using any Web browser supporting the Java plug-in.
- Run multiple MFG/PRO programs simultaneously through the full interface.
- Create a company Web page and link MFG/PRO programs to it with the embedded interface.
- Use a comprehensive security scheme to restrict or authorize user access to browses, inquiries, and reports.
- Ensure network security through the use of Secured Socket Layer (SSL) encryption.
- Search and navigate the complete MFG/PRO User Guide set in HTML format using your browser.
- Create and access URL links to frequently-used Web pages and internet addresses.
- Print browses, inquiries, and reports using local and remote printers.

New Programs

Table 2.5 lists the new programs added to MFG/PRO to support Web security and other NetUI setup tasks.

Table 2.5
NetUI Programs

Menu Number	Description	Program Name
36.3.21	Web Security Menu...	
36.3.21.1	Program Information Maintenance	mgpgmimt.p
36.3.21.2	Program Information Browse	mubr060.p
36.3.21.3	Rule Maintenance	mrulemt.p
36.3.21.4	Rule Master Browse	mubr027.p
36.3.21.5	Constant Maintenance	mgnstmt.p
36.3.21.6	Constant Master Browse	mubr058.p
36.3.21.7	Profile Maintenance	mprofmt.p
36.3.21.8	Profile Master Browse	mubr057.p
36.3.21.9	Profile Program Maintenance	mproprgmt.p
36.3.21.10	Profile Program Browse	mubr035.p
36.3.21.11	Profile Program Rule Maintenance	mproprlmt.p
36.3.21.12	Profile Program Rule Browse	mubr036.p
36.3.21.14	Group Maintenance	mgrpmt.p
36.3.21.15	Group Master Browse	mubr032.p
36.3.21.16	Group Constants Value Maint	mgrcnmt.p
36.3.21.17	Group Constants Value Browse	mubr034.p
36.3.21.18	User Group Security Maintenance	mgusrmt.p
36.3.21.20	User Constants Value Maintenance	mguscmt.p
36.3.21.21	User Constants Value Browse	mubr029.p
36.3.21.23	Web Rpts and Utilities Menu...	
36.3.21.23.1	Profile Master Report	mprofrp.p
36.3.21.23.2	Profile Where-Used Report	mprofwurp.p
36.3.21.23.3	Profile Program Rule Report	mproflrp.p
36.3.21.23.4	Profile User Report	mprofusrp.p
36.3.21.23.5	Constant Master Report	mgnstrp.p
36.3.21.23.6	Constant Where-Used Report	mgnwurp.p
36.3.21.23.7	Group Master Report	mgrprrp.p
36.3.21.23.8	Group Constants Value Report	mgrcnrp.p

Menu Number	Description	Program Name
36.3.21.23.9	Program Constant Report	mgpgcnrp.p
36.3.21.23.10	Rule Master Report	mgrulerp.p
36.3.21.23.11	Rule Where-Used Report	mgrlwurp.p
36.3.21.23.13	User Constants Value Report	mguscnrp.p
36.3.21.23.14	User Profile Report	mgusprp.p
36.3.21.23.15	User Profile Program Rule Report	mguspprp.p
36.3.21.23.16	Buffer Where-Used Inquiry	mgbfwuiq.p
36.3.21.23.18	Program Information Update	mgpgmiut.p
36.3.21.23.19	Profile Copy Utility	mfgprofcp.p
36.3.21.23.21	Browse UI Records Maintenance	mgusrbmt.p
36.3.21.24	Web Security Control File	mgsecpm.p
36.20.10	Web Menu...	
36.20.10.1	User Option Maintenance	mgusromt.p
36.20.10.2	User Option Browse	mgb062.p
36.20.10.3	User Option Telnet Maintenance	mgusrmt.p
36.20.10.4	User Option Report	mgusrrp.p
36.20.10.8	Menu URL Maintenance	mgurlmt.p
36.20.10.9	Menu URL Browse	mgb220.p
36.20.10.11	Browse URL Maintenance	mgburlmt.p
36.20.10.12	Browse URL Browse	mgb221.p
36.20.10.13	Help URL Maintenance	mghurlmt.p
36.20.10.15	Session Master Maintenance	mgssmt.p

Modified Programs

All standard MFG/PRO programs have been modified to be accessible from the Network User Interface.

PRO/PLUS Supplier Shipping Schedules

▶ See the *PRO/PLUS User Guide*.

The PRO/PLUS package now includes a new Supplier Shipping Schedules module that enhances functions in MFG/PRO Release Management. These enhancements let users generate supplier shipping schedules for short-term requirements and supplier planning schedules for mid-term and long-term requirements. Daily item requirements on shipping schedules can be bucketed by hours or minutes.

Note These enhancements are not included with the standard 9.0 release. They are distributed separately as part of the PRO/PLUS package.

Business Need

Many companies that operate in just-in-time environments regularly provide detailed shipping schedules to key suppliers telling them which items they need, how many, and when they need them. Suppliers, in turn, use these schedules to plan production and deliveries.

Companies who use supplier schedules need to be able to distinguish between long-term planning schedules and short-term shipping schedules. For the short term, they need to be able to track item requirements at a detailed level—by hours or minutes rather than days.

MFG/PRO Solution

The Supplier Shipping Schedules module enhances the standard MFG/PRO supplier schedule functions to support two new schedule types for transmission to suppliers. With the enhanced supplier schedule functions, you can generate:

- Planning schedules with long- or medium-term item requirements
- Shipping schedules for shorter-term requirements

You can create ship delivery time (SDT) codes to indicate how often during the day you require deliveries. Item requirements on supplier shipping schedules are automatically bucketed by hours or minutes during schedule generation.

In addition, you can set up schedule defaults in a control file and then customize these defaults for individual suppliers. For example, you can

associate default delivery times with individual suppliers. You can also generate new reports comparing shipping and planning schedules or various releases of a schedule.

Key Features

Using the features of Supplier Shipping Schedules, you can:

- Generate shipping schedules for short-term requirements and planning schedules for medium- and long-term requirements.
- Generate release IDs based on the date and time of release creation. Unlike other features of this enhancement, this option is available to all users of MFG/PRO Version 9.0 and is not exclusive to the PRO/PLUS package.
- Set up default schedule details, and then tailor defaults for individual suppliers as needed.
- Associate default delivery times with individual suppliers and scheduled orders.
- Choose whether to generate shipping schedules from MRP-driven item requirements as part of Scheduled Order Maintenance (5.5.1.13).
- Choose which types of schedules to update from Schedule Update from MRP (5.5.3.1).
- Choose whether to generate schedules when there are no item requirements from MRP. Schedules with zero item requirements can be sent to suppliers to indicate that no new shipments are needed.
- Automatically bucket daily item requirements in shipping schedules by hours or minutes during schedule generation.
- Optionally update planning schedules with changes made to their associated shipping schedules.
- Choose which schedule types to print or export in Schedule Print (5.5.3.8), Schedule Print in Fax Format (5.5.3.9), and Supplier Schedule Export (35.18).
- View variances between planning schedules and their associated shipping schedules or between current shipping schedules and previously released shipping schedules.

New Programs

Table 2.6 lists the new programs added to MFG/PRO to support the Supplier Shipping Schedules module.

Table 2.6
Supplier Shipping
Schedules
Programs

Menu Number	Description	Program Name
5.5.7	PRO/PLUS Supplier Schedules...	
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

Modified Programs

Most of the supplier schedule programs in the Release Management module were modified to support this enhancement. In addition, EDI functions related to supplier schedules were updated, including Supplier Schedule Export (35.18) and the format for the 830 and 862 EDI documents.

Q/LinQ

Q/LinQ provides a complete set of features for the development, administration, and management of application program interfaces (APIs). Q/LinQ is offered in two forms:

- Runtime Q/LinQ is part of standard MFG/PRO. It provides an environment to administer and execute advanced application interfaces provided by QAD or QAD partner organizations. The Universal Logistics API is included with Q/LinQ. A new generation of application interfaces will be made available for execution by Q/LinQ as they are developed.
- Developer Q/LinQ is separately licensed. It comes with the technical information and tools required to develop custom interfaces that allow MFG/PRO to communicate with any external system.

Tip
QAD's Global Implementation Services builds custom APIs.

Runtime Q/LinQ

Business Need

Companies that use MFG/PRO frequently require enhanced functionality to support their particular processes, products, and systems.

These companies want to select and implement the applications that best meet their specific needs and still be able to share data with MFG/PRO. To do this, they need a flexible, cost-effective, and easy-to-implement way to exchange data.

MFG/PRO Solution

Runtime Q/LinQ lets users administer and manage interfaces built with Developer Q/LinQ. It also lets users import data from ASCII files or from PROGRESS procedure output. MFG/PRO processes the data in the same manner as when it is entered directly through the user interface screens.

▶ See *User Guide Volume 10B: External Interfaces*.

Q/LinQ is a powerful and flexible alternative to both the MFG/PRO CIM interface and Application Data Interface (ADI), offering more complete systems integration, faster data processing, concurrent execution of multiple scripts, and improved error logging and reporting capabilities.

Note You can continue to use the CIM Interface, which QAD still supports.

Q/LinQ also includes functions for exchanging sales order and inventory management information between MFG/PRO and an external logistics system using an XML-based (Extensible Markup Language) BOD (business object document) transfer technique.

Key Features

Using Runtime Q/LinQ, you can:

- Administer and use any of the APIs created with the tools provided in Developer Q/LinQ.
- Maximize performance and stability for API transactions through an asynchronous interface.
- Import data from PROGRESS programs and text files, including files formatted for the CIM Interface.
- Run multiple concurrent import and export sessions.
- Log messages, report errors, and send E-mail to inform users of data transfer successes or failures.
- Query the status and contents of transaction and error files, edit or rerun transactions with errors, and archive or delete files according to specified criteria.
- Restart the data-exchange process from the last successfully completed step if processing is interrupted.
- Use a direct interface to IBM's MQSeries middleware for secure communications between MFG/PRO and external systems. Other CORBA-compliant (Common Object Request Broker Architecture) middleware can also be easily integrated.
- Apply standards such as the Open Applications Group Integration Specification (OAGIS) and XML data format.
- Export data to and import data from a logistics system using the Universal Logistics API.

Tip
TSI Mercator must be installed to operate this interface.

New Programs

Table 2.7 lists the new programs added to MFG/PRO to support Q/LinQ and the Universal Logistics API.

Menu Number	Description	Program Name
36.5.7	Logistics Interface Menu...	
36.5.7.1	Logistics System Maintenance	lglgsmt.p
36.5.7.2	Logistics System-Site Reference	lgsimt.p
36.5.7.4	Logistics Item Cost Export	lgsctex.p
36.5.7.6	Logistics Inventory Export	lglldref.p
36.5.7.12	Sales Order Owner Change	lgsocown.p
36.5.7.13	Mass Item Export	lgmssyit.p
36.5.7.14	Mass Customer Export	lgsycu3e.p
36.8	Q/LinQ...	
36.8.1	Register External Application	qqaprmt.p
36.8.2	Export Specification Maint	qqespmt.p
36.8.3	Import Specification Maint	qqispmt.p
36.8.5	Interface Session Monitor	qqsesmon.p
36.8.7	Send Export Documents	qqsnd.p
36.8.9	Receive Import Documents	qqrcv.p
36.8.10	Process Import Documents	qqimprc.p
36.8.11	Debug CIM Document	qqimdebug.p
36.8.12	Process Received Acknowledgment	qqprcack.p
36.8.13	Dump Export/Import Doc for Edit	qqdp.p
36.8.14	Reload Edited Export/Import Doc	qqld.p
36.8.15	Document Control Tag Maint	qqtagmt.p
36.8.16	Export/Import Document Query	qqbr.p
36.8.17	Export/Import Document Report	qqierp.p
36.8.18	Dump Export/Import Docs to File	qqwrt.p
36.8.23	Export/Import Doc Delete/Archive	qqrup.p
36.8.24	Q/LinQ Control File	qqctrmnt.p

Table 2.7
Q/LinQ and
Universal Logistics
API Programs

Developer Q/LinQ

Business Need

Developer Q/LinQ addresses the same needs as Runtime Q/LinQ but provides tools for companies who require more complex data exchange with non-PROGRESS applications.

MFG/PRO Solution

▶ See *Developer Q/LinQ Technical Reference*.

Developer Q/LinQ provides the tools for creating interfaces to other applications such as logistics and distribution systems, factory automation systems, scheduling systems, and sales order entry applications.

By providing an infrastructure that supports complex data mapping and exchange, Developer Q/LinQ reduces the time and resources that companies must spend integrating applications for data sharing with MFG/PRO.

Developer Q/LinQ provides the tools that developers need to:

- Build custom APIs that allow Q/LinQ to communicate with any external system
- Build custom APIs to map data
- Publish data to Q/LinQ from MFG/PRO applications
- Build custom gateway programs that directly access the MFG/PRO database

Key Features

In addition to supporting the features of Runtime Q/LinQ, with Developer Q/LinQ you can build and implement APIs to external systems using:

- Language-specific API specifications and parameter definitions
- Libraries of routines
- UNIX and NT include files
- Java classes
- Sample adapters
- Powerful third-party data-mapping tools such as TSI Mercator. A mapping adapter for Mercator is included. Other mapping solutions can be easily integrated if necessary.

Incorporated Features in MFG/PRO Version 9.0

This chapter lists significant features incorporated in MFG/PRO Version 9.0.

Corporate Commodity Codes 30

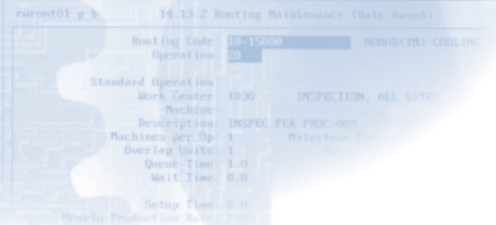
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Routing Maintenance (Basic Screen)

Routing Code:	10-15000	MANUFACTURE CHBLIN
Operation:	20	
Standard Operation:		
Work Center:	1030	INSPECTION, ALL SITE
Machines:		
Description:	INSPEC PER PROC-000	
Machines per Op:	1	
Overlap Units:	1	
Queue Time:	1.0	
Wait Time:	0.0	
Setup Time:	0.0	
Ready Production:		

Corporate Commodity Codes

▶ See *User Guide Volume 6: Master Files*.

MFG/PRO now supports corporate commodity codes.

Note Corporate commodity codes are distinct from the commodity codes used to classify goods for Intrastat reporting purposes. Intrastat codes are typically defined based on the European Union's Combined Nomenclature and are associated with items in Item Intrastat Data Maintenance (2.22.6). They are used for external reporting and only available to users of Intrastat.

Business Need

In some business environments, it is a common practice to use commodity codes to group items for internal business needs. For example, all suppliers providing a certain kind of commodity—represented by a commodity code—may be rated together, regardless of the particular item.

MFG/PRO Solution

Valid corporate commodity codes can be created for grouping sets of items together. You can directly link sets of items to a commodity code in a parent/child relationship or specify the commodity code for individual items.

Key Features

Using corporate commodity codes, you can:

- Create valid commodity codes in Commodity Code Maintenance (1.4.19).
- Associate multiple items with a commodity code in Commodity Code Maintenance (1.4.19).
- Alternately, specify a corporate commodity code for each item in Item Master Maintenance, Shipping Data Frame (1.4.1) or Item Inventory Data Maintenance (1.4.5).
- View an item's associated commodity code in Item Master Inquiry (1.4.2).

New and Modified Programs

Table 3.1 lists the new and modified programs to support commodity codes.

Menu Number	Description	Program	New/Mod
1.4.19	Commodity Code Maintenance	ppcommt.p	New
1.4.1	Item Master Maintenance	ppptmt.p	Modified
1.4.2	Item Master Inquiry	pptiq05.p	Modified
1.4.5	Item Inventory Data Maintenance	ppptmt01.p	Modified

Table 3.1
New and Modified
Programs for
Commodity Codes

Enhanced Support for Multiple Currencies

MFG/PRO now provides enhanced multiple-currency capabilities to support the euro—the single European currency introduced by the European Monetary Union (EMU).

▶ See *User Guide*
Volume 4:
Financials.

Business Need

The EMU introduced a single currency—the euro—on January 1, 1999, with a transition period lasting until July 1, 2002. The euro replaces the existing national currencies of the participating EMU countries, which are no longer currencies in their own right, but instead are considered denominations of the euro.

The timetable for the introduction of the euro within the participating countries is governed by European legislation and defines the following gradual transition:

- Until the end of 1998, the existing national currencies were the single representative currency of the participating countries. Banks and financial institutions within these countries began to prepare for the introduction of the euro, to ensure a smooth transition to the new currency.
- On December 31, 1998, the exchange rates between the euro and existing national currencies participating in the EMU were irrevocably fixed.

- On January 1, 1999, the euro became the currency of the participating countries and the old national currencies became denominations of the euro. The euro must be used as an intermediary when converting from one member nation currency to another. This multi-step conversion is known as triangulation.

The following steps must be completed for triangulation to be valid.

- The original national currency is converted into euros using the fixed six-digit conversion rate.
 - The euro amount is rounded to no less than three decimal places.
 - The euro amount is converted into the target national currency using the fixed six-digit conversion rate and rounded to two decimal places.
- On January 1, 2002, euro coins and banknotes will be introduced. A transitional period lasts until July 1, 2002. During this time, both euro banknotes and coins and the national currency banknotes and coins are in circulation.
 - Beginning July 1, 2002, the old national currencies will cease to be legal tender.

Target Audiences

- European companies that are located in EMU countries. This includes both those who convert their database currency to the euro on January 1, 1999, as well as those who plan to do it later, by January 1, 2002.
- Companies located in non-EMU countries conducting business with companies located in EMU countries.

MFG/PRO Solution

MFG/PRO lets customers in the EMU switch their database currency to the euro and convert existing financial data. It also enables customers to work with the euro on a business-transaction level during the transition and conversion phases of the introduction of the euro.

When a company chooses not to switch their base currency, MFG/PRO supports triangulation requirements in all cases where at least one of the transaction currencies involved is a denomination of the euro. If a

company switches their base currency to the euro, triangulation is inherent in the multiple currency features currently available in MFG/PRO.

Multicurrency features meet EMU requirements and make MFG/PRO euro compliant as preliminarily outlined by the Business and Accounting Software Developers Association (BASDA), the recognized leader in developing EMU regulatory specifications.

Key Features

Using enhanced multiple currency functions, you can:

- Define currency codes with associated rounding methods.
- Separate realized and unrealized exchange rate gains and losses into distinct GL accounts. Set up GL defaults at the system level and modify them for each currency.
- Specify which currencies are members of the EMU and when they should become a denomination of the euro.
- Switch the base currency of the database to the euro and convert existing financial data.
- Check the financial integrity and consistency of the data in the database both before and after the base-currency conversion.
- Revalue historical financial data in MFG/PRO and take into account the profits and losses realized when the exchange rate between the euro and the old national currencies is fixed.
- Generate reports of financial data in both the euro and the old national currency during the transition period.
- Prepare sales orders, sales quotes, and invoices with relevant figures in both the euro and the old national currency during the transition period.
- Accept payment of invoices in the euro, the base currency, or the document currency.
- Conduct business in euros or the national currency simultaneously, while recognizing the euro as a distinct currency and the national currency as a denomination of the euro (euro transparency).
- Use triangulation in all transactions where at least one of the currencies is a denomination of the euro.

Euro Features Matrix

Table 3.2 lists major multicurrency features and the target audience who would use each feature.

Table 3.2
Euro Features
Matrix

Multicurrency Feature	EMU companies	Non-EMU companies
Base currency conversion	✓	
Financial integrity checks	✓	
Revalue historical financial data	✓	
Reporting currency	✓	✓
Dual pricing	✓	✓
Improved settlement	✓	✓
Define currencies and their rounding methods	✓	✓
Use realized and unrealized exchange rate gains/losses accounts	✓	✓
Specify currencies that are a denomination of the euro	✓	✓
Euro transparency	✓	✓
Triangulation	✓	✓

New Programs

Table 3.3 lists the new programs introduced to support multicurrency features.

Table 3.3
New Programs
Supporting
Enhanced
Multicurrency

Menu Number	Description	Program
26.1	Currency Maintenance	mccumt.p
26.2	Currency Browse	mcb002.p
26.4	Exchange Rate Maintenance	mcexrmt.p
26.5	Exchange Rate Browse	mcb003.p
26.19	EMU Currency Maintenance	mcumt.p
26.20	EMU Currency Browse	mcb004.p
26.21.1.2	Initial Euro Exchange Rate Copy	etratecp.p

Menu Number	Description	Program
26.21.1.6	AR EMU Revaluation	etarfxmt.p
26.21.1.7	AP EMU Revaluation	etapfxmt.p
26.21.1.8	GL EMU Revaluation	etglfxmt.p
26.21.1.9	Imported Trans. EMU Revaluation	etimfxmt.p
26.21.1.12.1	GL Integrity Report	etinglrp.p
26.21.1.12.3	AR Integrity Report	etinarrp.p
26.21.1.12.8	Inventory Integrity Report	etininrp.p
26.21.1.12.9	WIP Integrity Report	etinwirp.p
26.21.1.12.11	Fixed Assets Integrity Report	etinfarp.p
26.21.1.12.12	Combined Integrity Checks	etincbrp.p
26.21.1.13	Accounts Not To Convert Maint.	etexacmt.p
26.21.1.14	Accounts Not To Convert Report	etexacrp.p
26.21.1.16	Supplier Item Price Creation	etsipc.p
26.21.1.18	Count Program	etcount.p
26.21.1.19	Count and Estimate Report	etctrp.p
26.21.1.20	Hash Total Report	etashrp.p
26.21.1.23	Conversion Checklist Report	etvack.p
26.21.3.1.1	GL Integrity Report	etinglrp.p
26.21.3.1.3	AR Integrity Report	etinarrp.p
26.21.3.1.4	AP Integrity Report	etinaprp.p
26.21.3.1.6	PO Integrity Report	etinporp.p
26.21.3.1.8	Inventory Integrity Report	etininrp.p
26.21.3.1.9	WIP Integrity Report	etinwirp.p
26.21.3.1.11	Fixed Assets Integrity Report	etinfarp.p
26.21.3.1.12	Combined Integrity Checks	etincbrp.p
26.21.3.3	Conversion Audit Trail	etaudrp.p
26.21.3.4	GL Conversion Audit Trail	etacaud.p
26.21.3.13	Routing Cost Roll-Up	rwrору.p
26.21.3.14	Product Structure Cost Roll-Up	bmcsru01.p
26.21.3.16	WIP Revaluation	wocswip.p
26.21.3.18	Sales Order Revaluation	sosorv.p
26.21.3.19	Adjust Customer Balances	utcsbal.p
26.21.3.20	Adjust Supplier Balances	utvdbal.p

Menu Number	Description	Program
26.21.3.22	GL Report Writer Synchronize	grsync.p
26.21.3.23	Budget Calculation	glbgcalc.p
26.21.5	Cust Second Currency Mass Update	etemmaup.p
26.21.24	Euro Functionality Control File	ettkpm.p

Modified Programs

Existing programs have been modified in the following modules: Master Files, Addresses/Taxes, Purchasing, Sales Quotations, Sales Orders/Invoices, Sales Analysis, Service/Support Management, General Ledger, Multiple Currency, Accounts Receivable, Accounts Payable, Cash Management, and Manager Functions.

Euro Toolkit Integrated into MFG/PRO

The Euro Toolkit enables users of selected, previously released versions of MFG/PRO to accommodate the introduction of the European Monetary Union's new currency—the euro. The Euro Toolkit applies to 7.3K, 7.4G, 8.5F, and 8.6C. It provides a number of reporting features, as well as support for converting the base currency of a database to the euro.

▶ See page 32 for a definition of triangulation.

To calculate exchange rates, the Euro Toolkit introduces a limited version of triangulation. Only the set of programs modified by the Euro Toolkit calculates exchange rates between EMU member currencies using triangulation. As a result, the Euro Toolkit does not always use triangulation unless you actually switch your database base currency to the euro.

For Euro Toolkit users upgrading to the version currently integrated into MFG/PRO, this section describes the differences between the stand-alone version of the Euro Toolkit and the integrated version.

Euro Toolkit and MFG/PRO Version 9.0 Features

Most features of the Euro Toolkit also exist in MFG/PRO Version 9.0. Details of how they differ after integration into MFG/PRO are included in the following tables.

- Euro Toolkit Control File. Controls various Euro Toolkit features.
- Euro currency conversion. Defines EMU currencies and fixed exchange rates to the euro. Based on these definitions, implements limited triangulation in calculating exchange rates.
- Dual pricing. Shows pricing on sales orders and similar documents in two currencies. This only affects documents originally expressed in either the euro or an EMU currency.
- Reporting currency. Specifies a reporting currency to be used on selected reports.
- Improved settlement. Allows payment of invoices in the base currency, the document currency, or the euro, when either the base currency or document currency is a member of the EMU.
- EMU revaluation. Supports realization of exchange rate gains and losses created as a side-effect of introducing the euro.
- Financial integrity checks and base currency conversion. Validates the state of your database before and after conversion and switches the base currency of your database to the euro.

Euro Toolkit Control File

The Euro Toolkit Control File (26.21.24) affects both base currency conversion and other reporting features. Table 3.4 lists each control file field.

Note In MFG/PRO Version 9.0, the control file is named Euro Functionality Control File.

Table 3.4
Euro Toolkit
Control File
Contrasted

Euro Toolkit	MFG/PRO Version 9.0
Activate Euro Toolkit	Removed. Euro Toolkit features are integrated, not separate.
Euro Currency	Removed. Specified in EMU Currency Maintenance (26.19).
Old Base Currency	Same as Euro Toolkit.
Print Sales Orders/Invoices with Dual Currency	Same as Euro Toolkit.
Second Currency in Improved Settlement Popup Windows	Removed. This feature is not offered.
Show Conversion Differences with Reporting Currency	Same as Euro Toolkit.
Euro Currency Exchange Rates Activated	Same as Euro Toolkit.
Euro Currency Introduction Date	Removed. Defined per currency in EMU Currency Maintenance.
Old National Currencies Termination Date	Removed. Defined per currency in EMU Currency Maintenance.
Euro Conversion Rounding Differences Account	Same as Euro Toolkit.
Effective Date GL Correction Booking Details/Totals	Same function; relabeled GL Correction Booking Effective Date
Start Conversion	Same function; relabeled Allow Conversion.

Currencies and Exchange Rates

The definition and implementation of currencies and exchange rates is very different in MFG/PRO Version 9.0.

Euro Toolkit	MFG/PRO Version 9.0
Limited triangulation and use of derived cross-rates.	Triangulation always used for EMU currencies.
Euro defined in control file.	Euro specified in EMU Currency Maintenance (26.19).
Currencies not predefined.	Currencies predefined in Currency Maintenance (26.1), including rounding methods and exchange rate gain and loss accounts.
EMU currencies and fixed rate to euro defined in EMU Currency Maintenance (26.21.1.1).	EMU currencies defined in EMU Currency Maintenance (26.19). This program replaces the Euro Toolkit program. The internal implementation of EMU currencies is different.
Exchange rates to euro defined in EMU Currency Maintenance and Euro Exchange Rate Maintenance (26.21.1.3).	Both programs are obsolete. All exchange rates are defined in Exchange Rate Maintenance.
Separate exchange rate gain and loss accounts only for EMU currencies.	Separate accounts defined for all currencies in Currency Maintenance.
EMU currency information maintained in QAD workfiles.	New database tables for currencies (cu_mstr) and EMU currencies (mu_mstr).

Table 3.5
Support for
Currencies
Contrasted

Dual Pricing

Dual pricing in MFG/PRO Version 9.0 and dual pricing in the Euro Toolkit are very similar.

Euro Toolkit	MFG/PRO Version 9.0
Activated in Control File.	Same as Euro Toolkit.
Uses customer address Dual Currency field.	Same as Euro Toolkit.
Affects selected external documents with financial information.	Same as Euro Toolkit.

Table 3.6
Dual Pricing
Contrasted

Reporting Currency

Minor modifications to the reporting currency feature have been made in MFG/PRO Version 9.0.

Table 3.7
Reporting Currency
Contrasted

Euro Toolkit	MFG/PRO Version 9.0
Limited set of modified reports and inquiries.	Most reports and inquiries that include currency amounts.
Provides an Exchange Rate Field to specify a spot exchange rate.	Uses today's exchange rate or the rate based on the effective date of the report.
Only used currency-based rounding in 8.5 and 8.6.	Always uses currency-based rounding.

Improved Settlement

Improved settlement in MFG/PRO Version 9.0 follows the current BASDA guidelines. The Euro Toolkit provided features that are now prohibited by BASDA.

Table 3.8
Improved
Settlement
Contrasted

Euro Toolkit	MFG/PRO Version 9.0
Dual currency in pop-up windows supported.	Uses standard look-up browses.
Purchase orders can be associated with a voucher, regardless of the currency.	Payment is validated based on bank currency. If the bank uses base currency, payment can be in any currency. If the bank uses non-base currency, payment must be in the bank currency.
Invoices can be settled in any currency.	Payment is validated based on bank currency. If the bank uses base currency, payment can be in any EMU currency. If your base currency and the bank currency are both EMU currencies, payment can be in any EMU currency. If your base currency is an EMU currency and the bank currency is not, payment must be in the bank currency. If your base currency is not an EMU currency and the bank currency is, payment can be in the bank currency, base currency, or any other EMU-member currency.

EMU Revaluation

EMU revaluation in MFG/PRO Version 9.0 and EMU revaluation in the Euro Toolkit are very similar.

Euro Toolkit	MFG/PRO Version 9.0
GL EMU Revaluation	Separate Exchange Rate Date and GL Effective Date.
Imported Transaction EMU Revaluation	Separate Exchange Rate Date and GL Effective Date.
AR EMU Revaluation	Separate Exchange Rate Date and GL Effective Date.
AP EMU Revaluation	Separate Exchange Rate Date and GL Effective Date.

Table 3.9
EMU Revaluation
Contrasted

Base Currency Conversion

The conversion of your base currency to the euro is very similar between the Euro Toolkit and MFG/PRO Version 9.0. There are some minor differences.

Euro Toolkit	MFG/PRO Version 9.0
Financial Integrity Checks	Modified to include schema updates in 9.0.
Count programs	Modified to include schema updates in 9.0.
Base Currency Control Process	Same as Euro Toolkit.
Batch Conversion Routines	Modified to include schema updates in 9.0.
Conversion of Documents	Same as Euro Toolkit.
Audit Trails	Same as Euro Toolkit.

Table 3.10
Base Currency
Conversion
Contrasted

Externalized Labels

MFG/PRO incorporates a new method for managing labels that display on the user interface.

Business Need

MFG/PRO has a worldwide customer base. Translating the software quickly and efficiently is an important requirement for meeting the needs of non-English speaking users.

MFG/PRO Solution

A new development standard has been created to ensure that MFG/PRO source code can be translated quickly. Code has been modified to meet this standard, which affects text that requires translation for the non-English versions of MFG/PRO, including field labels, column labels, frame titles, messages, and button text.

PRO/PLUS

▶ See the *PRO/PLUS User Guide*.

The optional PRO/PLUS package includes programs not offered with the standard release of MFG/PRO. The PRO/PLUS package is fully supported and includes its own unified documentation set. For PRO/PLUS availability, contact your MFG/PRO sales representative.

The initial PRO/PLUS offering includes:

- Global Requisition System (GRS)
- A/R Self-Billing
- Supplier Performance
- Cumulative Ship Reset

▶ See page 20.

PRO/PLUS Supplier Shipping Schedules are new with MFG/PRO Version 9.0.

Global Requisition System (GRS)

MFG/PRO's Global Requisition System (GRS) can be used as an alternative to standard purchase requisitions.

Business Need

Many modern organizations require a complex and closely monitored process for generating purchase orders from requisitions. They find that requisitions for one item at a time are too limiting and time-consuming to manage. They also need to integrate the requisition approval process with standard methods of company-wide communication, such as E-mail.

MFG/PRO Solution

GRS enables you to 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 have been 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, disapprove, 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.

Activate GRS by setting the Using GRS field in the Requisition Control File to Yes. If your company prefers to use the standard MFG/PRO requisition functions, leave this flag set to No.

New Programs

New programs added for the Global Requisition System are listed in Table 3.11.

Table 3.11
New Programs for
GRS

Menu Number	Description	Program
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	rjmt.p
5.2.1.8	Job Browse	rjjiq.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	rbmt.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
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

Modified Programs

To accommodate multiple-line requisitions, GRS modifies two existing MFG/PRO programs when you activate it in the Requisition Control File.

Menu Number	Description	Program
5.7	Purchase Order Maintenance	popomt.p
23.11	Planned Purchase Order Approval	mrprap.p

Table 3.12
Programs Modified
by GRS

Key Features

Using GRS, you can:

- Create purchase requisitions with more than one line. 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.
- Create and use a flexible approval process. 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.
 - A person who is responsible for replenishing inventory used for manufacturing is a *product line* approver.
- Use system-generated E-mail to advise end users, reviewers, and approvers of a requisition’s status from the time it begins the approval process until the last line item is referenced on a purchase order.

- Build a purchase order from existing 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 to the PO header. You can then copy approved requisition line items to build the detailed line items on the PO.

A/R Self-Billing

Use Self-Billing to process customer-initiated payments by applying payment to MFG/PRO invoices based on line-item shipper details.

Business Need

In some business environments, it is common for customers to initiate payments that are not directly related to an invoice. This is typical for businesses that have long-term and scheduled relationships.

MFG/PRO Solution

Self-Billing enhances the standard accounts receivable functions by enabling you to process payments that are initiated by a customer and that do not directly reference an invoice number. Payments are matched based on details related to shipments sent to the customer.

New Programs

New programs for Self-Billing are listed in Table 3.13.

Table 3.13
Self-Billing
Programs

Menu Number	Description	Program
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

Menu Number	Description	Program
27.6.12.23	Self-Bill Delete/Archive	arsbdel.p
27.6.12.24	Self-Billing Control File	arsbpm.p

Modified Programs

In addition to the new self-billing programs, Document Import (35.13) has been modified to import self-billing documents with Electronic Data Interchange (EDI).

Menu Number	Description	Program
2.1.1	Customer Maintenance	adcsmt.p
7.9.5	Pre-Shipper/Shipper Confirm	rcsois.p
35.13	Document Import	edimport.p

Table 3.14
Programs Modified
by Self-Billing

Key Features

With Self-Billing, you can:

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

Supplier Performance

Supplier Performance enables manufacturers to monitor the performance of their internal and external suppliers.

Business Need

In an increasingly competitive business environment, companies need to be sure that purchases are being received in a timely and complete manner. Capturing exceptions and tracking performance over time becomes an important requirement for efficient corporate management.

MFG/PRO Solution

MFG/PRO's Supplier Performance enables businesses to define performance criteria and monitor supplier activity based on those criteria. Depending on your manufacturing environment, you can customize the way your system collects performance data and reports performance metrics. You can create your own data collection points, or use the predefined system collection points.

New Programs

The programs and reports shown in Table 3.15 are included with Supplier Performance.

Table 3.15
Supplier
Performance
Programs

Menu Number	Description	Program
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
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

Modified Programs

In addition to the new supplier performance programs, the following programs are modified when you activate Supplier Performance in the control file.

Menu Number	Description	Program
3.4.1	Transfer–Single Item	iclotr02.p
3.4.2	Transfer–Multi Item	iclotr01.p
3.4.3	Transfer With Lot/Serial Change	iclotr03.p
2.3.1	Supplier Maintenance	advnmt.p
5.5.1.13	Scheduled Order Maintenance	rspomt.p
5.7	Purchase Order Maintenance	popomt.p
5.13.1	Purchase Order Receipts	poporc.p
5.13.20	PO Shipper Receipts	rsporc.p
7.9.5	Pre-Shipper/Shipper Confirm	rcsois.p
11.7.3.13	RTS Receipts	fartvrc.p
12.15.1	Intersite Request Maintenance	sdsdmmt.p
12.15.20	Distributed Order Receipts	dsdorc.p

Table 3.16
Programs Modified
by Supplier
Performance

Key Features

With Supplier Performance, you can:

- Define and use flexible data collection methods—both automatic and manual.
- Optionally record any nonroutine events or modify or add to an existing event with the maintenance functions.
- Produce a supplier performance report card that rates your suppliers based upon your rating criteria and the data collected. The report card can be run for any selected time period.
- Use your E-mail system to send your suppliers their performance report card.

Cumulative Ship Reset

Business Need

Companies involved in a close relationship with suppliers through scheduled orders do not always want to reset cumulative order totals to zero.

MFG/PRO Solution

Cumulative Shipped Reset (7.5.19) is similar to standard MFG/PRO's Cumulative Shipped Reset to Zero (7.5.18). It can be used to reset the cumulative totals for customer scheduled orders and generate a summary or detail report showing the orders reset. You can reset one or a range of scheduled orders.

However, with this new program, you do not have to reset the Cum Shipped quantity to zero. It can be reset to zero or some other specified quantity based on shipping details from any specific date and time.

Key Features

Using Cumulative Shipped Reset, you can:

- Specify a cumulative ship start time as well as date.
- Indicate if the date is the actual shipment date or the GL effective date.
- Choose to include or exclude manual adjustments.
- Specify the level of detail for the report output.

New Programs

Cumulative Shipped Reset (7.5.19) has been added to the Customer Schedule Processing Menu.

User Licensing

User licensing tracks user counts in MFG/PRO and alerts QAD customers to license violations. Additionally, user licensing alerts customers to software expiration.

▶ See *User Guide Volume 11: Manager Functions*.

License utilities do not currently restrict the total number of users that can log into MFG/PRO. This means that a user is not prevented from logging in when the total number of licensed users is exceeded. User counts are tracked according to both licensing systems QAD supports: concurrent and named users.

Note The user license utility applies only to MFG/PRO modules licensed by user count. For example, it does not apply to the EDI module.

Business Need

As their companies grow, QAD customers have not had an easy way to determine if they are in compliance with their license agreements.

MFG/PRO Solution

The user license feature provides system administrators with the information they need to plan for resource and license needs. It also helps system administrators identify when peak user loads occur, as well as how frequently the maximum user count is exceeded.

Key Features

Using user licensing features, you can:

- Automatically track the number of users logged into MFG/PRO.
- Monitor and report on user sessions.
- View a warning during user log-in, starting 10 days prior to the software expiration date.

New and Modified Programs

The user licensing system adds three new programs to the Database Management Menu (36.16).

- License Registration (36.16.10) is used at initial login to register a new license code, or at any other time to edit an existing license. At software expiration, navigation is limited to this program.
- License Violation Report (36.16.11) displays a list of users who have logged into MFG/PRO in excess of the allowed user count. The date and time of login also displays.
- User Monitor Inquiry (36.16.12) displays users currently logged into MFG/PRO and related information, including the date and time of login, the program they are currently executing and its execution time, and the amount of time they have been idle if no program is selected. By monitoring user activity, system administrators can identify and minimize unnecessary overhead during peak system usage.