MFG/PRO® eB

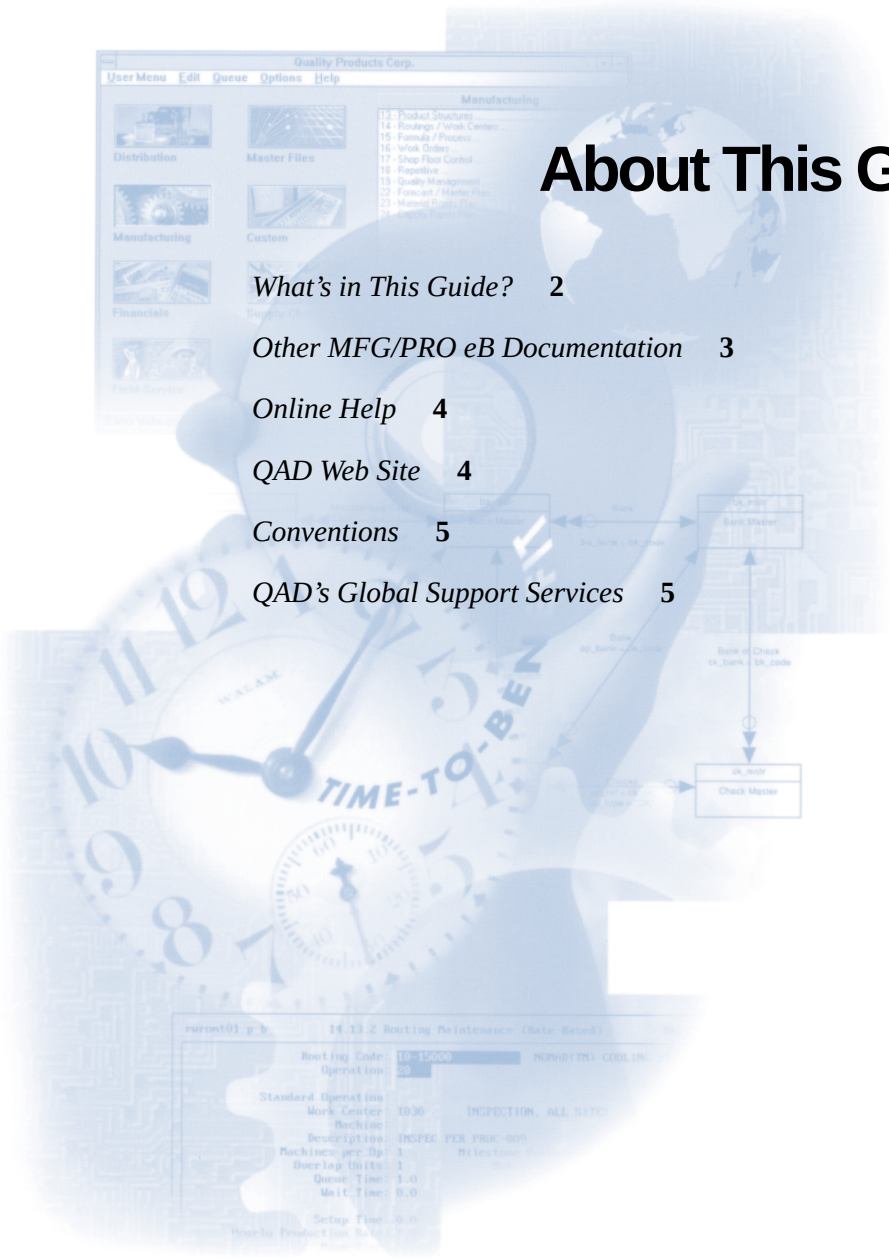
Installation Guide

Service Pack 7

MFG/PRO eB
September 2003

QAD Inc.
6450 Via Real
Carpinteria, California 93013
Phone (805) 684-6614
Fax (805) 684-1890
http://www.qad.com

Contents



About This Guide

What's in This Guide?

This installation guide contains instructions on how to install the Service Pack 7 updates for these MFG/PRO eB components:

- The UNIX database server
- The Windows database server
- The character user interface client
- The Windows character and graphical user interface (GUI) clients
- QAD's Network User Interface (NetUI)
- The Windows help (WinHelp) system

Audience

These instructions are intended for the MFG/PRO eB system administrator who manages the MFG/PRO eB databases and is familiar with UNIX and Windows servers, networking, QAD's NetUI, and Progress software.

Installation Documentation Updates

Installation Errata

In addition to these instructions, you may receive a supplementary errata sheet with changes and additional instructions. Check your product package.

Even when an errata sheet is included with your product package, QAD recommends that you download the most up-to-date errata sheet from the QAD Web site. New information may have been added to the errata sheet since your product was shipped.

Installation Guides

To ensure a successful implementation, QAD installation guides are periodically updated. To determine whether your installation guide has been updated, refer to the QAD Web site. Compare the item number listed on your installation guide with the number listed on the QAD Web site. If

your installation guide has been updated, download and use the most recent version.

Other MFG/PRO eB Documentation

- For an overview of new features and software updates, see the *Release Bulletin*.
- For software installation instructions, refer to the appropriate installation guide for your system.
- For instructions on navigating the MFG/PRO eB Windows and character environments, refer to *User Guide Volume 1: Introduction*. Navigation information for the Network User Interface (NetUI) and optional eB Desktop is provided in *User Guide: eB Desktop and Network User Interface Guide*. Navigation information for QAD Desktop 2 is found in *User Guide: QAD Desktop*.
- For information on using MFG/PRO eB, refer to the *User Guides*.
- For information on using features that let MFG/PRO eB work with external applications, see the *External Interface Guides*. For example, these guides describe the Warehousing application program interface (API) and Q/LinQ, the tool set for building and using tools that perform complex data exchange between MFG/PRO eB and external systems.
- For technical details, refer to *File Relationships* and *Database Definitions.*
- To view documents online in PDF format, see the *Documents on CD* and *Supplemental Docs on CD*. The CD-ROM media includes complete instructions for loading the documents on a Windows network server and making them accessible to client computers.

  Note MFG/PRO eB installation guides are not included on *Documents on CD*. Printed copies are packaged with your software. Electronic copies of the latest versions are available on QAD's Web site.

Online Help

MFG/PRO eB 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 in the different MFG/PRO eB environments, refer to *User Guide Volume 1: Introduction*, *User Guide: eB Desktop and Network User Interface Guide*, and *User Guide: QAD Desktop*.

QAD Web Site

QAD's Web site provides a wide variety of information about the company and its products. You can access the Web site at:

http://www.qad.com

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

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

You can register for a QAD Web account by accessing the Web site and clicking the Accounts link at the top of the screen. Your customer ID number is required. Access to certain areas is dependent on the type of agreement you have with QAD.

Most user documentation is available in two formats:

- Portable document format (PDF). PDF files can be downloaded from the QAD Web site to your computer. You can view them with the free Adobe Acrobat Reader. A link for downloading this program is also available on the QAD Web site.
- HTML. You can view user documentation through your Web browser. The documents include search tools for easily locating topics of interest.

Features also include an online solution database to help MFG/PRO eB users answer questions about setting up and using the product. Additionally, the QAD Web site has information about training classes and other services that can help you learn about MFG/PRO eB.

Conventions

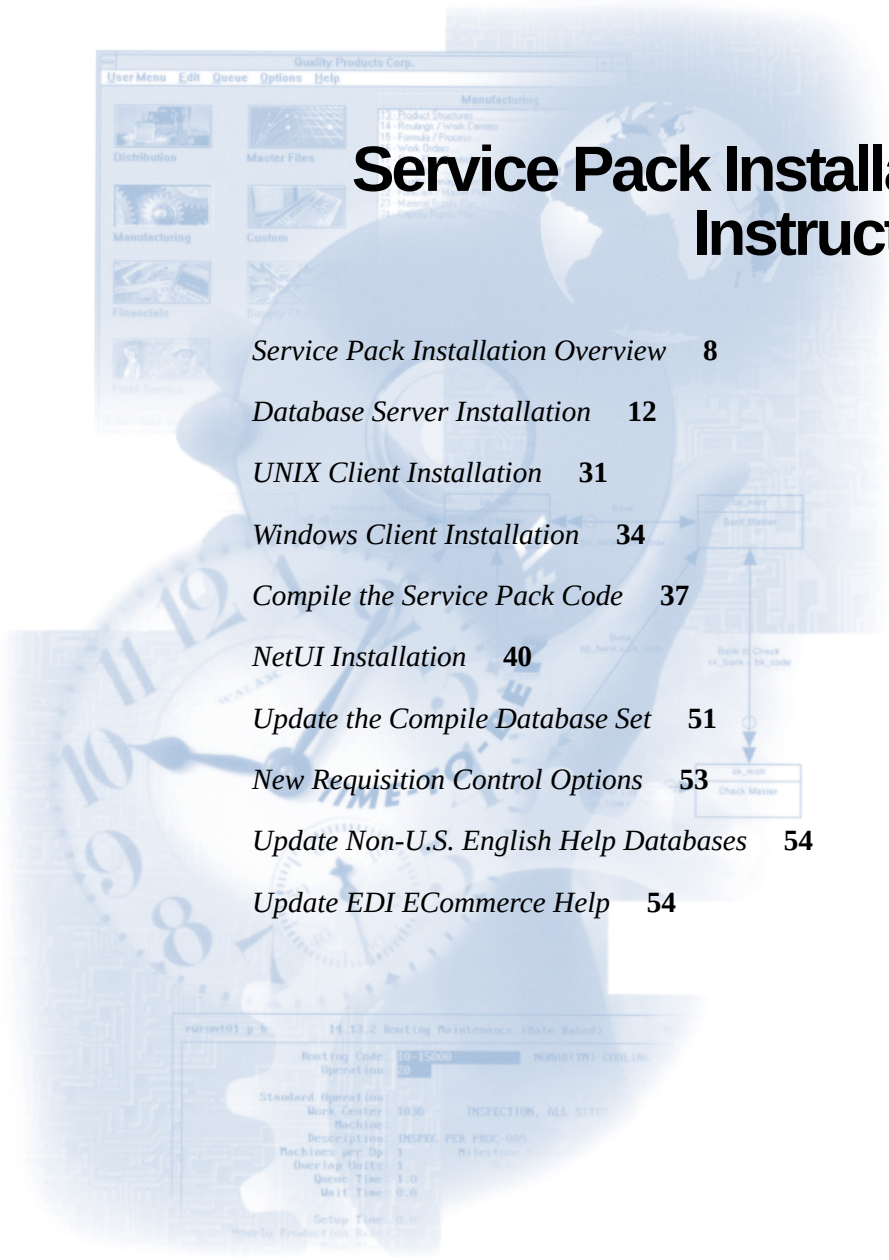
This document uses the text or typographic conventions listed in the following table.

If you see:	It means:
`monospaced text`	A command or file name.
`italicized monospaced text`	A variable name for a value you enter as part of an operating system command; for example, *`YourCDROMDir`*.
`indented command line`	A long command that you enter as one line, although it appears in the text as two lines.
Note	Alerts the reader to exceptions or special conditions.
Important	Alerts the reader to critical information.
Warning	Used in situations where you can overwrite or corrupt data, unless you follow the instructions.

QAD's Global Support Services

MFG/PRO eB installations have a wide variety of configuration possibilities, are highly scalable, and are easily customized. While this guide provides basic installation information, it cannot consider every possible MFG/PRO eB computing environment or configuration.

To take full advantage of MFG/PRO eB's flexibility and potential in your specific environment, contact your QAD support representative for information on the installation and customization offerings supplied by QAD's Global Support Services. These offerings include installation and conversion services, performance enhancements, as well as technical and administration training.



Service Pack Installation Instructions

Service Pack Installation Overview

Which CD Do I Use?

This service pack contains five CDs. One is used to update the Oracle and Progress database environments. The others are used to update the various client environments and the NetUI.

Database Server. Use this CD to update MFG/PRO eB Progress and Oracle database environments on Windows or UNIX servers.

Win 32 Char Client. Use this CD to update MFG/PRO eB Windows character clients.

UNIX Client. Use this CD to update MFG/PRO eB UNIX character clients.

Win 32 GUI Client. Use this CD to update MFG/PRO eB Windows GUI clients.

NetUI. Use this CD to update MFG/PRO eB NetUI files on Windows NT or UNIX Web servers.

Always install the database server CD first. You must install the character client CD before you install the NetUI CD.

Service Pack Impact Analysis

Service pack impact analysis information is contained in HTML and ASCII text files located in subdirectories under the `svcpack/spinfo` directory on each service pack CD. The HTML files are located in the `web` subdirectory and the ASCII text files are located in the `text` subdirectory. Impact analysis information contains the following elements:

Module. Provides information on each module and the files in that module that have been changed in the service pack.

Menu. Provides information on each menu and the files in that menu that have been changed in the service pack.

ECOs. Provides information on each Engineering Change Order (ECO) addressed by the service pack. This information includes a

brief description of the ECO plus cross-references to the modified files, affected menus and modules, and the compiled files for that ECO.

Modified Files. Provides information on each file modified by the service pack. This information includes the changes that were made to the file plus cross-references to the ECO that caused the file to be modified, the affected menus and modules, and the entire file to enable review of all changes in context.

File Difference. Provides information on each file modified by the service pack. This information includes the entire file with all of the changes in context and a list of the changes made to the file for specific ECOs.

Compile List. Provides a list of all the files that must be recompiled after the service pack has been installed. Additionally, provides cross-references to the modified file information for each file changed in the service pack.

During the service pack installations, you can optionally copy impact analysis information to any directory you specify. When prompted whether to copy the service pack information, enter Yes, and indicate the destination directory for the information.

Important Additional Impact Information

Before you begin any service pack installation, review the following notes to see if they apply to your specific environment.

Environments Implementing QAD Desktop 2

If you have implemented or plan to implement QAD Desktop 2 and do not use the NetUI, do not install the NetUI Service Pack CD. The Desktop installation does not require any NetUI Service Pack components.

Whenever you install a new service pack, you must also upgrade to the latest QAD Desktop 2 release.

For details, see “Using QAD Desktop 2” on page 40.

New Schema Holder May be Required in Oracle Environments

For details, see “Create a New Schema Holder for Oracle Environments” on page 18.

Depending on your current service pack level, you may need to create a new schema holder, update your Oracle databases using the SQL scripts included with this service pack, and recompile your system code.

Implement Results Application Updates

For details and information on installing this file, see “Update Results Application File” on page 22.

If you use the Results application in a Windows environment, the service pack contains an updated `qaddb.qc7` file. The updated file resolves truncation issues associated with Join changes or additions that may arise when the original file is first used. Depending on your specific environment, you may need to update this file for your Results application.

Windows Environment WinHelp Updates

For details, see “Update hlp_mstr Table” on page 23.

If you use the US English language WinHelp system for GUI clients, you may need to update the hlp_mstr table with the latest records.

Update lbl_mstr for Non-Us English NetUI Environments

For details, see “Update lbl_mstr for the NetUI” on page 24.

Depending on your current service pack level, you may need to load an updated `lbl_mstr.d` or `lbl_mstr_us.d` file into the administration database.

Update msg_mstr and mnt_det Records

For details, see “Update msg_mstr and mnt_det Tables” on page 25.

If you have not implemented Service Pack 2 or above, installing this service pack will automatically update your databases with new msg_mstr and mnt_det records. You can optionally update these tables without installing the service pack.

Update Portuguese Language Database Dictionary Field Labels

For detailed instructions, see “Update the Compile Database Set” on page 51.

Depending on your service pack level, you may need to update the database dictionary field labels. This is a one-time required step that must be performed when you install the first service pack in your environment.

Global Requisition System Control Updates

For Service Pack 6, Requisition Control File (5.2.1.24) was enhanced with new control options. After installing that service pack or any subsequent service pack, new control options will not affect your GRS environment unless you change the default values.

For details, see "New Requisition Control Options" on page 53.

Update Non-US English Help Databases

Service Pack 5 included field and procedure help updates for some non-U.S. English environments. If you implemented that help, you can safely ignore this section.

For details see "Update Non-U.S. English Help Databases" on page 54.

Service Pack Contents

Service packs are cumulative. Each service pack contains the MFG/PRO eB files contained in previous service packs. Each service pack also contains any files modified by patches since the previous service pack. You only need to apply the latest service pack to have all the changes for this MFG/PRO eB version. Some installation tasks documented in these instructions are not required if you implemented them in a previous service pack. Review each section of this document for details.

The cut-off date for a service pack can be found in the `version.mfg` file in the `svpack.wserv` directory on each service pack CD.

Installing a service pack will replace files in the destination directory. When installing service packs, make sure you have read and write permissions in all affected directories. Applying the service pack directly to your production environment may cause third-party products, customizations, localizations, and bolt-on applications to no longer function as intended. You should review the service pack impact analysis information in the `/spinfo` directory in order to understand the ramifications of installing the service pack.

Important If you have third-party products, you should contact the product suppliers for compatibility issues with this service pack.

Additionally, if you have any third-party products, program customizations, localizations, or bolt-on applications, you should merge the changes in this service pack with the changes made for the third-party

product, customizations, localizations or bolt-on in a test area before updating the production environment.

Service Pack Configuration Overview

The service pack can be installed in two configurations:

1. Set up a test MFG/PRO eB database and service pack directory. QAD recommends this configuration for established MFG/PRO eB production environments.
2. Use the service pack to directly update production databases and the MFG/PRO eB installation directory. In general, this configuration simply requires that you run the service pack installation routine and specify the production databases and MFG/PRO eB installation directory. QAD recommends this configuration for new installations and conversions.

Database Server Installation

Complete the database server setup section that pertains to your specific operating system before you begin the service pack database server installation.

Setup for UNIX Database Server Installation

You should complete the following setup steps before installing the database server service pack CD in a UNIX environment:

1. Log on as user `mfg`.
2. Shut down the servers for the database sets to be updated.
3. Back up the MFG/PRO eB directory and any databases that you are going to update.
4. If you have an MFG/PRO eB production environment currently running and want to set up a service pack test environment, use the following instructions. If you are installing the service pack for a new

MFG/PRO eB installation or during a conversion, skip the following steps and continue with “Database Server Installation Instructions” on page 15.

5 If an MFG/PRO eB test environment does not already exist, make a copy of your MFG/PRO eB production, administration, and help databases to use as a test database set. To make database copies, use the PROCOPY utility from your system’s command prompt. The databases being copied must be shut down before using the PROCOPY utility.

In the following example, *SourceDBName* refers to the name of your original MFG/PRO eB production, admin, or help database. *TargetDBName* refers to the name you give to this database in the test environment.

```
procopy SourceDBName TargetDBName
```

For more information on PROCOPY and other Progress utilities, refer to your Progress S*ystem Administration Reference*.

6 Launch MFG/UTIL. Create a database set and new server and client scripts for your test environment.

7 In the Database Sets Parameter window, modify your service pack test database set PROPATH by entering the service pack client startup directory and the service pack BBI directory; for example:

```
SET PROPATH=.,/dr01/qad/svpack,/dr01/qad/svpack/us/bbi,
    /dr02/qad/chrfilesrv,/dr02/qad/chrfilesrv/us/bbi
```

Make sure the Active field is set to Yes; then choose OK.

8 Select the Scripts drop-down menu from the MFG/UTIL main window and choose the Generate Scripts option. Select the service pack test database set and choose OK. MFG/UTIL generates a startup script for your test database set. For details, see the setup chapter in the MFG/PRO eB *Installation Guide: Progress on UNIX* or *Installation Guide: Oracle on UNIX*.

Setup for Windows Database Server Installation

You should complete the following setup steps before installing the database server service pack CD in a Windows environment:

1. Make sure you are logged on to the Windows server with administrative privileges.
2. Shut down the servers for the database sets to be updated.
3. Back up the MFG/PRO eB directory and any databases that you are going to update.
4. If you have an MFG/PRO eB production environment currently running and want to set up a service pack test environment, use the following instructions. If you are installing the service pack for a new MFG/PRO eB installation or during a conversion, skip the following steps and continue with “Database Server Installation Instructions” on page 15.
5. If an MFG/PRO eB test environment does not already exist, make a copy of your MFG/PRO eB production, administration, and help databases to use as a test database set. To make database copies, use the PROCOPY utility from your system’s command prompt. The databases being copied must be shut down before using the PROCOPY utility.

   In the following example, *SourceDBName* refers to the name of your original MFG/PRO eB production, admin, or help database. *TargetDBName* refers to the name you give to this database in the test environment.

   ```
   procopy SourceDBName TargetDBName
   ```

   For more information on PROCOPY and other Progress utilities, refer to your Progress *System Administration Reference*.
6. Launch MFG/UTIL on the Windows server. Create a database set and new server and client scripts for your test environment.
7. In the Database Sets configuration window, modify your service pack test database set PROPATH by entering the service pack client startup directory and the service pack BBI directory; for example:

   ```
   SET PROPATH=.,C:\mfgcli\IMAGES.PL,E:\MFGGUIFS\sp7,
       E:\MFGGUIFS\sp7\us\BBI,E:\MFGGUIFS,E:\MFGGUIFS\us\BBI
   ```

Make sure the Active field is set to Yes; then choose OK.

8 Select the Scripts drop-down menu from the MFG/UTIL main window and choose the Generate Scripts option. Select the service pack test database set and choose OK. MFG/UTIL generates a startup script for your test database set. For details, see the database server setup chapter in the MFG/PRO eB *Installation Guide: Progress on Windows NT.*

Database Server Installation Instructions

Use the following instructions to install the updated database server files from the database server service pack CD.

Note Depending on your installation environment, you may be prompted to remove temporary installation files during the installation process. You should always enter Yes at these prompts.

1 Make sure you have administrative privileges.

- In UNIX environments log on as user mfg.
- In Windows environments log in to the client machine with administrative privileges.

2 Start the installation.

In a UNIX environment start the installation by performing the following steps:

a Insert the service pack CD into the CD-ROM drive.

b Mount the CD-ROM.

c Change directories to the directory where you mounted the CD-ROM.

d Enter `./install`.

In a Windows environment, start the installation by inserting the database server service pack CD into the CD-ROM drive. Run `install.exe` using File Manager, Windows Explorer, or the Start button.

3 Confirm you are executing the correct installation.

4 Review the license agreement. Enter Yes to accept the agreement.

5 At the prompt, enter Yes to view these installation instructions online using your Web browser. Otherwise, continue to the next step.

Yes: Your default Web browser is automatically launched. Review the warnings and other information displayed on your browser. Navigate to the installation instructions, and continue this installation with step 8 of those instructions.

6 Review the Service Pack CD Warning; enter Yes to continue the installation.

7 Review the Q/LinQ information; enter Yes to continue the installation.

8 At the prompt, enter the location where you installed the MFG/PRO eB database server. This is the database server installation directory where `version.mfg` exists; for example:

```
/qad/mfguxsrv
```

9 At the prompt, enter your Progress installation directory; for example depending on your operating system, enter `/progress/dlc91`, or `C:\dlc91`.

10 Confirm the Progress version and installation directory.

11 If the system detects an Oracle Dataserver, indicate whether this is an MFG/PRO eB on Oracle installation. If this is not an Oracle installation, skip to step 21.

12 At the prompt, enter the letter representing the Oracle connection type used for this installation. The connection types are:

a Shared Memory

b Net8 (SQL*Net)

c Progress Client Networking (Host and Services)

If you select Progress Client Networking (Host and Services), continue with the next step. Otherwise, skip to step 15.

13 At the prompt, enter the host name.

14 At the prompt, enter the service name.

15 At the prompt, enter the Oracle instance name.

16 At the prompt, enter the Oracle owner name (user name).

17 At the prompt, enter the Oracle user password.

18 At the prompt, enter the Oracle home location.

19 At the prompt, enter the Oracle database name.

20 At the prompt, enter the Progress schema holder name. Continue the installation on step 22.

21 At each `DB ->` prompt, enter the full directory for a database to update. After you enter all the database paths to update, enter `end` to continue the installation. For example, to update the production, administration, and help databases in a UNIX environment, you would enter:

```
DB -> /mfgpro/eBtest.sp7/db/mfgprod.db
DB -> /mfgpro/eBtest.sp7/db/admprod.db
DB -> /mfgpro/eBtest.sp7/db/hlpprod.db
DB -> end
```

In a Windows environment, you would enter:

```
DB -> d:\mfgpro\eBtest.sp7\db\mfgprod.db
DB -> d:\mfgpro\eBtest.sp7\db\admprod.db
DB -> d:\mfgpro\eBtest.sp7\db\hlpprod.db
DB -> end
```

Warning Do not update empty databases with the service pack data. For example, do not update the mfgempty or hlpempty databases.

22 At the prompt, review the information for the databases to update. Enter Yes to begin copying the database service pack files. Otherwise, enter No to re-enter the installation information.

23 Select Enter to end the script after the database contents have been loaded. Check the service pack log file, `svcpack.log`, in the log subdirectory in the service pack installation directory for errors.

24 For each database that is updated, a subdirectory named *DatabaseName*`save` (Windows) or *dbname*`.save` (UNIX) is created in the database directory. This directory contains the following update-related files:

- For each table that is updated in the database, a *TableName*`.del` file is created containing the records that were replaced during the update process.

Note If the *TableName*`.del` file exists, it is renamed *TableName*`.000` and a new *TableName*`.del` is created. If *TableName*`.000` exists, *TableName*`.del` is renamed *TableName*`.001` up to `999`.

- For some tables, a *TableName*`.rpt` is created containing the non-US language records where the English equivalent was replaced.

25 To keep the correct data in the data directory for use by standard load procedures, you must dump the `.d` files for the updated tables into the appropriate MFG/PRO eB subdirectory for each updated database. For example, you would dump the `.d` files for the mfg database into the `mfg` subdirectory of the MFG/PRO eB database server installation directory.

Create a New Schema Holder for Oracle Environments

Important New environments implementing MFG/PRO eB on Service Pack 7 must create new schema holders using the `.df` files provided on the service pack. Do not use the `.df` files provided on the MFG/PRO eB database server CD.

For new environments, you can safely ignore this section if all of the following are true:

- You copied the Service Pack 7 `tools/db` directory to *MFGPROInstallDir*`/db` as instructed in the MFG/PRO eB errata. See Service Pack Information for New MFG/PRO eB Implementations in the latest MFG/PRO eB errata.
- You have already created a schema holder using the Service Pack 7 files copied to your *MFGPROInstallDir*`/db`.

If you are installing Service Pack 7 in an existing MFG/PRO eB Oracle environment you can safely ignore this section if all the following are true:

- Your current environment is on Service Pack 6.
- When you implemented Service Pack 6 you created new schema holders using the Service Pack 6 provided `.df` and `.sql` files.

Carefully review this section before updating any existing schema holders.

- Schema Holder Requirement

  No schema changes occurred after Service Pack 6. Service Pack 7 specific delta or full `.df` and `.sql` files are not provided on Service Pack 7. Even so, you must be using a Service Pack 6 schema holder to implement Service Pack 7 or any subsequent service packs.

  Implementing this service pack with a pre-Service Pack 6 schema holder may cause Oracle database corruption and unexpected errors. A schema holder built with the Service Pack 6 level `.df` files allows for implementation of additional Progress 9.1 performance parameters by more accurately adhering to and using the latest Progress 9.1 constructs. It resolves performance issues and prevents potential database corruption dependent upon certain Progress settings.

- Customizations

  Take the proper backup precautions before removing your existing schema holders. For details, see the MFG/PRO eB *Installation Guide: Oracle Database on UNIX Server* and the *Progress DataServer for Oracle Guide*.

  When you install this service pack, the contents of the `/db` subdirectory in your MFG/PRO eB installation directory are automatically backed up to a subdirectory named `SP7BK`. The installation script places new `.df` and `.sql` files in the `/db` directory. If you have customized any of the existing `.df` or `.sql` files, migrate those customizations to the new service pack files.

  If an existing MFG/PRO eB schema holder has additional schema objects outside of the standard schema, these modifications must be added to the new schema holder. Any new custom entries must contain the new elements for Progress 9.1 schema holders, such as

FOREIGN-MAXIMUM. Additionally, for all fields extended in Oracle, extend the FOREIGN-MAXIMUM values for the schema holder. For details, see “Upgrading Schema Holders from Progress Version 7 or 8” and “Running Progress-to-Oracle Utility” in the *Progress DataServer for Oracle Guide*.

- SQL Updates

Tip
For information on SQL scripts used in MFG/PRO eB, see *Installation Guide: Oracle Database on UNIX Server.*

The Service Pack database server CD includes the `eBtoSP6.sql`, `eBSP4toSP6.sql`, and `eBSP5toSP6.sql` files in the `/tools/db` directory. During the service pack installation, these scripts are placed in your MFG/PRO installation `/db` subdirectory. You must execute the appropriate script before you compile any MFG/PRO eB code.

Use the following table to choose the script to execute in your environment.

Script Name	Used For
`eBtoSP6.sql`	Baseline, Service Pack 1, Service Pack 2, or Service Pack 3 environments moving to Service Pack 6 or above
`eBSP4toSP6.sql`	Service Pack 4 environments moving to Service Pack 6 or above
`eBSP5toSP6.sql`	Service Pack 5 environments moving to Service Pack 6 or above

To run the SQL script, use the following command at the DOS or UNIX prompt:

```
sqlplus qad/qad < ScriptName.sql
```

- Baseline Schema Holder

  Remove all pre-Service Pack 6 QAD-supplied schema holder components, including `.df` files. Remove these components from all locations you may have previously copied them to and replace them with the new service pack files.

  Remove all custom schema in your baseline and replace it with the correct schema elements for Progress 9.1. This must be done before using custom schema with the new service pack schema holder elements.

- Compile Requirements

  After creating the new schema holder, you must perform a full recompile of the MFG/PRO eB code. For complete compile

instructions, see MFG/PRO eB *Installation Guide: Oracle Database on UNIX Server*.

The baseline MFG/PRO eB `oraempty.df` had `IBM850` as the setting for `CODEPAGE_NAME`. The service pack `oraempty.df` has the `iso8859-1` Western European setting for `CODEPAGE_NAME`. Depending on your environment and language-specific needs, you may need to change this setting back to `IBM850`, or another more appropriate value. See the Progress documentation, the QAD MFG/PRO eB Customer Advisory (2001/0228), or the MFG/PRO eB Errata for details on changing this setting.

- Additional Information

  Avoid modifying your existing scripts, such as `client.Production`, by re-creating the new schema holder with the same name used by the previous schema holder. If custom schema exists, be sure to back up any existing schema holders before initiating this step.

  Avoid repetitive compiles by compiling the service pack code as part of the complete MFG/PRO eB compile.

Create New Schema Holder

Create a new schema holder for each of your database sets. Additionally, each client connection requires using the new schema holder constructs. This includes the WebSpeed connection used for the Desktop, as well as the connection for GUI clients.

Use the following steps to create the new schema holder.

Note This can also be accomplished through MFG/UTIL.

1. Verify that the DLC and PATH environment variables are set correctly. DLC should be set to the explicit path of the Progress installation directory. PATH should include `DLC` and `DLC/bin`. For example:

```
DLC=/apps/dlc/91b;export DLC
PATH=$DLC:$DLC/bin:$PATH;export PATH
```

2 Use the PROCOPY command-line function to copy a Progress empty database to a new schema holder name. In the following example `oraempty` is the schema holder being created:

```
$DLC/bin/procopy $DLC/empty /MFGPROeBInstallDir/DB/oraempty
```

When Progress was originally installed, the `empty.db` database was installed in the base Progress directory.

3 Start the new schema holder in single-user mode.

```
$DLC/bin/_progres -1 /MFGPROeBInstallDir/DB/oraempty
```

4 In the Progress Editor, choose Tools|Data Dictionary|Admin|Load Data and Definitions|Data Definitions (.df file).

5 In the Load Data Definitions screen, enter `oraempty.df` in the Input File prompt, then choose OK.

Loading of the `.df` file may take several minutes. If errors are encountered, the load will abort. If an error occurs, ensure that the original source database used during the PROCOPY was empty and restart the schema holder creation process.

6 Repeat step 5 to load `oadmempty.df` and `ohpempty.df`.

7 Using MFG/UTIL, copy `oraempty` to create the production database set schema holder. For details see the Database Server Setup chapter of the MFG/PRO eB *Installation Guide: Oracle Database on UNIX Server.*

Update Results Application File

Important This section applies to Windows environments where the Results application will be used for the first time. If you currently use the Results application successfully, you can safely ignore this section.

This service pack includes an updated `qaddb.qc7` file. It resolves truncation issues associated with Join changes or additions that may arise in some environments when the Results application is initially used. This new file is not required for all environments. It should be used only for new Results installations and in environments where the truncation issues have been encountered. If you have updated any Join characteristics in your current file, you must make the same updates in the new file.

To replace the existing file with the service pack file, use Windows tools to copy the service pack `qaddb.qc7` file from database server service pack CD directory:

```
\svcpack\results\v2
```

To the Results directory:

```
\results\v2
```

Update hlp_mstr Table

If you use the US English language WinHelp system, you must manually delete existing hlp_mstr table entries and reload the `hlp_mstr.d` file from the service pack CD. The service pack installation does not update the hlp_mstr table with the latest records.

Important The hlp_mstr table is used by the MFG/PRO eB help system for US English language only. If you do not use WinHelp, you do not need to update this table. Additionally, if you have already updated the hlp_mstr table during a previous service pack installation, you can safely skip this section.

Repeat the process for each MFG/PRO eB database you update using the service pack.

Follow these steps to delete existing hlp_mstr table contents and to update the table with the service pack information:

1. Copy `hlp_mstr.d` from the `svcpack\mfg` directory on the service pack database server CD to a directory where you have write access.
2. Start an MFG/PRO eB session that connects to the database being updated.
3. Start the Progress editor.
4. Enter and run the following program to delete all the records in hlp_mstr:

```
for each hlp_mstr:
    delete hlp_mstr.
end.
```

5. Start the Progress Data Dictionary.

6 Select the qaddb database as the working database.

7 Select Admin/Load Data and Definitions/Table Contents (.d file).

8 Select the hlp_mstr table from the list.

9 Enter the full path to the `hlp_mstr.d` file copied in step 1 above.

Important You may receive a code page error. You can safely ignore this error. It has no adverse effects on your data load.

10 If errors were generated during the hlp_mstr load, the `hlp_mstr.e` file is created in the directory where the `hlp_mstr.d` file was copied. Review the `hlp_mstr.e` file for errors that need to be corrected. After correcting any errors, you must delete the hlp_mstr records and reload the `hlp_mstr.d` file.

Update lbl_mstr for the NetUI

This section applies to non-US English environments where the NetUI is being used, and either the US language `lbl_mstr.d` file or the `lbl_mstr_us.d` file have not already been loaded into the administration database.

Important If you have already loaded the US language `lbl_mstr.d` or the `lbl_mstr_us.d` file in your environment, you can safely skip this section.

Loading the `lbl_mstr_us.d` file in non-English language environment adds data and mapping information needed by the NetUI to correctly display messages. Without this information, NetUI messages may appear in undefined characters, or other display errors may occur. You must load the `lbl_mstr_us.d` file into your administration database in order for the NetUI to function correctly for non-English languages.

During the service pack installation, the `lbl_mstr_us.d` file was copied to the *`/spinstalldir`*`/lblmstr` service pack installation subdirectory. This file is also on the database server service pack CD:

`cdrom``/svcpack/lblmstr/`

Note If you are not installing the service pack but want to load this data, use Windows or UNIX tools to copy this file to a working directory where you have administrative privileges.

Follow these instructions to load the `lbl_mstr_us.d` file:

1. Launch MFG/UTIL from your database directory.
2. Select Database|Load Data into Database.
3. In the Connect Database window, specify the path and name of your admin database in the Physical Name field. Leave all of the other fields blank and choose OK.
4. In the Input Directory window, enter the full path to the appropriate subdirectory in your service pack installation directory, or to the working directory where you copied the file.

   `/spinstalldir/lblmstr/`
5. When the Table Selection for Load window displays, make sure the `lbl_mstr_us.d` file displays; choose OK to begin loading the data.
6. When the load completes, choose OK to continue.

Update msg_mstr and mnt_det Tables

Note These instructions apply to all non-US English MFG/PRO eB installations.

If you have implemented Service Pack 2 or above in your environment, the service pack installation automatically updated your databases with new msg_mstr and mnt_det records. You can safely ignore this section. However, to install new msg_mstr and mnt_det records without implementing the service pack, you must use the following instructions.

Updating msg_mstr and mnt_det information without implementing the service pack involves copying data files and scripts manually from the service pack media to a temporary directory, then customizing an environment-specific script with your environment details. The appropriate script must be tailored and run for each individual database. If you have multiple databases, you must customize and run the correct script for each of them.

Note If you have multiple databases to update, rename modified scripts when you save them so that the original script template is not overwritten. This makes the task of modifying the script for a new database easier.

Setup for Table Updates

Perform the following steps before you begin updating the msg_mstr and mnt_det tables.

Using UNIX or Windows tools:

1. Create a working directory where you have administrative privileges.

   This directory is used to store temporary Progress and Oracle files, log files, and lists of deleted records.

2. Copy the complete `bin` and `spdata.preSP2` directories from the database server service pack CD to your working directory.
   - The `bin` directory contains programs required by the service pack installation. Some of these programs are used for this data load.
   - The `spdata.preSP2/spdata.baseline` directory contains the data files needed to update the msg_mstr and mnt_det tables for MFG/PRO eB environments with baseline code only. These are environments where no service pack has been implemented.
   - The `spdata.preSP2/spdata.SP1` directory contains the data files needed to update the msg_mstr and mnt_det tables for MFG/PRO eB environments where Service Pack 1 has been implemented.
   - The `spdata.preSP2/scripts` directory contains the scripts that you will tailor with your environment details, then execute to update your databases. For typical databases, you only need to use one of these scripts.

3. Select the update script appropriate for your environment.

Script Name	Used For
uxpro	Progress databases on UNIX servers
ntpro.bat	Progress databases on Windows servers
uxora_sharedmem	Oracle databases on UNIX servers using a shared memory connection
uxora_net8	Oracle databases on UNIX servers using a Net8 connection
uxora_pronet	Oracle databases on UNIX servers using a Progress Client Network connection

Edit the Script

Using a text editor, open the correct script in the `spdata.preSP2/scripts` subdirectory of your working directory. Edit the script as indicated in the following sections for your specific environment.

uxpro: Progress on UNIX

1. Make sure you are editing the correct script in the *`workdir`*`/spdata.preSP2/scripts` directory.
2. Replace the following variables with the information corresponding to your environment:

   fulldbname. Enter the full name of the database being updated.

   fulltmpdirname. Enter the complete path to the working directory you created in the setup section.

   fulldatadirname. Enter the complete path to the directory containing the data being loaded. Two sets of data files are included on the service pack. Make sure you indicate the data directory that corresponds to your environment by entering one of the following:

   `workdir``/spdata.preSP2/spdata.baseline`

   `workdir``/spdata.preSP2/spdata.SP1`
3. Save the script.
4. Set DLC.
5. Make `bin` your working directory:

   `cd` *`workdir`*`/bin`
6. Run the modified `uxpro` script.

ntpro.bat: Progress on Windows

1. Make sure you are editing the correct script in the *`workdir`*`\spdata.preSP2\scripts` directory.
2. Replace the following variables with the information corresponding to your environment:

   fulldbname. Enter the full name of the database being updated.

fulltmpdirname. Enter the complete path to the working directory you created in the setup section.

fulldatadirname. Enter the complete path to the directory containing the data being loaded. Two sets of data files are included on the service pack. Make sure you indicate the data directory that corresponds to your environment by entering one of the following:

`c:\workdir\spdata.preSP2\spdata.baseline`

`c:\workdir\spdata.preSP2\spdata.SP1`

3 Save the script.

4 Set DLC.

5 Set `bin` as your working directory:

`cd workdir\bin`

6 Run the modified `ntpro.bat` from a DOS command line.

uxora_sharedmem: Oracle on UNIX, Shared Memory Connection

1 Make sure you are editing the correct script in the *workdir*`/spdata.preSP2/scripts` directory.

2 Replace the following variables with the information corresponding to your environment:

fullschemaholdername. Enter the full schema holder name.

oracledbname. Enter the full Oracle database name.

oracleownername. Enter the Oracle owner name.

oracleuserpassword. Enter the Oracle user password.

fulltmpdirname. Enter the complete path to the working directory you created in the setup section.

fulldatadirname. Enter the complete path to the directory containing the data being loaded. Two sets of data files are included on the service pack. Make sure you indicate the data directory that corresponds to your environment by entering one of the following:

workdir`/spdata.preSP2/spdata.baseline`

workdir`/spdata.preSP2/spdata.SP1`

3 Save the script.

4 Set the following environment variables:

- DLC
- ORACLE_HOME
- ORACLE_SID
- PATH

ORACLE_HOME and ORACLE_HOME/bin must be in the path.

5 Confirm your Oracle database is running.

6 Set `bin` as your working directory:

```
cd ./bin
```

7 Run the modified `uxora_sharedmem` script.

uxora_net8: Oracle on UNIX, Net8 Connection

1 Make sure you are editing the correct script in the *`workdir`*`/spdata.preSP2/scripts` directory.

2 Replace the following variables with the information corresponding to your environment:

fullschemaholdername. Enter the full schema holder name.

oracledbname. Enter the full Oracle database name.

oracleownername. Enter the Oracle owner name.

oracleinstancename. Enter the Oracle instance name.

oracleuserpassword. Enter the Oracle user password.

fulltmpdirname. Enter the complete path to the working directory you created in the setup section.

fulldatadirname. Enter the complete path to the directory containing the data being loaded. Two sets of data files are included on the service pack. Make sure you indicate the data directory that corresponds to your environment by entering one of the following:

`workdir``/spdata.preSP2/spdata.baseline`

`workdir``/spdata.preSP2/spdata.SP1`

3 Save the script.

4 Set the following environment variables:

- DLC
- ORACLE_HOME
- ORACLE_SID
- PATH

  Make sure that ORACLE_HOME and ORACLE_HOME/bin are in the path.

5 Confirm your Oracle database is running.

6 Make `bin` your working directory:

`cd` *`workdir`*`/bin`

7 Run the modified `uxora_net8` script.

uxora_pronet: Oracle on UNIX, Progress Client Network Connection

1 Make sure you are editing the correct script in the *`workdir`*`/spdata.preSP2/scripts` directory.

2 Replace the following variables with the information corresponding to your environment:

fullschemaholdername. Enter the full schema holder name.

oracledbname. Enter the full Oracle database name.

oracleownername. Enter the Oracle owner name.

oracleuserpassword. Enter the Oracle user password.

hostname. Enter the name of the host on which the schema holder runs.

servicename. Enter the name of the service started for the schema holder.

fulltmpdirname. Enter the complete path to the working directory you created in the setup section.

fulldatadirname. Enter the complete path to the directory containing the data being loaded. Two sets of data files are included on the

service pack. Make sure you indicate the data directory that corresponds to your environment by entering one of the following:

`workdir/spdata.preSP2/spdata.baseline`

`workdir/spdata.preSP2/spdata.SP1`

3 Set the following environment variables:

- DLC
- ORACLE_HOME
- ORACLE_SID
- PATH

  Make sure that ORACLE_HOME and ORACLE_HOME/bin are in the path.

4 Confirm your Oracle database is running.

5 Make `bin` your working directory:

```
cd workdir/bin
```

6 Run the modified `uxora_pronet` script.

UNIX Client Installation

UNIX Client Installation Setup

If you are currently running a production environment and want to test the service pack in a test environment, you can use the setup instructions in “Setup for UNIX Database Server Installation” on page 12 to create a test environment.

If the test environment client files are not in the same directory as the test database server files, use the following instructions to regenerate the client startup files with the correct PROPATH. If the client files are in the test database server directory, the following setup is not required. Install the client CD directly into the test database server directory.

If this is a new installation or you are performing a conversion, skip to “UNIX Client Installation Instructions” on page 32.

1 Log on as user mfg.

2 Create a new test directory for the client installation; for example, `dr01/qad/svpack`. This is the client startup directory you will use to modify the PROPATH in step 4 of this setup. This is also the directory you should enter in step 10 of the installation instructions on page 33.

3 Launch MFG/UTIL. From the MFG/UTIL main window, choose the Configure drop-down menu and select the Database Set Maintenance option.

4 In the Database Set configuration window, enter a new set description for your service pack test database set. Leave the default Start Parameters. Modify the PROPATH by entering the service pack client startup directory and the service pack `bbi` directory; for example:

```
SET PROPATH=.,/dr01/qad/svpack,/dr01/qad/svpack/us/bbi,
    /dr02/qad/chrfilesrv,/dr02/qad/chrfilesrv/us/bbi
```

Make sure the Active field is set to Yes; then choose OK.

5 Select the Scripts drop-down menu from the MFG/UTIL main window and choose the Generate Scripts option. Select the service pack test database set and choose OK. MFG/UTIL generates a startup script for your test database set.

UNIX Client Installation Instructions

Use these instructions to install the UNIX client service pack CD. Install the character client service pack CD before installing the NetUI service pack CD.

Note Depending on your installation environment, you may be prompted to remove temporary installation files during the installation process. You should always enter Yes at these prompts.

You must be logged in as mfg to complete this installation.

1 Start the installation by performing the following steps:

a Insert the service pack CD into the CD-ROM drive.

b Mount the CD-ROM.

c Change directories to the directory where you mounted the CD-ROM.

d Enter `./install`.

2 Confirm you are executing the correct installation.

3 Review the license agreement. Enter Yes to accept the agreement.

4 At the prompt, enter Yes to view these installation instructions online using your Web browser. Otherwise, continue to the next step.

Yes: Your default Web browser is automatically launched. Review the warnings and other information displayed on your browser. Navigate to the installation instructions, and continue this installation with step 7 of those instructions.

5 Review the Service Pack CD Warning; enter Yes to continue the installation.

6 Review the Q/LinQ information; enter Yes to continue the installation.

7 At the prompt, enter the full path to the directory where you installed the MFG/PRO eB code; for example, `/qad/charcli`.

8 At the prompt, enter Yes to install the Progress code for the service pack. Otherwise, skip to step 12.

9 At the prompt, enter the two-letter language directory where the Progress code should be installed.

10 At the new test area prompt, enter Yes. This allows you to specify the test directory you created in “Setup for UNIX Database Server Installation” on page 12 or in step 2 of “UNIX Client Installation Setup” on page 31.

11 Enter the full path to the directory where you want the service pack client files installed. If you created a test directory in “Setup for UNIX Database Server Installation” on page 12, enter it here; for example, `/QAD/SVPACK`. Otherwise, accept the default.

12 At the prompt, indicate whether to copy the service pack information files. If you enter Yes, indicate the directory where you want the service pack information files copied.

13 Review the service pack installation information. Enter Yes if the information is correct. Otherwise, enter No to re-enter the installation information.

14 Press Enter at the prompt to complete the installation.

Important After updating your Production environment and before starting MFG/PRO eB, you need to update the `version.mfg` file in your client working directory. This file contains the MFG/PRO eB version identifier, which is displayed on the logon screen. Copy `version.mfg` from your service pack installation directory to your client working directory.

Windows Client Installation

The setup and installation steps for the Windows character and Windows GUI client service pack CDs are identical. Install the character client service pack CD before installing the other client CDs.

Windows Client Installation Setup

If you are currently running a production environment, QAD highly recommends using a test database environment to install the service pack files before installing them to your production environment. For example, you can use the test database environment you created to test the database service pack installation. To test the service pack in a test environment, use the following instructions.

If this is a new installation or you are performing a conversion, skip to “Windows Client Installation Instructions” on page 36.

1 Log in to the Windows client with administrative privileges.

2 Create a new test directory for client installation; for example, `E:\mfgguifs\sp7`. You will use this directory to modify the PROPATH in step 6 of this setup. This is also the directory you should enter during the installation in step 11 on page 37.

3 Launch MFG/UTIL. From the MFG/UTIL main window, choose the Configure drop-down menu and select the Database Set Maintenance option.

4 In the Database Sets configuration window, select your production set and choose Copy Set. In the Copy Data Set window, enter a name for the service pack test database set and choose OK.

5 In the Database Sets configuration window, select the service pack test database set and choose Edit Set.

6 In the Database Sets configuration window, enter a new set description for your service pack test database set. Leave the default Start Parameters. Modify the PROPATH by entering the service pack client startup directory and the service pack `BBI` directory.

For example:

```
SET PROPATH=.,C:\mfgcli\IMAGES.PL,E:\MFGGUIFS\sp7,
    E:\MFGGUIFS\sp7\us\BBI,E:\MFGGUIFS,E:\MFGGUIFS\us\BBI
```

Make sure the Active field is set to Yes; then choose OK.

7 Select the newly created service pack test database set. For each client member of the database set, select the test database that corresponds to the production database it is replacing. Edit the client physical name and database path to correspond with the test database. Verify that the connection parameters for the test database are correct. After you review all the database connections for all the test clients, choose OK to exit the Database Sets configuration window.

8 Select the Scripts drop-down menu from the MFG/UTIL main window and choose the Generate Scripts option. Select the service pack test database set and choose OK. Follow the prompts.

MFG/UTIL generates a startup icon for your test database set. For details, see the client setup chapter in the MFG/PRO eB *Installation Guide: Progress on Windows NT.*

Windows Client Installation Instructions

These instructions apply to the Windows character and GUI client service pack CDs. Install the character client service pack before installing the NetUI service pack CD.

Note Depending on your installation environment, you may be prompted to remove temporary installation files during the installation process. You should always enter Yes at these prompts.

1. Insert the service pack CD into the CD-ROM drive. Run `install.exe` using File Manager, Windows Explorer, or the Start button.
2. Confirm you are running the correct installation.
3. Review the license agreement. Enter Yes to accept the agreement.
4. At the prompt, enter Yes to view these installation instructions online using your Web browser. Otherwise, continue to the next step.

   Yes: Your default Web browser is automatically launched. Review the warnings and other information displayed on your browser. Navigate to the installation instructions, and continue this installation with step 7 of those instructions.
5. Review the Service Pack CD Warning; enter Yes to continue the installation.
6. Review the Q/LinQ information; enter Yes to continue the installation.
7. At the prompt, enter the full path to the directory where you installed the MFG/PRO eB code; for example, `D:\MFGNTSVR\guicli`.
8. At the prompt, enter Yes to install the Progress code for the service pack. Otherwise, skip to step 12.
9. At the prompt, enter the two-letter language directory where the Progress code should be installed.
10. At the new test area prompt, enter Yes. This allows you to install the service pack Progress code in the test directory you created in step 2 of the Setup section on page 34. Otherwise, skip to step 12.

11 Enter the full path to the directory where you want the service pack client files installed. If you created a test directory in “Windows Client Installation Setup” on page 34, enter it here; for example, `D:\QAD\SVPACK`.

12 At the prompt, indicate whether to copy the service pack information files. If you enter Yes, indicate the directory where you want the service pack information files copied.

13 Review the service pack installation information. Enter Yes if the information is correct. Otherwise, enter No to re-enter the installation information.

14 Press Enter at the prompt to complete the installation.

Important After updating your production environment and before starting MFG/PRO eB, you need to update the `version.mfg` file in your client working directory. This file contains the MFG/PRO eB version identifier, which is displayed on the logon screen. Copy `version.mfg` from your service pack installation directory to your client working directory.

Compile the Service Pack Code

After installing the service pack database server CD and the service pack client CD, compile the service pack code. You must compile the code for each language you install.

Important If this is a Portuguese (PO) language installation, refer to “Update the Compile Database Set” on page 51 before continuing.

Depending on your UNIX system configuration, you may need the client CD originally used to install MFG/PRO eB. If you are compiling in a Windows environment, you will need that CD.

The service pack code is compiled using MFG/UTIL. In order to correctly compile the new code, MFG/UTIL reviews your original installation configuration log files to determine the installed MFG/PRO eB components. It compares those components to the service pack contents and generates a compile list based on that comparison.

In UNIX environments, the original configuration log files are copied to the installation directory when you install MFG/PRO eB. In Windows environments, those log files are not copied to the installation directory. You must have the original MFG/PRO eB installation CD to compile the service pack code in a Windows environment. During the compile procedure, you will be prompted to insert that CD in the CD-ROM drive.

Follow these steps to compile the service pack code:

1. Start MFG/UTIL.
   - In UNIX environments, start MFG/UTIL from the character client installation directory.
   - In Windows environments, start the MFG/UTIL character or GUI client on the file server machine.
2. Select Generate Compile List File from the Programs drop-down menu.
3. Select the Generate Service Pack Compile List check box.
4. The Service Pack Directory field displays the service pack target directory. If this is not the directory where the service pack was installed, enter the correct service pack installation directory.
5. Select the correct language code in the Language Code field.
6. Select Generate.
7. An error message may appear prompting you to insert the MFG/PRO eB client CD.
   a. Insert the CD into the CD-ROM drive.

      In UNIX environments, at the prompt, enter the path to the `mfgpro` directory on the CD; for example:

      `CDROMDir``/mfgpro`

      In Windows environments, at the prompt, enter the CD-ROM device letter.

   b. The system reviews the MFG/PRO eB client CD and generates a service pack compile list. Select Close to return to the main window of MFG/UTIL.
8. Select Compile Procedures from the Programs drop-down menu.

9 Enter the correct compile list file name. The compile list file name defaults from the previous screen.

10 Review and update the compile PROPATH:

- If this is a new MFG/PRO eB installation or a conversion, the PROPATH should include the `xrc` directory in the target service pack directory; for example, in UNIX environments:

  SPTargetDir`/us/xrc`

  Or in Windows environments:

  SPTargetDir`\us\xrc`

  SPTargetDir is the directory where the service pack code was installed.

- If you are installing the service pack in a test environment, the PROPATH must include the service pack install directory and the install directory where the MFG/PRO eB client code was originally installed; for example, in UNIX environments:

```
COMPILE PROPATH=SPTargetDir/us/xrc,SPTargetDir/us/bbi,
    OrigClientInstallDir/us/xrc,OrigClientInstallDir/us/bbi
```

  Or in Windows environments:

```
COMPILE PROPATH=SPTargetDir\us\xrc,SPTargetDir\us\bbi,
    OrigClientInstallDir\us\xrc,OrigClientInstallDir\us\xrc
```

11 Review the language code; it should correspond to the directory structure indicated in the PROPATH.

12 Accept the default database set. QAD highly recommends you compile only against the Compile database set.

13 Review the destination directory.

- If this is a new installation or conversion, this should be the directory where you originally installed MFG/PRO eB code.
- If you are installing the service pack in a test environment, this should be the directory where you installed the service pack code.

14 Select Compile. Verify the compile information.

15 Select OK to compile the code. Otherwise, select Back to change information on the previous screens.

NetUI Installation

This section includes installation instructions for both the UNIX and Windows NetUI service pack. Use the instructions that pertain to your NetUI environment.

If you have already installed QAD's NetUI in a production environment, QAD recommends that you set up a test environment to install and test the NetUI service pack files before updating your existing production environment. If you do not already have a test environment, refer to the setup and configuration chapters in the MFG/PRO eB *Installation Guide: Network User Interface* to set one up.

Important The NetUI service pack CD installation instructions assume that you are installing the service pack code in a test environment.

This service pack contains modified files for various components of the NetUI. Depending on your NetUI configuration, these files may be located on multiple machines. Before beginning the NetUI service pack installation, make sure that you have access to and permissions for the following directories:

- The directory where the NetUI HTML, Java, and client files are located
- The directory where the remote method invocation (RMI) server files are located

Using QAD Desktop 2

If you have implemented or plan to implement QAD Desktop 2 but not the NetUI, do not install the NetUI service pack CD. The Desktop installation media contains all the components needed to install and use Desktop.

Note Installing this service pack requires that you also install the latest Desktop 2 release. If you have already implemented the latest Desktop 2 release, you must rebuild your Desktop system using the Desktop administration HTML pages after you install the service pack. Additionally, the Desktop installation directory must be placed before the service pack installation directory in the PROPATH.

QAD Desktop 2 and the NetUI can be used together in the same environment. If you plan to set up this type of environment, review the following information to ensure a successful implementation:

- If you use the embedded NetUI interface, you must install the NetUI service pack. Otherwise, you do not need to update your NetUI environment with the NetUI service pack files. To use the latest NetUI files, simply point your NetUI clients to the `full.html` file in the Desktop installation directory on the Web server. The Desktop installation media always contains the latest `full.html` file.
- If you plan to set up client machines for use with both the NetUI and Desktop, install or update the NetUI client software before you launch the first Desktop session.
- Desktop clients require Internet Explorer 5.5 on Service Pack 2, or 6.0 or greater. QAD recommends you use the latest 6.0 release. You must upgrade your client machines to one of these releases. Desktop does not run on Netscape browsers.
- Setting up Desktop on a NetUI client machine requires that you update components on the client machine, such as the Java Runtime Environment (JRE). Additionally, the Desktop startup may add components, such as additional browser plug-ins.
- The Desktop Web server requires Java 2 SDK 1.4; the NetUI requires JDK 1.3 on the RMI server. If both servers reside on the same machine, both Java environments are required.

Overview of Changes to the NetUI

Enhancements have been made to the NetUI in Service Packs 1 and 2 to support the new eB Desktop product. These enhancements change some aspects the NetUI and, starting with Service Pack 2, require that you install a more recent version of Java. This primarily affects the remote method invocation (RMI) server.

For a complete description of the NetUI, see *User Guide: eB Desktop and Network User Interface*. You can view or download this document at the QAD documentation Web site:

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

Changes Introduced with Service Pack 1

Service Pack 1 adds the following features and changes to the NetUI:

- All NetUI tool bar icons have been updated and replaced with clearer, simplified images. The icons perform the same functions; only their appearance has changed.
- The appearance of telnet programs in the NetUI has changed in the following ways:
  - A tool bar is active with both standard tool buttons and those specific to telnet programs. Most actions that were previously available with function keys can now also be executed by clicking a button.
  - A separate scrollable message area has been added at the bottom of the telnet program screen.
  - The general appearance of the screen has been modified to make telnet screens look more like browses and reports in the NetUI.
  - Java lookups are now available from most fields in telnet programs.
  - Access to online help and lookups has been functionally separated. A new button and accelerator (Alt+L) display the lookup. Clicking the question mark icon or using F2 displays the same HTML-based help available in reports.
- A new Appearance Manager (36.20.10.18) function has been added that lets a system administrator modify the default screen appearance by creating and applying color and font schemes.
- A new type has been added to Program Information Maintenance (36.3.21.1) to support the Appearance Manager.

Changes Introduced with Service Pack 2

Service Pack 2 adds the following features and changes to the NetUI:

- The NetUI now requires Java 1.3. This change affects installed components, such as the RMI and online help servers. Each client machine must also have Java Runtime Environment (JRE) 1.3.
- A new client installation script is required to accommodate changes introduced with Java 1.3, such as changes to Java security files.

NetUI Installation Overview

To install the NetUI service pack files into your test or production environment, complete the following tasks:

Note If you are using the NetUI in a non-English environment, you may also need to follow the instructions to update your database with missing label data, included on the database server CD.

See "Update lbl_mstr for the NetUI" on page 24.

Install the NetUI Web Server Files

Use the following instructions to install updated files from the service pack CD into the appropriate directory on your NetUI Web server.

Note Depending on your installation environment, you may be prompted to remove temporary installation files during the installation process. You should always enter Yes at these prompts.

1. Make sure you have administrative privileges:
   - In UNIX environments, log on as a user with write privileges for the Web server document and cgi directories, normally user *root*.
   - In Windows environments, log in to the client machine with administrative privileges.
2. Begin the NetUI installation:
   - In UNIX environments, mount the NetUI service pack CD on your Web server and launch the service pack installation program:

     ```
     ./install
     ```
   - In Windows environments, insert the NetUI service pack CD into the CD-ROM drive and run `install.exe` using File Manager, Windows Explorer, or the Start button.

3 Confirm you are executing the correct installation.

4 Review the license agreement. Enter Yes to accept the agreement.

5 At the prompt, enter Yes to view these installation instructions online using your Web browser. Otherwise, continue to the next step.

Yes: Your default Web browser is automatically launched. Review the warnings and other information displayed on your browser. Navigate to the installation instructions, and continue this installation with step 8 of those instructions.

6 Review the Service Pack CD Warning; enter Yes to continue the installation.

7 Review the Q/LinQ information; enter Yes to continue the installation.

8 At the prompt, enter Yes to install the service pack on the Web server.

9 At the prompt, enter the full path to your Web server's primary document directory. This directory should contain the `multinet` directory where the Java, HTML, and client setup files and the `multinet.html` file were originally installed; for example:

In UNIX environments using the Netscape Web sever:

```
/netscape/suitespot/docs
```

In Windows environments using the Apache Web server:

```
C:\apache\htdocs
```

10 At the prompt, confirm the service pack installation details. Enter Yes to install the service pack. Otherwise, enter No to re-enter the installation information.

11 At the prompt, select Enter to complete the installation.

Copy Updated NetUI Interface Help Files

This section applies to multi-language or non-English language environments.

Note If you have already implemented updated interface help files for a previous MFG/PRO eB service pack, you do not need to repeat the process. You can safely ignore this section.

The service pack installation updates interface help files in the US English directory only. In multi-language environments it does not automatically install updated interface help files to the various language-specific help directories. You must manually copy the interface help files from your installation directory or from the NetUI service pack CD to the appropriate language-specific help directory.

Find the interface help files on the service pack CD or in your installation directory at:

CDROM DIR/svcpack.wserv/multinet/help/doc/en/help/interfacehelp/javaui

InstallDir/multinet/help/doc/en/help/interfacehelp/javaui

Copy the contents of the `javaui` directory from either location to your language-specific directory. In a Windows environment, use the Windows Explorer, File Manager, or DOS to copy the files. In UNIX environments, use the copy command. For example, to copy the service pack interface help files from the service pack CD to your Spanish language NetUI help directory, where the language code is `es`, you would use the following copy command:

```
cp -r CDROM DIR/svcpack/wserv/multinet/help/doc/en/help/
interfacehelp/javaui/* InstallDir/multinet/help/doc/es/
help/interfacehelp/javaui
```

Update JDK on the RMI Server

The Java Development Kit (JDK) is required for the RMI server and NetUI online help. Starting with Service Pack 2, JDK 1.3.1_03 is required for the RMI server. You do not need to update the help server; it can continue to use JDK 1.1.8.

To download the JDK 1.3.1_03 software, access the following Sun Microsystems Java Web site:

www.java.sun.com/j2se/1.3/download.html

Copy and Incorporate RMI Server Files

The service pack installation does not automatically install updated files in the RMI server directory. You must manually copy these files to your environment.

The RMI server files are located on the service pack CD in *CDROM DIR*/`svcpack.wserv/rmi`. Starting with Service Pack 2, many of the files in the RMI directory have been updated to be compatible with the updated version of the JDK.

Note For more information on the RMI server, see *Installation Guide: Network User Interface*.

Setting up the RMI server involves two major steps:

- Copying the files from the service pack CD
- Running a script to configure the server

To set up the RMI server, perform the following steps on the machine where you want the RMI server to run. These instructions assume that you have already installed the appropriate version of the JDK.

1. Create a backup copy of your existing RMI directory.
2. Copy the `rmi` directory from the CD over your currently installed RMI directory, replacing and updating files. This directory is referred to as the RMI installation directory.
3. Access the RMI installation directory, and launch the RMI configuration script appropriate to the operating system of your machine.
   - For UNIX servers, run `config.ksh`.
   - For Windows servers, run `config.exe`.
4. When prompted, enter the path to the directory containing the JDK.
5. The configuration script attempts to detect the host name of your machine and prompts you to verify it. If the host name is correct, specify Yes. If the host name is incorrect, specify No and enter the host name at the subsequent prompt.
6. When prompted, enter the port number you want the RMI server to use.

7 After you complete these prompts, the configuration script creates an RMI startup script in the `rmi` directory. Depending on your machine's operating system, the script has different names:

- For UNIX servers, the script is `rmi.ksh`.
- For Windows servers, the script is `rmi.bat`.

8 Using the appropriate startup script, start the RMI server.

9 To verify that the RMI server is functioning correctly, use the instructions appropriate to your operating system.

- For UNIX servers, access the `rmipid.log` file and record the RMI process IDs. There should be one process for the RMI Registry and one for the Java RootManager. Then, verify that the processes are running using the following command:

  `ps -ef | grep` *`ProcessID`*

- For Windows servers, verify that there is an active command prompt window for each of the RMI processes: one for the RMI Registry and one for the Java RootManager.

Replacing files in the RMI directory overwrites any customizations, including the public and individual presentation files that are modified with the UI Configurator. You should notify users with customized presentations that the customized versions have been deleted.

Customizations to both the public and individual presentation files must be redone after you replace the files. There currently is no way to merge the changes from the new QAD-supplied files.

Update NetUI Clients

To run the NetUI after the service pack is installed, clients must have the correct version of the JRE installed and the JRE must be tailored for NetUI requirements. The NetUI service pack includes a new client installation program that completes these tasks.

The client installation occurs in two major steps:

- Complete the JRE install.
- Complete the NetUI setup sequence.

The client installation script does not copy the NetUI `.jar` files to the client. This is managed automatically by JRE 1.3. Whenever a newer `.jar` file exists on the Web server, it is downloaded before the Java applet runs. This ensures that the client is always running the most up-to-date code.

Important Before beginning, make sure that your Web server is running.

Install JRE 1.3

1. From the client, launch the Web browser, go to the NetUI Web server, and access the `multinet` subdirectory below the primary document directory.

   In the following example URL, *`HostName`* refers to the NetUI Web server. This example assumes that when accessing the Web server you are placed in the document directory by default and that `index.html` is the default file to display:

   `http://`*`HostName`*`/multinet/`

2. Click OK when a message displays indicating that the NetUI client files are not current on this machine. You are redirected to the `client_setup.html` file in the `client_files` subdirectory below the `multinet` directory in the Web server's document directory.

3. When Client Machine Setup Procedure window displays, read NetUI client requirements and verify that the client machine meets them.

4. Read the instructions in the Setup Procedure for QAD NetUI section. If you have not previously installed JRE 1.3, click step 1, Java Plug-In 1.3.

5. You can choose to download the JRE file or run the program from the server. If you choose to save the file to disk before running it, you must find it in the file system and double-click to start it before continuing with the next step.

   Note One or two security warning screens may display. These screens let you agree to accept installations from InstallShield and from Sun. Simply click Yes to continue.

6 When the InstallShield program displays, click Yes to accept the Software License Agreement.

7 The Choose Destination Location screen displays. Click Next to install to the default location (recommended). Click Browse to find an alternate location for the installation; then click Next.

8 A number of messages display indicating the progress of the install.

9 When the install is complete, your Web browser redisplays.

Complete NetUI Setup

1 Click step 2, QAD Setup, in the Setup Procedure for QAD NetUI section of the `client_setup.html` page.

2 The File Download screen displays. Click Run this program from its current location; then click OK.

Note If you receive a security warning, simply click Yes to continue.

3 When the installation completes, close the browser on the client machine and restart it. You can now access the NetUI.

The first time the client successfully logs in to the NetUI, the required `.jar` files are downloaded. A message displays indicating that the download is in process.

Client Updates

The following list provides brief descriptions of updates the client setup process performs and of files that it installs on the client machine:

- Installs JRE 1.3.1_03, which includes the Java Plug-In.
- Configures Java security files by copying the `qadkeystore` file and updating the `java.policy` file so that users can run `.jar` files signed by QAD. These files are located in:

  `C:\Program Files\JavaSoft\JRE\1.3.1_03\lib\security`

  The previous version of `java.policy` is saved as:

  `java.policy.orig`

Important If you modified policies previously, you should combine the changes in the two policy files.

- Installs a `font.properties` file with settings needed by eB Desktop into:

  `C:\Program Files\JavaSoft\JRE\1.3.1_03\lib\`
- Installs required fonts into:

  `C:\Program Files\JavaSoft\JRE\1.3.1_03\lib\fonts`
- Sets the Java Run Time Parameters field in the Java Plug-in Control Panel to `-mx64m`.
- Creates a cookie that indicates setup is complete.

Optionally Customize NetUI HTML Files

The NetUI includes a set of default HTML files that you can copy and modify to meet your requirements. The NetUI HTML files are located in the `multinet` subdirectory below the Web server's primary document directory.

Starting with Service Pack 2, files with 13 appended to the name are added, indicating they are to be used with Java 1.3. These files must be used after installing the service pack. The other files are not overwritten by the service pack so that you can preserve any customizations you have made.

The installation process preserves the port number and Web Speed broker currently specified in `multinet.html` by saving these values in `netui13.js`. This javascript file is called by the new `multinet13.html` to set the values appropriately.

If you have further customizations you want to preserve, you may need to modify the following files after installing the service pack:

- `full13.html`
- `embedded13.html`
- `multinet13.html`
- `trace13.html`

Update the Compile Database Set

This service pack includes the `xdc_mstr.d` and `xdc_mstr_upd.d` data files to update the Portuguese (PO) language database dictionary field labels. If this is a PO language installation and you have not implemented this update for Service Pack 1, you must now update the translated labels in your compile database set before you compile the service pack code.

If you have already implemented the PO database dictionary field labels updates for Service Pack 1, you do not need to repeat the process. You can safely ignore this section and compile the code as instructed in “Compile the Service Pack Code” on page 37.

Service Pack Updates

The following table shows the database dictionary labels modified in Service Pack 1 for PO language installations. The labels are modified for various MFG/PRO eB programs.

US Language Label	Length	PO Language Label	Length
Format	6	Formato	7
BOM/Formula	11	Lista Materiales	15

Use one of the following files to update the labels for the PO language compile database set. Both files are located on the database server service pack CD in `/svcpack/po`:

- `xdc_mstr.d`

  This is the complete and updated `xdc_mstr.d` file. It includes the complete set of PO language database dictionary labels for MFG/PRO eB. Use it to update a new PO compile database set. For future use, copy this file to your installation PO directory.

  Note Use this file only when creating a new compile database set. Using it to update an existing compile database set is time consuming and may result in the loss of label customizations.

- `xdc_mstr_upd.d`

  This is the service pack updates file. It contains the updated schema label information only. Use it to update schema labels for existing PO language compile database sets.

Creating a New Compile Database Set

If this is a new installation and you have not created a Portuguese language compile database set, create the database set using the instructions found in the Multiple Language Setup chapter of the MFG/PRO eB installation guide appropriate for your system.

Do not use the baseline `xdc_mstr.d` file found in the MFG/PRO eB installation directory. Instead copy the service pack `xdc_mstr.d` file to the MFG/PRO eB PO installation directory, and use it to update the schema labels.

Updating an Existing Compile Database Set

If your compile database set has already been updated with the baseline `xdc_mstr.d` file, update the translated schema labels with the service pack `xdc_mstr_upd.d` file.

Warning Label customizations in your existing compile database set may be lost when you copy or load the service pack information. Take the appropriate steps to back up and restore your customizations as needed.

For future use, copy the service pack `xdc_mstr.d` file to the MFG/PRO eB PO installation directory. Use this file next time you need to create a new database set.

Use the following instructions to update the translated schema labels in your existing PO language compile database set:

1. Copy service pack `xdc_mstr_upd.d` file to your working directory.
2. Start MFG/UTIL.
3. From MFG/UTIL, select Database and choose Load Translated Labels.
4. In the Connect Database screen, specify the path and name of the language-specific main database in the Physical Name field. Choose OK to continue.
5. After a connection is made, specify the path to where you copied the `xdc_mstr_upd.d` data file; for example:

   DBAdminDir`/po/xdc_mstr_upd.d`

6 Choose OK to begin loading the translated labels.

After updating the compile database set with the `xdc_mstr_upd.d` file, compile the service pack code as described in “Compile the Service Pack Code” on page 37.

New Requisition Control Options

For Service Pack 6, Requisition Control File (5.2.1.24) was enhanced with new control options. After installing that service pack, or a subsequent service pack, the new control options will not affect your GRS environment unless you change the default values. The new control options:

- Prohibit or allow modification of a requisition after the requisition is routed for review and at least one approver has approved it.
- Reset all approvals after one approver denies the requisition and re-routes the denied requisition back to the originator.

The following paragraphs describe the two GRS control options.

Prohibit Changes to Approved Requisitions. Use this field to prohibit or allow changes to an approved requisition.

No: You can edit the requisition after approvals exist using Requisition Maintenance (5.2.3) or Requisition Approval Maintenance (5.2.13).

Yes: If one approver has approved the requisition, only the buyer can edit the requisition. If you are not a buyer, an error message displays if you attempt to edit any requisition field.

Reset Approvals Upon Denial. Use this field to reset the approval status for all approvers upon denial.

No: When an approver denies a requisition, only that approver’s status is set to denied. Any existing approval statuses are maintained. The routing does not change.

Yes: When one approver denies the requisition, the status of all other existing approvers is reset, regardless of the original approval status. The system routes the requisition back to the requester or originator. Use Approval Status Inquiry (5.2.15) to display the reset approval status.

Update Non-U.S. English Help Databases

Service Pack 5 included field and procedure help updates for some non-U.S. English environments. If you have already loaded that help you can skip this section for this service pack.

The help updates include help that was missing or incorrect in the baseline help files for the following languages:

- French (FR)
- German (GE)
- Traditional Chinese (TW)
- Simplified Chinese (CH)
- Portuguese (PO)
- Japanese (JP)
- Latin Spanish (LS)

The help update files are in `.fhd` format. Each `.fhd` files is located on the service pack Database Server CD in an appropriate two-letter language subdirectory under `/svpack`.

Copy the appropriate language fhd file to a work directory and use Field Help Load (36.4.19) to load it into your database. For details, see the section on loading help in your MFG/PRO eB installation guide.

Update EDI ECommerce Help

Refer to the MFG/PRO eB2 *User Guide Volume 7: Release Management* for information on the new document tracking and export programs.

Field and procedure help updates for the EDI ECommerce document tracking functionality added by ECO N1VN, as well as for programs added to the Document Export Menu (35.21.4) were included on the service pack beginning with Service Pack 6. If you have already loaded these help updates, you can skip this section.

The help update files are in `.fhd` format. Each `ecommerce.fhd` file is located on the service pack Database Server CD in an appropriate two-letter language subdirectory under `/svcpack`.

Copy the appropriate language `.fhd` file to a work directory and use Field Help Load (36.4.19) to load it into your database. For details, see the section on loading help in your MFG/PRO eB installation guide.

Note These records display as character help only. To view updated character help from a GUI client, access User Interface Profile (36.20.4) and set Winhelp? to No.

Tip
Leave User ID blank to update this setting for all users who do not have individual profile records.