Industry-specific

QAD SOLUTIONS

Manufacturing Applications

Installation Guide
Trade Management

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Contents

About This Guide

Use this guide to install Trade Management (TrM) on a UNIX, Linux, or Windows server. Windows installations support character clients only. For graphical interfaces, run QAD Desktop.

These instructions are for the system administrator who manages the database and is familiar with the installation operating system, networking, and Progress.

TrM and Service Pack Installation

Each TrM release is completely remastered. Therefore, if you are installing TrM for the first time, regardless of service pack level, the entire release including all service pack updates is included during the base installation; no additional steps are required.

If you are upgrading from an initial release (IR) of a given version (2.5, 2.6, 2.7) or from an earlier service pack to the most recent TrM service pack, follow the specific steps outlined in the service pack installation guide provided on the CD.

Installation Errata

See “QAD Web Site” on page 3 for information.

In addition to these instructions, you may receive a supplementary errata sheet with changes and additional instructions. Check your product package. In addition, when you begin the installation, always check the QAD Web site to verify that you have the latest version.

Other TrM Documentation

For information on using Trade Management, refer to *User Guide: Trade Management* and *User Guide Supplement: Trade Management*. The supplement includes information about the latest changes and enhancements to the application.

For technical details, refer to *Trade Management Entity Diagrams* and *Trade Management Database Definitions.*

To view documents online in PDF format, see the *Supplemental Documents on CD*.

Note The Trade Management installation guide is not included on a CD. Printed copies are packaged with your software. Electronic copies of the latest versions are available on the QAD Web site.

Online Help

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

For information on using the help system, refer to *User Guide: Trade Management*.

QAD Web Site

The QAD 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 users with a QAD Web account, product documentation is available for viewing or downloading at:

http://support.qad.com/

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 QAD customers 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 QAD products.

Conventions

Typographic 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.

UNIX and Windows Conventions

This document supports the installation of Trade Management for both UNIX and Windows platforms. Some steps are unique to a particular platform and are documented in separate sections and marked as UNIX or Windows only. In steps that are common to UNIX and Windows, UNIX file and path conventions are used when needed. If you are installing on the Windows platform, substitute the drive letter and path conventions for your operating system.

Chapter 1

Planning a TrM Installation

This chapter presents basic topics that you should understand before beginning a Trade Management (TrM) installation.

Planning an Installation

Trade Management (TrM) is a pricing and promotions application that covers the full spectrum of promotions, from planning through execution, administration, and evaluation. The application allows your company to manage fluid pricing activities effectively.

TrM runs in conjunction with MFG/PRO on Progress. TrM is typically deployed on the same server as your production MFG/PRO instance. This guide supports UNIX or Windows server installs, and character clients.

Installation Utilities

A large portion of the installation is managed by a QAD utility called MFG/UTIL. This product can be used for numerous database management tasks, both for the server and Windows clients.

After installation, you can access MFG/UTIL to perform maintenance, such as compilation and editing startup scripts or Windows client icons.

Keyboard Commands

Keyboard commands for MFG/UTIL are listed in Table 1.1.

Table 1.1 MFG/UTIL Character Interface Commands

Keyboard Entry	Command Name	Description
F1	Go	Moves to next frame or runs a program
F2	Help	Displays context-sensitive help (may not be available for all functions)
F3	Menu Bar	Accesses the menu bar
F4	End	Exits a frame, program, or menu
Spacebar	Select	Selects check boxes and on/off options
Enter or Tab	Tab	Moves to next field or command
Shift+Tab or Control+U	Back Tab	Moves to the previous field or command

Note In the character interface, buttons appear within angle brackets: `<OK>`. To choose a button, Tab to the button and press Enter.

Log Files

You can refer to the following log files created by the installation utilities.

Utility	Log File Name	Directory Location
Installation script	`install.log` and `mfgpro.log`	Subdirectory `/log` under the installation target directory
MFG/UTIL	`mfgutil.log`	MFG/PRO installation directory

Note Each time MFG/UTIL runs a prolonged task, such as compiling or loading a `.df` file, it creates a new log file. The most recent log file is always called `mfgutil.log`. Older log files are named with the convention `mfgutil.xxx`, where `xxx` is a number from 001 through 999. The lower the number, the older the file. For example, these files are listed newest to oldest:

```
mfgutil.log
mfgutil.002
mfgutil.001
```

Prior to Installation

Complete these tasks before a Trade Management install:

- Set up the network.
- Set up `services` files for client/server connections if you have multiple hosts.
- Install any patches for your operating system.
- Install MFG/PRO.
- Install the latest Progress patches. These can be obtained from:

  http://www.progress.com/support

Installing TrM

- Install the TrM server media.
- Create the empty TrM database.
- Create the TrM production database from the empty database and structure file.
- Load system data into the database.

- Configure new database sets—groups of databases started or stopped together with a single script.
- Generate server startup and shutdown scripts.
- Compile the application code.
- Complete several activities to load data and define settings that manage the integration of MFG/PRO and TrM.

Chapter 2

System Requirements

The TrM installation requires adequate system resources. This chapter provides system requirements and software prerequisites for the TrM server and the network.

A TrM installation consists of a database server and TrM clients. It operates under MFG/PRO with the QAD Desktop.

General Requirements

The system administrator must be an experienced Progress database administrator with a minimum of 1-2 years experience and must know how to manage Progress client processes.

Database Server

The database server is a UNIX or Windows server that contains TrM source code and the TrM database.

Hardware Requirements

- 1 GB of free disk space
- High-speed 100 mbps network card
- ISO9660 CD-ROM or tape drive
- 2 disk controller channels (minimum)

Software Prerequisites

- Operating system patches
- Progress 9.1E, Enterprise DB Server, licensed for the appropriate number of users
- Progress 9.1E, ProVision Plus
- MFG/PRO eB2.1 Service Pack 2+

Network

Set up your network to support Progress networking specifications. Minimum requirements from the TrM standpoint are:

- 10 Megabit (Mb) Ethernet or faster network

Chapter 3

Server Install

This chapter describes the installation of Trade Management on the MFG/PRO database server.

Preliminary Steps

Prior to install, review the following cautions and requirements:

- Set your `$TERM` variable to a standard terminal type such as vt100 or vt200 while installing TrM.
- Create services on your servers for the TrM databases, `trmempty`, `trmprod`, and optionally `trmdemo`.
- Determine the following information:
  - The TrM installation directory where you want to install the TrM server files, referred to as *`TrMInstallDir`*
  - The Progress directory
  - The host name for the database server

Installing the TrM Server

In this set of steps, you mount the Database Server media and copy the files to the server. Choose the steps for the media you received.

Mount the CD-ROM (UNIX only)

1. Log on as `mfg`.
2. Mount the CD-ROM. Example commands are listed in Table 3.1.

Table 3.1 UNIX CD Drive Mount Commands

Hardware	Mount Command
Sun	`volcheck cdrom`
HP	`/etc/mount -F cdfs /dev/dsk/`*`YourCDDevice`*` /cdrom`
Digital	`mount -r -o noversion -t cdfs /dev/`*`YourCDDevice`*` /cdrom`
AIX	`smitty mountfs` Then select file system, directory, and file system type (`cdrfs`).
Linux	`mount /dev/hdb /mnt/cdrom` Where `/hdb` could be `hdc` or `hdd` among other possibilities.
All others	Refer to your operating system documentation or vendor for requirements to mount a CD-ROM. You may be able to type `man mount` to determine the correct command.

3 Continue with “Install Database Server Files” on page 16.

Load Tape Media (UNIX Only)

Load the tape media into a temporary directory, then extract the TrM files from there into a permanent installation directory. All QAD tapes are written using a block size of 5120 bytes.

1 Log on as `mfg`.

2 Create a temporary directory.

3 Load your tape into the appropriate server drive.

4 Change to the temporary installation directory:

```
cd TemporaryTapeDir
```

5 Enter the applicable load command from Table 3.2.

Table 3.2 UNIX Tape Extract Commands

On this type of hardware...	Enter this load command...
HP 9000/800 Series, 1/4" cartridge	`tcio -i /dev/rct/YourTapeDevice | cpio -iumvdBc`
All others	`cpio -iumvdBc < /dev/YourTapeDevice`

6 Remove the tape and store it.

Installation Directory

Your selection of an installation directory for Trade Management can be important. If this is a new install, QAD recommends installing beneath your MFG/PRO installation directory (*MFGPROInstallDir*`\trm`).

On Windows, do not install to a directory with spaces such as `c:\Program Files\trm`. Some installation utilities or logs may not recognize the full path.

Install Database Server Files

Complete this section to install the TrM database server files on your server.

1. In UNIX, log on as user `mfg` under the group `qad`. On Windows, log on as an Administrator.

2. On the CD, change to the directory containing the database server media. This is the temporary tape directory for tape installs.

3. Change to the `install` directory:

   ```
   cd install
   ```

4. Launch the database server installation script in that directory:

   ```
   ./install.ksh
   ```

   In Windows, launch `install.exe` from the Windows Explorer.

   A welcome screen displays. Press Enter.

   ```
   Welcome to QAD's Trade Management 2.7 installation.
   We are installing Trade Management 2.7 for MSWin32.
   Press <Enter> to view license agreement.
   ```

5. Accept the software license agreement. Press Ctrl+C to jump to the end of the agreement.

   ```
   Do you accept all the terms of the preceding License
   Agreement?
   If you choose no, the install will stop.

   To install Trade Management 2.7, you must accept this
   agreement. (y/n)?
   Default is n
   ->y
   ```

6. You are prompted for a location for the log files. Accept the default or enter the installation log file location. If you enter a different log file location, make note of it for later installations.

   ```
   Please enter the location where the log file should be
   written.
   Default is c:\instlog
   ```

   On UNIX systems, the default is `/home/mfg/instlog`.

   This log directory is used to record information about this installation.

   Note If you identify the location used for your MFG/PRO installation logs here, the TrM install uses the information recorded there.

7 Enter the Progress installation directory path or accept the default. The script verifies the location and version. Specify Yes to confirm. The message “Installing Trade Management” displays.

8 Enter the MFG/PRO installation directory (*MFGPROInstallDir*).

9 Enter the path and directory where you want to install the Trade Management server files (*TrMInstallDir*). By default the installation is placed under *MFGPROInstallDir*. For example, `/qad/mfgsvr/trm`. On Windows, this is `c:\mfgsvr\trm`. If this directory does not exist, it is created.

   The following message displays:

   ```
   The character client is normally installed under the
   database server directory.
   ```

   You are then asked to confirm the TrM installation directory.

10 On Windows system, enter the name for the folder to contain MFG/UTIL icons. By default, this is Trade Management 2.7.

11 Review the summary and confirm by entering `y` and pressing Enter. Depending on processor speed, this process can take 90 minutes or more.

12 When the files finish copying, press Enter to end the script.

Modify the Workflow .ini Files

Three workflow files are shipped with TrM:

Workflow file	Title	Use
`wk0605.ini`	Create TrM Database Set	All installs
`wk0610.ini`	TrM Module Setup	All installs
`wk0615.ini`	Convert Trade Management (2.6 and up)	Conversions only
`wk0616.ini`	Convert Trade Management (pre 2.6)	Conversions only
`wk0620.ini`	Convert TrM Payments	New installs only

The `.ini` files are text files that set the sequence and default values for the MFG/UTIL installation process.

This document covers the create and convert workflows. The TrM Module Setup steps are documented without reference to the workflow since multiple user paths are possible within each step of the workflow.

By default, the TrM demo database creation steps are commented out. If you want to create the TrM demo database, you can edit `wk0605.ini` in a text editor to uncomment these steps. Remove the semicolon (;) at the start of each required line.

Creating the TrM Databases

In the following section, you create the empty TrM production database from the default QAD structure files. You will then use the empty database as a template to build your production and demonstration databases.

1. Launch MFG/UTIL from *`MFGPROInstallDir`* using the following command: `./mfgutil`.
2. Choose MFG/PRO Guided Setup from the Configure menu.
3. Select Create TrM Database Set in the Operation Set list box.

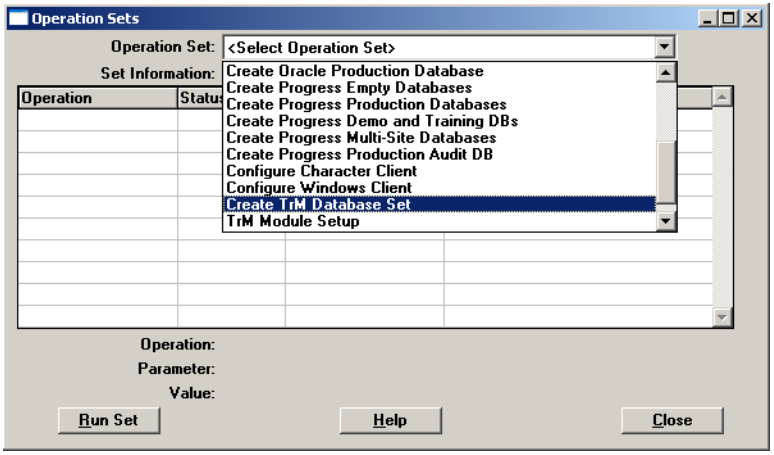


Fig. 3.1
Operation Sets Drop-Down

The MFG/PRO Guided Setup program provides a workflow of the operations required to set up your TrM environment. You can use this program to access the different configuration utilities in MFG/UTIL with proper default information and in proper sequence. Review the following figure to become familiar with the Guided Setup screen.

Note The number of operations is determined by the number of uncommented sections in `wk0605.ini`. See “Modify the Workflow .ini Files” on page 17 for information on configuring this file.

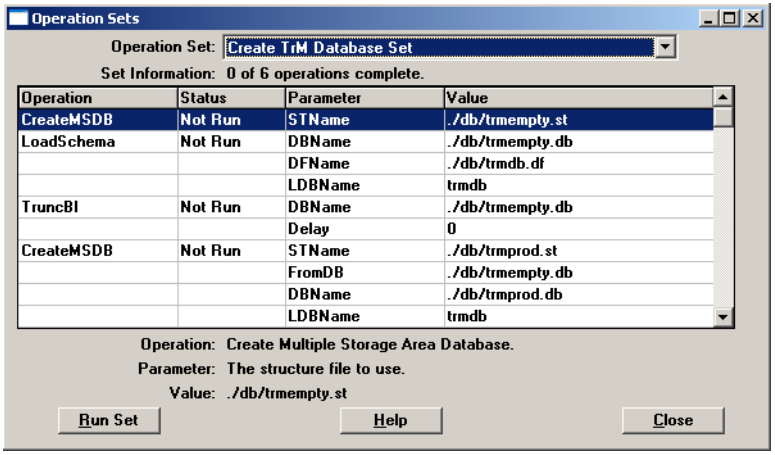


Fig. 3.2 Create TrM Database Workflow Steps

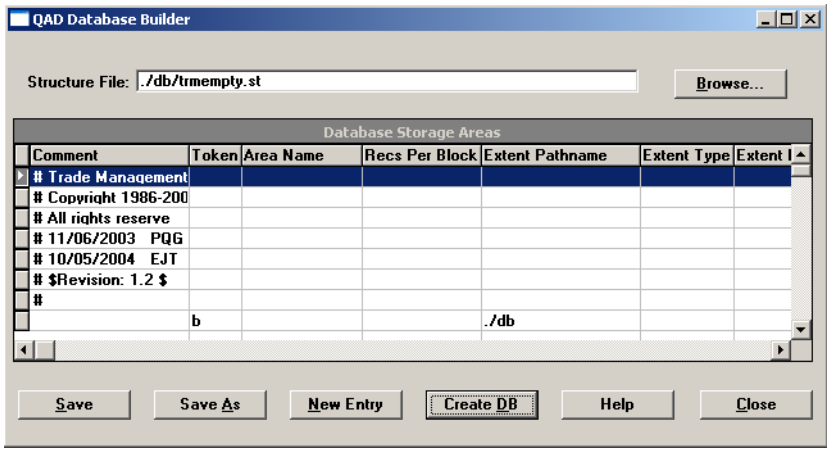
Operation sets are groups of installation activities. The operations in a set display in the Operation frame. On completion, the status changes to Done. If errors occur or if you cancel processing prior to completing a step, the status is Error. Below the Operation frame, the operation, the key variable required, and default value for that variable display.

If you stop the workflow and an Error status is written to a step, this is the first step run when you restart the operation set.

4 Choose Run Set and press Enter.

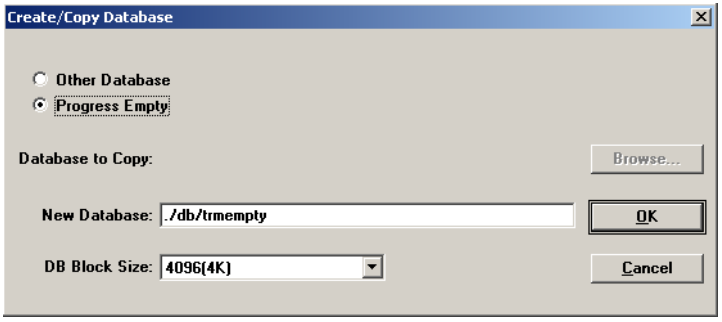
5 The QAD Database Builder screen displays with the default QAD empty structure file, `trmempty.st`. Generally, you do not need to edit this file for the empty databases. Choose Create DB.

Fig. 3.3
QAD Database Builder For `trmempty.st`



6 In the Create/Copy Database screen, verify that Progress Empty is selected and accept the defaults in the New Database and DB Block Size fields.

Fig. 3.4
Create/Copy Database For `trmempty.db`



7 Choose OK to build the main empty database, `trmempty`.

8 When `trmempty` is built, a log of the database build process displays. Choose Close to exit the log window.

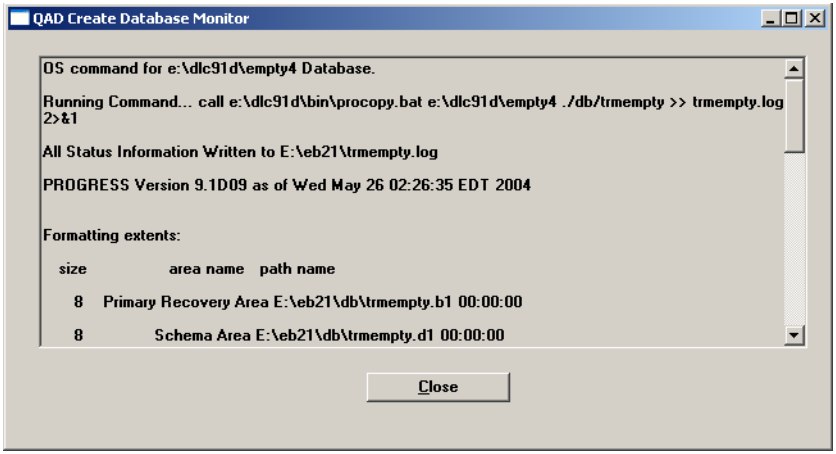


Fig. 3.5
Log Window Showing trmempty Creation

Load Schema in Empty Databases

The database schema consists of the sequences, tables, fields, and indexes in the database. In this task, you load the schema into the empty TrM database using a data definition file `trmdb.df`. The resulting database is used to build your main databases such as `trmprod` and `trmdemo`.

1 After you close the Edit Structure File/Create Database screen, the Connect Database screen displays. Accept the defaults and choose OK to connect to `trmempty`. Use Table 3.3 and the screen as guides.

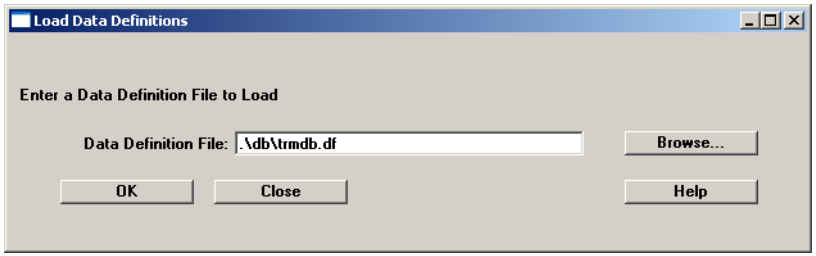
Table 3.3
Connect Database Values for `trmempty.db`

Field	Value
Physical Name	Path to `trmempty` (`/db/trmempty.db`)
Logical Name	Logical database name (`trmdb`)
All other fields	Leave blank

Fig. 3.6
Connecting to `trmempty.db`

2 The default data definition file displays. Choose OK to begin loading the database schema.

Fig. 3.7
Loading Data Definitions into `trmempty.db`



The program first writes the schema to a buffer, then loads it into the database. The write displays a progress screen; the load process does not.

Important Due to Progress limitations in the character interface, almost half the load time you see the message, “Processing schema load. Please wait...”

3 When the load completes, close the log window.

Fig. 3.8
Log Window Following Schema Load

4 The Enter a Data Definition File to Load screen displays with the OK button selected. Press Enter to close the screen. An error stating you must be connected may appear. Choose OK in this error. The workflow continues correctly following the error.

Truncate Before-Image Files

You now truncate the empty database before-image (BI) files. These files contain data awaiting writes to the database. Truncation updates the file so that the database is fully synchronized and then deletes the temporary data, bringing the files back to their minimum size. Little has occurred to increase the size of your BI file at this point, but the synchronization is required prior to creating copies of these databases.

1 In the Truncate Database Before Image File screen, accept the default path to `trmempty` and choose Truncate.

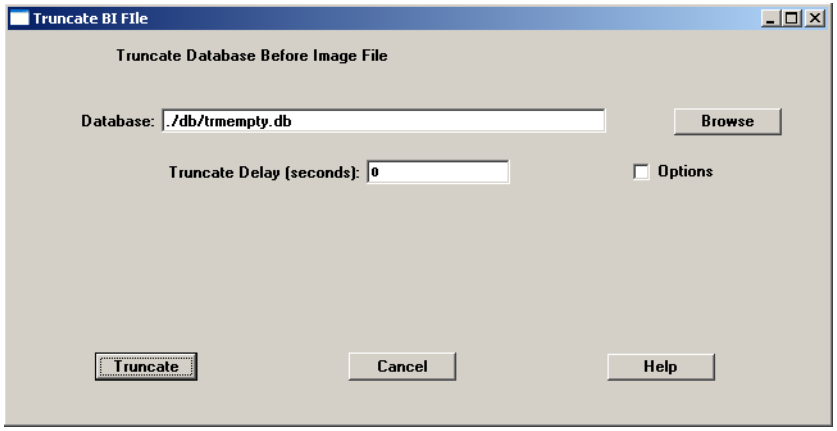


Fig. 3.9
Truncating `trmempty.db`

2 Close the log window that displays on completion.

3 The workflow displays the Structure File Edit screen.

Create the Production and Demo Databases

In the next set of tasks, the empty databases and the default structure files are used to create your working databases. Cycle through the entire process for `trmprod` and `trmdemo`, if it remains in the workflow.

Edit the Structure Files

The Guided Setup starts with the production database. By default this is `trmprod`. The first step is editing the structure file if you choose. The Structure File Record Detail screen lets you edit the Storage Area Path and the Extent Size for fixed-length extents.

- Use the Extent Pathname to distribute your database onto drives to maximize performance and optimize disk access.
- Use the Extent Size on fixed-length extents to control the size of each storage area. (This field does not appear for variable-length extents.)

Note Most storage areas consist of two extents—one fixed length, the other variable to allow for growth.

Warning Do not edit Comment lines. This nullifies the storage area. To add a comment to the file, select a comment line (#) from the Database Storage Area selection list and press Enter.

Warning Do not change the storage Area Name. This name matches the Area definition in the Data Definition files (`.df`) for the database. When Progress encounters data files without defined storage areas, it creates them in the System storage area, which is also used to maintain the structure of the database.

1. In the Structure File Edit screen, a structure file for the production database, `trmprod.st`, defaults in the Structure File field. The MFG/UTIL screen that displays lets you assign disk locations and sizes to your storage areas.

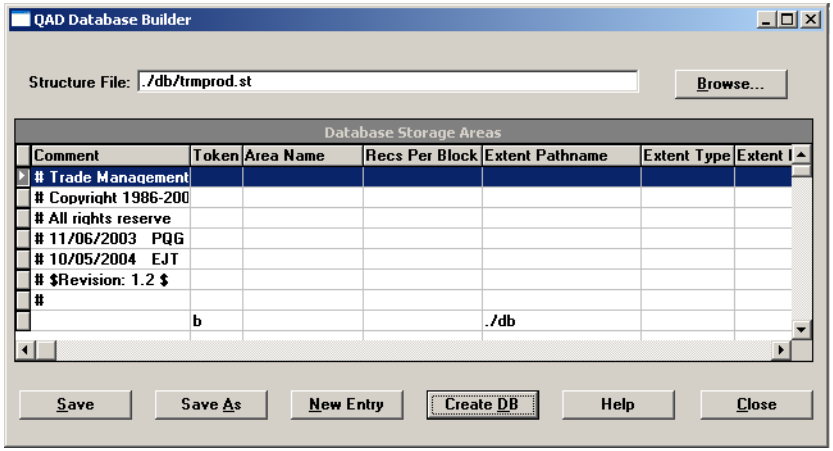


Fig. 3.10
Structure File Edit for `trmprod.st`

2 Modify any storage area by tabbing to the row and pressing Enter.

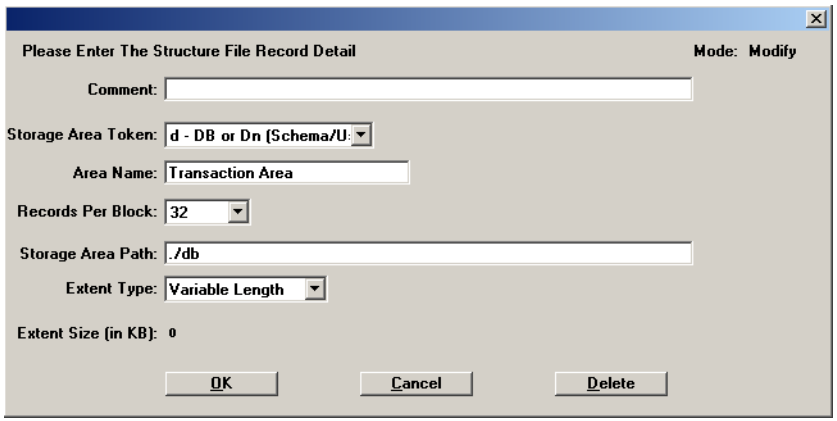


Fig. 3.11
Structure File Line Edit Screen

3 Edit the storage area definition. Typically you would edit only the Storage Area Path and Extent Size (on fixed-length extents).

4 Choose OK to save the edits.

5 Choose Create DB to save your entries and close the screen.

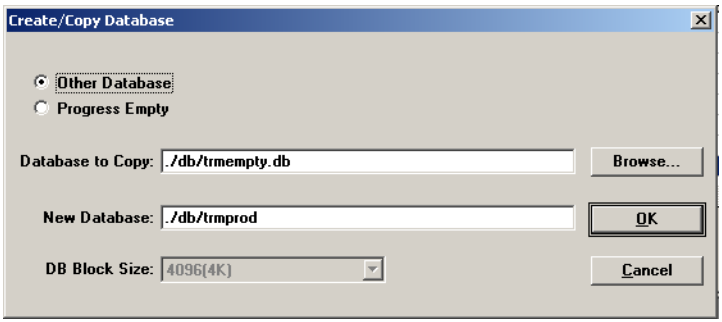
Build the Main Databases

In these next steps, you use the new `trmprod` structure file you configured and the empty databases to create the working databases.

1 The Create/Copy Database screen displays. Select Other Database and verify the path to `trmempty.db`. Choose OK.

The New Database name defaults from the `.st` file name. You can enter a different database name here if you choose.

Fig. 3.12 Creating `trmprod.db`



2 When `trmprod` is built, a log of the database build process displays. Scroll through the log and verify that `trmprod` was created successfully. This information is also recorded in `trmprod.log` in the *`MFGPROInstallDir`*. When ready, choose Close to continue.

3 The QAD Database Builder screen displays again with the Close button selected. Press Enter to close the screen.

4 If the demo database is in the workflow, that database is created here, following steps 1 through 3 in this section.

You now load the data for the production and demo databases.

Load System Data

In this task, you load the default system data, such as menu and message files supplied by QAD, into each database.

See “Modify the Workflow .ini Files” on page 17.

1 After the Database Storage Areas screen closes, the Connect Database screen displays. Accept the defaults to connect to the production database, `trmprod`. Choose OK.

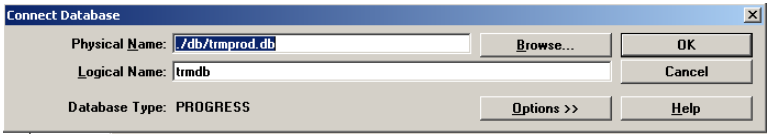


Fig. 3.13 Connecting to `trmprod.db`

2 The Log Window displays the database connection. Choose Close to continue.

3 Verify the correct load directory in the Load Data Contents screen. The correct directory is *`TrMInstallDir`*`/trmprod`. Use the Browse button to assure you have the correct directory. Select any file within the directory and choose OK to select that directory.

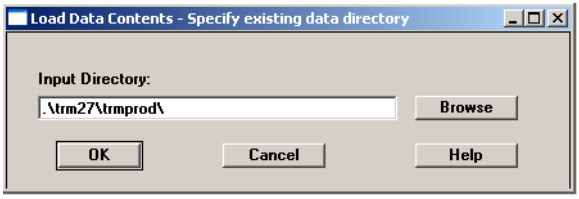


Fig. 3.14 Data Files Load Directory

4 The Table Selection for Load screen displays the data files in the `/trmprod` directory. Choose OK to start the load.

Fig. 3.15
Table Selection for `trmprod.db`

5 The Log Window displays load progress. There are a large number of files to load; the process takes approximately 45 minutes depending on processor speed, network bandwidth, and so forth.

6 When the load completes, press spacebar to continue.

7 If the demo database is in the workflow, those data loads occur here, following steps 1 through 6, from the directory *`TrMInstallDir`*`\trmdemo`.

8 You then connect to the `mfgempty` database to load Trade Management schema changes required in your MFG/PRO empty database. This load is required to enable you to correctly compile TrM and to recompile MFG/PRO. Use the Browse button to locate `mfgempty` in *`MFGPROInstallDir`*`\db`.

Fig. 3.16
Connecting to `mfgempty.db`

9 The Load Data Definitions screen displays. Locate `pcded.df` in your *`MFGPROInstallDir`*`\db` directory and choose OK.

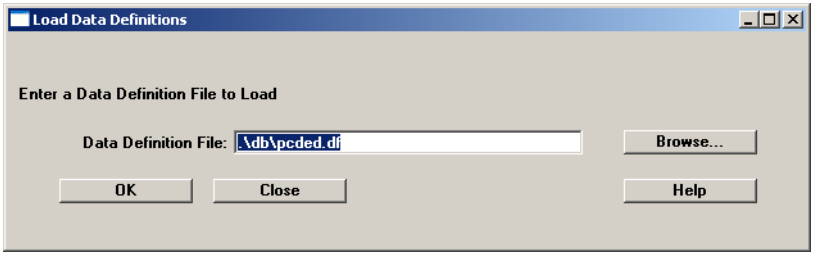


Fig. 3.17
Schema Load File for `mfgempty.db`

10 The Log Window displays showing load progress. When the load is complete, choose Close in the log window.

11 The Operation Set screen displays showing successful completion of the workflow. Choose Close.

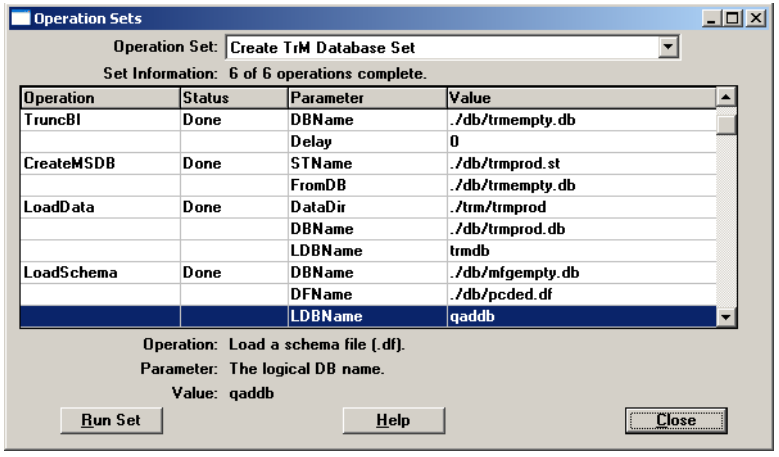


Fig. 3.18
Completed Create TrM Database Workflow

Preparing Database Sets and Scripts

MFG/UTIL uses the concept of database sets to link your various databases together. Each database set you create in MFG/UTIL is then used to generate startup and shutdown scripts (UNIX) or shortcuts and initialization and parameter files (Windows) that start and stop servers and client sessions correctly, launching and closing all the related databases together.

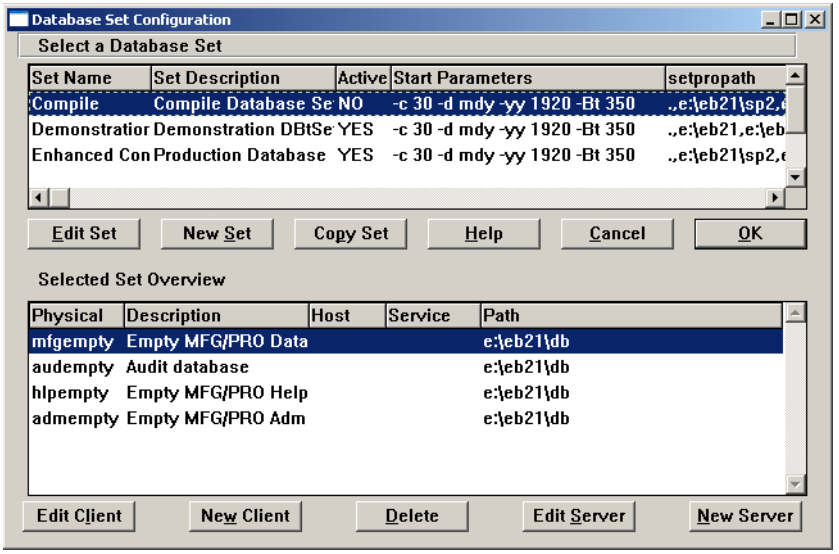
You create database sets for each working database and for compiles.

The following steps add the TrM database to the appropriate MFG/PRO database sets, and then generate server start and stop scripts for the production or demo database sets.

Configure Database Sets

1. In MFG/UTIL, choose Database Set Maintenance from the Configure menu.
2. Select the Compile database set in the top frame. Then Tab to the Selected Set Overview window. If a TrM database is displayed there, select it and choose Edit Server. Otherwise, choose New Server.

Fig. 3.19 Database Set Maintenance Screen



3 The Server Database Parameters screen displays. Verify the entries using the screen and field descriptions.

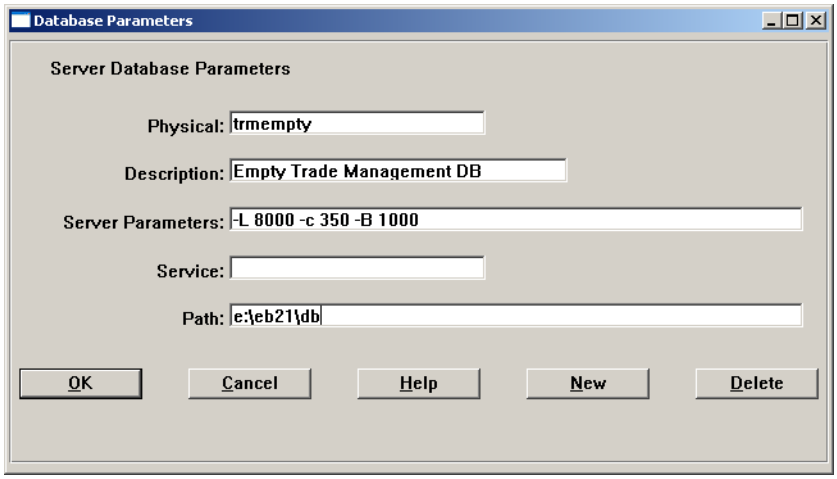


Fig. 3.20
Database Server Parameters for `trmempty.db`

Physical. Enter the physical database name. For the Compile database set, this is `trmempty`.

Logical. Enter the logical database name for `trmempty`.

Service. Leave blank for `trmempty` except in the rare case where you are installing the TrM databases on a client machine.

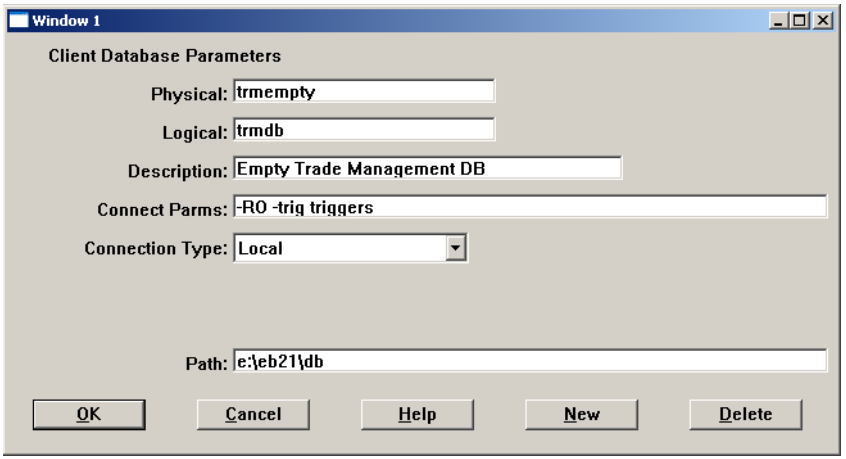
Path. Enter the full path to the database.

When you finish, choose OK.

4 Select the new entry for `trmempty.db` in the lower frame of Database Set Maintenance. Choose Edit Client.

5 The Client Database Parameters screen displays. Add Connect Parameters and make sure the connection type and values are correct.

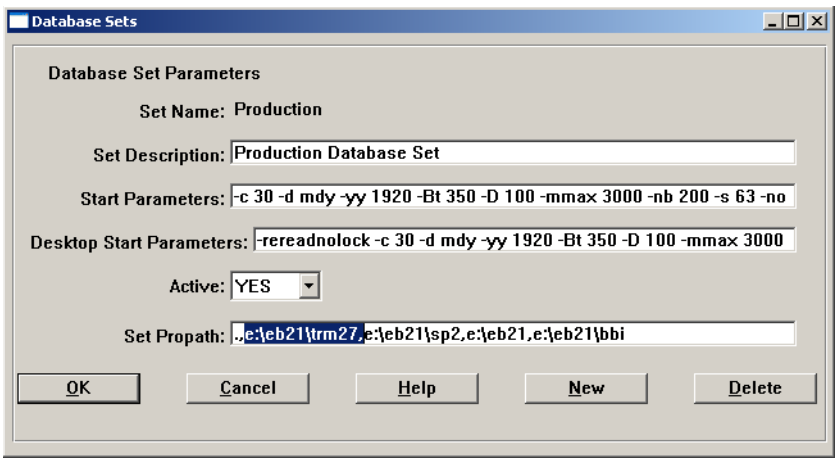
Fig. 3.21 Client Parameters Screen for `trmempty.db`



6 Choose OK to save your changes and return to Database Set Maintenance.

7 Tab or click in the top frame again. With the Production database set selected, choose Edit Set. Add the *`TrMInstallDir`* to the beginning of the PROPATH as shown and choose OK.

Fig. 3.22 Production Database Set Parameters



8 You return to Database Set Maintenance. In the Selected Set Overview, choose New Server. The Server Database Parameters screen displays. Verify the entries using the screen and field descriptions.

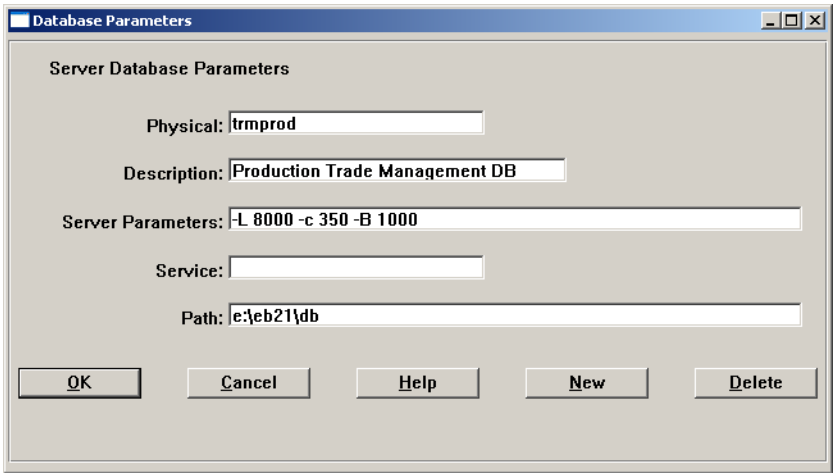


Fig. 3.23 Database Server Parameters for `trmprod.db`

Physical. Enter the physical database name. For the Production database set, this is `trmprod` by default.

Service. Leave blank or enter the service name for the database as set up in your `services` file.

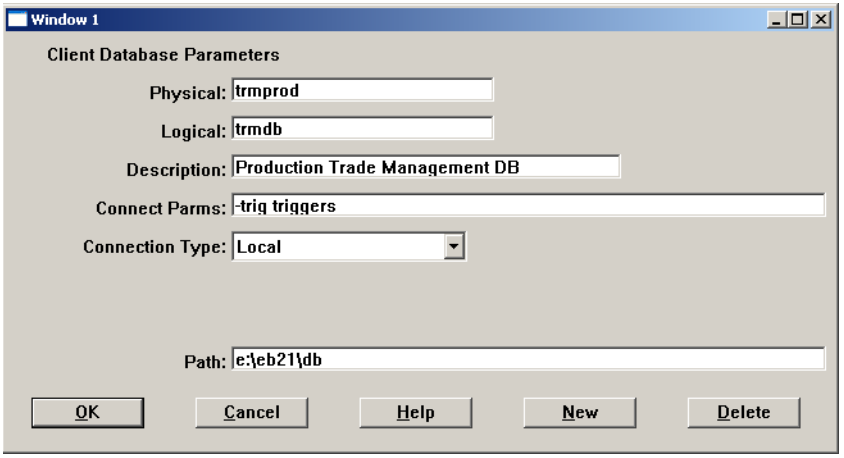
Path. Enter the full path to the database.

When you finish, choose OK.

9 Select the new entry for `trmprod.db` in the lower frame of Database Set Maintenance. Choose Edit Client.

10 The Client Database Parameters screen displays. Add Connect Parameters and make sure the connection type and values are correct.

Fig. 3.24
Client Parameters Screen for `trmprod.db`



11 Choose OK to save the changes and return to Database Set Maintenance.

12 Update the Demonstration database set in the same way if you created the TrM demo database.

13 When you complete the configuration of all applicable database sets, return to Database Set Maintenance and choose OK to save your work and exit to the main menu.

Generate Scripts

Run your MFG/UTIL character client to generate scripts and compile. This supports running TrM on a character client. The GUI compile is documented in “Compiling TrM Windows Programs” on page 48.

1 Launch MFG/UTIL from the *`MFGPROInstallDir`* using the following command: `./mfgutil`.

In Windows, click the character MFG/UTIL icon.

2 In MFG/UTIL, choose Generate Scripts from the Scripts menu.

3 Select the Production database set and Demonstration if required, and choose OK. The Compile database set does not require a start script since it is only used during compiles.

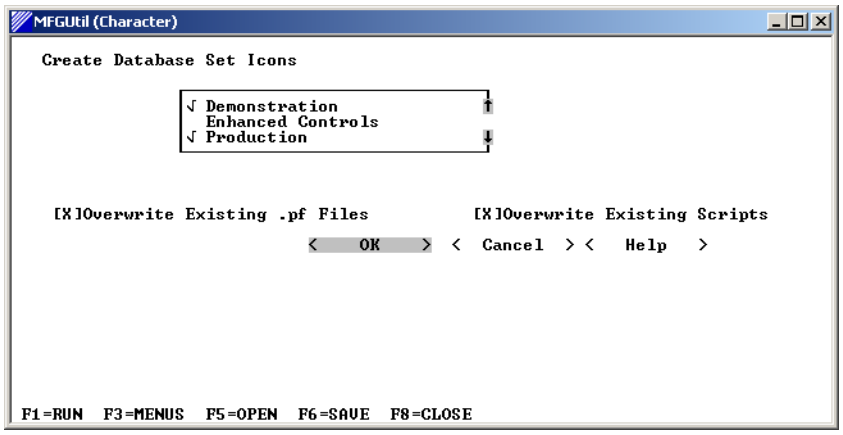


Fig. 3.25
Generating Scripts for the Production Database

4 You are asked to confirm the script generation. Choose Yes.

5 For Windows installs, select the folder where the program icons should be created.

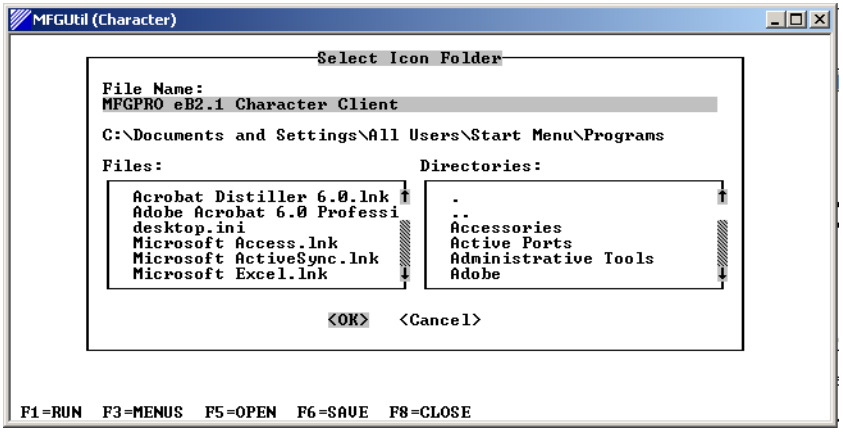


Fig. 3.26
Folder for TrM Production Database Icons

6 The log window displays progress. When the process completes, choose Close.

Compiling TrM Code

A full compile of TrM code is required. Compiling a source file creates an object file with the same name and the `.r` extension. Compiled programs are saved into a subdirectory using the first two letters of the program name. This subdirectory is located below the two-letter language code directory below *`TrMInstallDir`*. For example, `aiapprov.p` compiled for U.S. English is placed in *`TrMInstallDir`*`/us/ai`.

Multithreaded Compiles

TrM has nearly 12,000 programs to compile. If time is a factor, you can split the compile list file, `utcompil.wrk`, into multiple files and then launch separate complies for each of the files.

For example, you could create `utcomp01.wrk` through `utcomp04.wrk` having approximately 3,000 files apiece. You would then launch an MFG/UTIL session and start the first compile. Then launch a second session, a third, and a fourth. Depending on processor speed, this can cut compile time by as much as 70%.

Compile TrM

TrM is compiled in two passes, each pass controlled by a compile list file. The first pass uses `utuscomp.wrk`, the second, `utcompil.wrk`. Both passes through the compile program are controlled with a second TrM workflow in MFG/UTIL.

1. Launch MFG/UTIL from the *`MFGPROInstallDir`* using the following command: `./mfgutil`.

   In Windows, click the character MFG/UTIL icon.

2. Select Guided Setup from the Config menu.
3. In the Operation Sets field, select TrM Module Setup.
4. Choose Run Set to start the process.

5 The Compiler Options screen displays. Use the screen example and field descriptions to select compile options. The Compiler Options in the upper left of the screen let you set feedback levels and select a compile list.

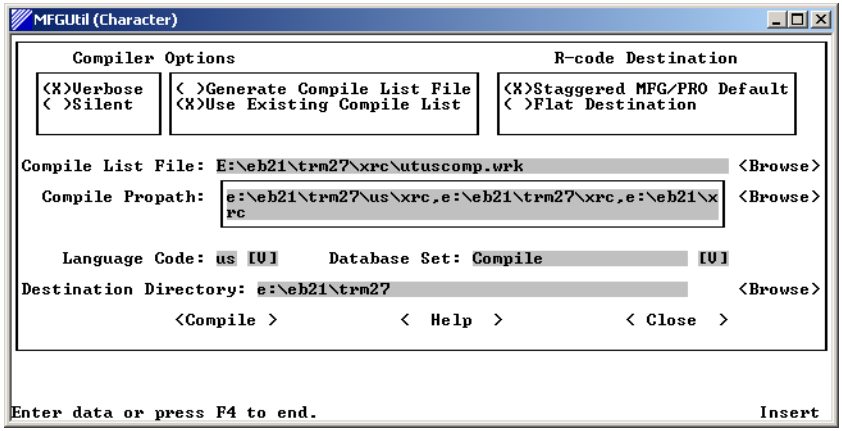


Fig. 3.27
Compiler Options
`utuscomp.wrk`

Verbose. MFG/UTIL displays compile information on the screen and writes it to the MFG/UTIL log file (`mfgutil.log`). During the compile, the following information displays:

- Date and time
- Percentage of the compile completed
- Path and name of the program currently compiling
- Number of compile errors that occur

The log file is in the directory from which MFG/UTIL was launched.

Silent. MFG/UTIL writes to `mfgutil.log` only.

Generate Compile List File. Generates or regenerates a file listing the programs to compile. When you select this option, the Generate Compile List screen displays.

Use Existing Compile List File. Use this option for most cases. This uses the compile list shipped with the product.

Staggered MFG/PRO Default. Saves compiled code in the default structure of language directories underneath *`TrMInstallDir`*.

Flat Destination. Select this option to save the compiled code in a single destination directory.

Compile List File. Specify the name of the compile list file, by default `utuscomp.wrk`. If the file is located in a directory other than the one from which MFG/UTIL was launched, include the directory path and the file name.

Compile Propath. The compile PROPATH for this compile must contain:

- The `xrc` subdirectory in *`TrMInstallDir`*`/us`
- The `xrc` subdirectory in *`TrMInstallDir`*
- The `xrc` subdirectory in *`MFGPROInstallDir`*

Language Code. If you selected Staggered MFG/PRO Default option, enter the language code where you want the code saved.

Database Set. The database set against which to compile.

Destination Directory. Specify the directory where you want compiled code saved. This is typically the *`TrMInstallDir`*. If Staggered MFG/PRO Default is selected, the compile places compiled code in the appropriate language directory beneath this directory and within two-letter directories beneath that. For example, a U.S. English `aiapprov.p` is compiled to:

`./TrMInstallDir``/us/ai/aiapprov.r`

6 When ready, choose Compile.

7 You are asked to confirm writing to the destination directories, *`TrMInstallDir`* and *`TrMInstallDir`*`\us`. Reply Yes to both prompts.

8 In the compile verification screen, verify the compile information. If the compile settings are correct, choose Continue. If the settings are incorrect, choose Back to make changes.

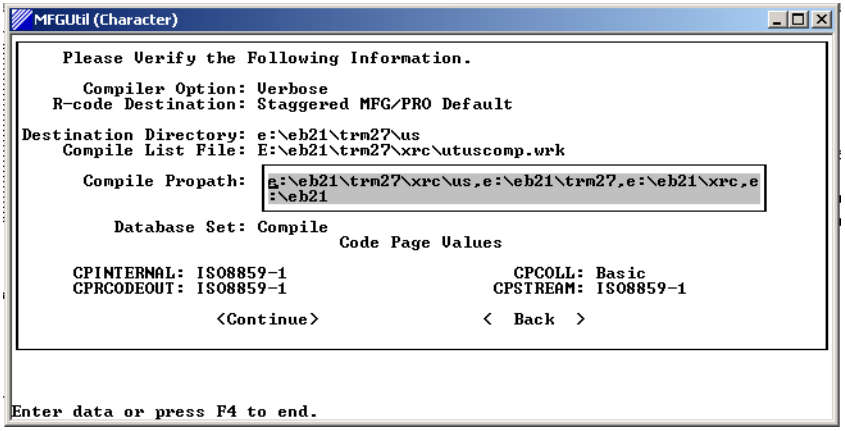


Fig. 3.28 Compile Verification for `utuscomp.wrk`

9 A log window displays progress.

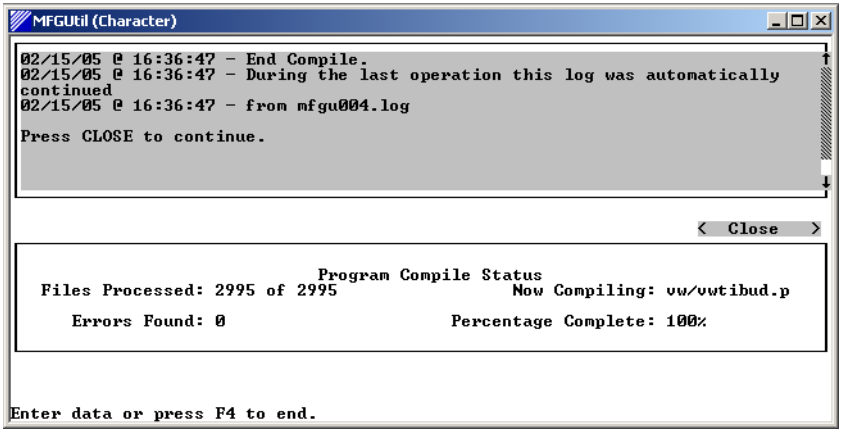


Fig. 3.29 Completed Compile

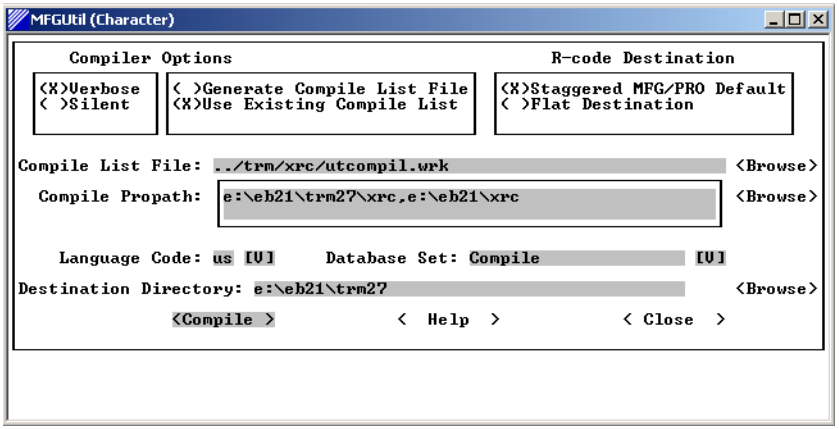
10 When the compile is complete, check for errors in the log window, and choose Close.

11 The Compile Options screen displays once again for `utcompil.wrk`. To reduce compile time, set up a multithreaded compile as described in “Multithreaded Compiles” on page 36.

12 Choose Compile Procedures from the Programs menu.

13 The Compiler Options screen displays. Use the screen example and field descriptions to select compile options. The Compiler Options in the upper left of the screen let you set feedback levels and select a compile list.

Fig. 3.30
Complier Options
`utcompil.wrk`



Compile List File. This should be `utcompil.wrk` (or `utcomp01.wrk`, etc.) located in the `xrc` subdirectory in *`TrMInstallDir`*.

Compile Propath. The compile PROPATH for this compile contains:

- The `xrc` subdirectory in *`TrMInstallDir`*
- The `xrc` subdirectory in *`MFGPROInstallDir`*

14 Choose Compile to start the compile.

15 Verify the destination directories in the prompts.

16 In the compile verification screen, verify the compile information and choose Continue.

17 When the compile is complete, check for errors in the log window, and choose Close.

18 The `mfgutil.ini` file is saved again and the workflow ends. Choose Close to exit the log window. Choose Close again to exit the Guided Setup program.

This completes the TrM compile.

Recompile MFG/PRO

Because several MFG/PRO programs are modified by TrM, you must recompile your MFG/PRO code. Follow the instructions in the installation guide for the specific MFG/PRO release you are running.

Create Default Payment Formats

For first-time installations of Trade Management only, MFG/PRO default payment records must be reconfigured to a TrM format.

Important Run this workflow only if this is the first Trade Management version installed.

1. Launch MFG/UTIL from *`MFGPROInstallDir`* using the following command: `./mfgutil`.
2. Choose MFG/PRO Guided Setup from the Configure menu.
3. Select the Convert TrM Payments workflow. Choose Run Set and press Enter.
4. Connect to your main MFG/PRO production database; for example, `mfgprod`.

   Note You loaded this file into `mfgempty` to support compiles in Step 8 on page 28. This load modifies your MFG/PRO production database.
5. In the Load Data Definition screen, select Browse to locate *`MFGPROInstallDir`*`\db\pcded.df`. This file includes tables required for payment centers and deductions. Choose OK to start the load.
6. Connect to your target MFG/PRO production database again, as in step 4; for example `mfgprod`. This is your target database for this portion of the conversion. Choose OK to connect.

   The payment centers and deductions conversion runs automatically.

Additional Optional Setup

TrM uses a method of accessing database information that may leave certain records in a locked state for extended periods. This situation can be avoided by enabling a function to release these locks.

This function is disabled by default since enabling it can impact performance for each affected database table. QAD recommends that you enable the record release function only for tables where locking could cause a significant problem.

Prerequisites

- Access to the Progress editor
- Knowledge of Progress commands
- The location of the MFG/PRO and TrM encrypted code
- The location of the MFG/PRO database `.pf` file

Compile Programs for Record Locking

1. From an MFG/PRO session with the Trade Management database connected, access the Progress editor.
2. Create a database alias for database `trmprod` using the command:

   ```
   create alias proc for database trmprod
   ```

3. Add the location of the encrypted source to the PROPATH using the command:

   ```
   PROPATH = PROPATH + ",MFGPROInstallDir\xrc,
   TrMInstallDir\xrc"
   ```

4. Use the application compiler to compile the `triggers` directory:
   a. From the Progress Editor, choose Tools|Application Compiler.
   b. Delete the “.” directory from the compile list.
   c. Add the *`TrMInstallDir`*`\triggers` directory to the compile list.
   d. Press Go to compile the code.

e When the compile finishes, exit the Progress editor.

5 Using a command window, access the TrM installation directory.

6 Using operating system commands, copy:

TrMInstallDir/xrc/triggers/*.r

To:

TrMInstallDir/triggers

Update the Database Configuration File

1 Open the MFG/PRO .pf file for editing with a text editor.

2 Add the following directory to the trmprod database entries:

-trig *TrMInstallDir*

Enable the Unlocking Function

After you have prepared the locking programs and modified the environment, you must enable the function for selected database tables using a supplied program. Follow these steps:

1 From the Progress editor, run triggers\trigupd.p.

2 Select the tables you want to enable. An asterisk (*) indicates selection.

3 Press Go to execute the update. Automatic unlocking is applied to all selected tables.

4 Quit from the Progress editor.

This completes the optional setup.

Chapter 4

Completing the Installation

Use the instructions in this chapter to complete the installation and integrate TrM with MFG/PRO so that users can run TrM from the MFG/PRO menu. These steps must be completed for both `trmprod` and `trmdemo`.

Setting Up MFG/PRO

You must complete the following steps to prepare MFG/PRO for use with TrM:

- Run a utility to load data in the MFG/PRO administration database.
- If you did not convert from a previous version of TrM, update each domain with default TrM data.
- Modify Sales Order Control.
- Modify Pricing Control.

Run Data Load Utility

The `uttrmld.p` utility loads TrM administration data into MFG/PRO. This can be run from any menu in MFG/PRO.

1. In any menu in MFG/PRO, type in the full utility program name in the command line:

   `uttrmld.p`

2. A screen displays with a single field where the source directory for the data load should appear. The directory is:

   `TrMInstallDir``/us/mfg`

3. Press Go to initiate the load.

Define Default Domain Data

See *User Guide: MFG/PRO eB2.1 New Features* for details on domains.

With the introduction of domains in MFG/PRO eB2.1, every database has one system domain named QAD indicated by a domain type of SYSTEM. The initial system domain is created when the database is created, for both a new installation of MFG/PRO or a conversion.

The system domain includes the default data you need to begin implementing MFG/PRO, such as control program settings, rounding methods, default accounts, and generalized codes. Default TrM data is also loaded into the system domain during installation of TrM.

The system domain is used as a template for new domains. When you create a new domain using Domain Maintenance (36.10.1), default MFG/PRO data is automatically copied from the system domain to the

new domain. However, to include TrM data in the new domain, you must run a separate Domain Initialization (7.20.24.13) utility. This copies default TrM data from the system domain to the new domain.

Note Since the system domain is used as a template, you may want to add data to it or tailor defaults before creating new domains based on it.

You must complete the following steps if:

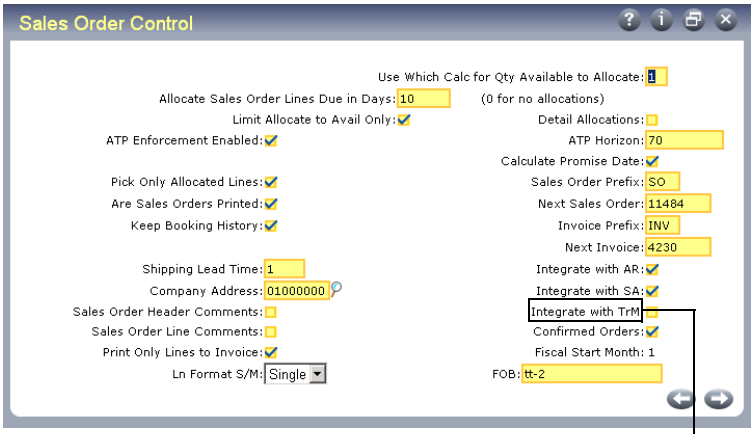
- You converted to MFG/PRO eB2.1 from an earlier MFG/PRO release and are now installing TrM for the first time; you did not use it with your previous release.
- You are starting a new MFG/PRO eB2.1 with TrM implementation.

You must also run this program in either situation if you later create additional domains in your database.

1. Start an MFG/PRO client session in character mode.
2. Choose 7.20.24.13 from the menu and press Go.
3. Respond Yes when prompted to continue.
4. Specify the code that identifies a domain in your database and press Go to load the TrM default data.
5. Press End when function completes.

Update MFG/PRO Sales Order Control

1. In MFG/PRO Sales Order Control (7.1.24), set the Integrate with TrM field to Yes.
2. Press Go to save this change. Then press End until you have exited Sales Order Control.



Set this field to Yes to complete the installation process.

This will enable you to access TrM from an MFG/PRO character session. Further initial setup instructions are provided in Chapter 4 of *User Guide: Trade Management*.

Update MFG/PRO Pricing Control

In MFG/PRO Pricing Control (1.10.1.24), enter a TrM price list prefix and set the QO and SO Price by Line fields to Yes.

Loading TrM Help

To complete the installation of TrM, you must load two help files using Field Help Load (36.4.19):

- The `fieldhlp.fhd` file contains TrM procedure and field help.
- The `2_7help.fhd` contains field and procedure help for the MFG/PRO payment center and deduction features introduced with TrM 2.7.

Both files are located in the *`TrMInstallDir`*`/us` directory.

1 In Field Help Load (36.4.19), enter the following field values:

Language. Enter the appropriate two-letter language code; for example, US for English.

Field, Procedure, Status, Text Type. Leave blank.

Field Help Load File. Enter the full path to the `fieldhlp.fhd` file.

Skip loading help with lower status. Enter Yes.

2 Press Go to load the help file into the MFG/PRO database.

3 Repeat steps 1 and 2 for the `2_7help.fhd` file.

Setting Up Trade Management

You must complete two setup steps in Trade Management:

- Use Price List Parameters (7.20.18.1) to define default settings required for TrM pricing.
- Specify the integration with MFG/PRO in Trade Management Control (7.20.19.1).

Setting Up Price List Parameters

If pricing parameters are not initialized, the errors may be encountered using MFG/PRO programs such as Item Master Maintenance (1.4.1), Customer Maintenance (2.1.1), and Sales Order Maintenance (7.1.1).

1 In MFG/PRO, choose Price List Parameters (7.20.18.1).

2 Specify values for the following fields:

- Division
- Multiple Divs
- SO Line Entry
- P/List Prefix
- P/List Sequence

For additional details on this program, see the discussion on the Price List module in *User Guide Supplement: Trade Management.*

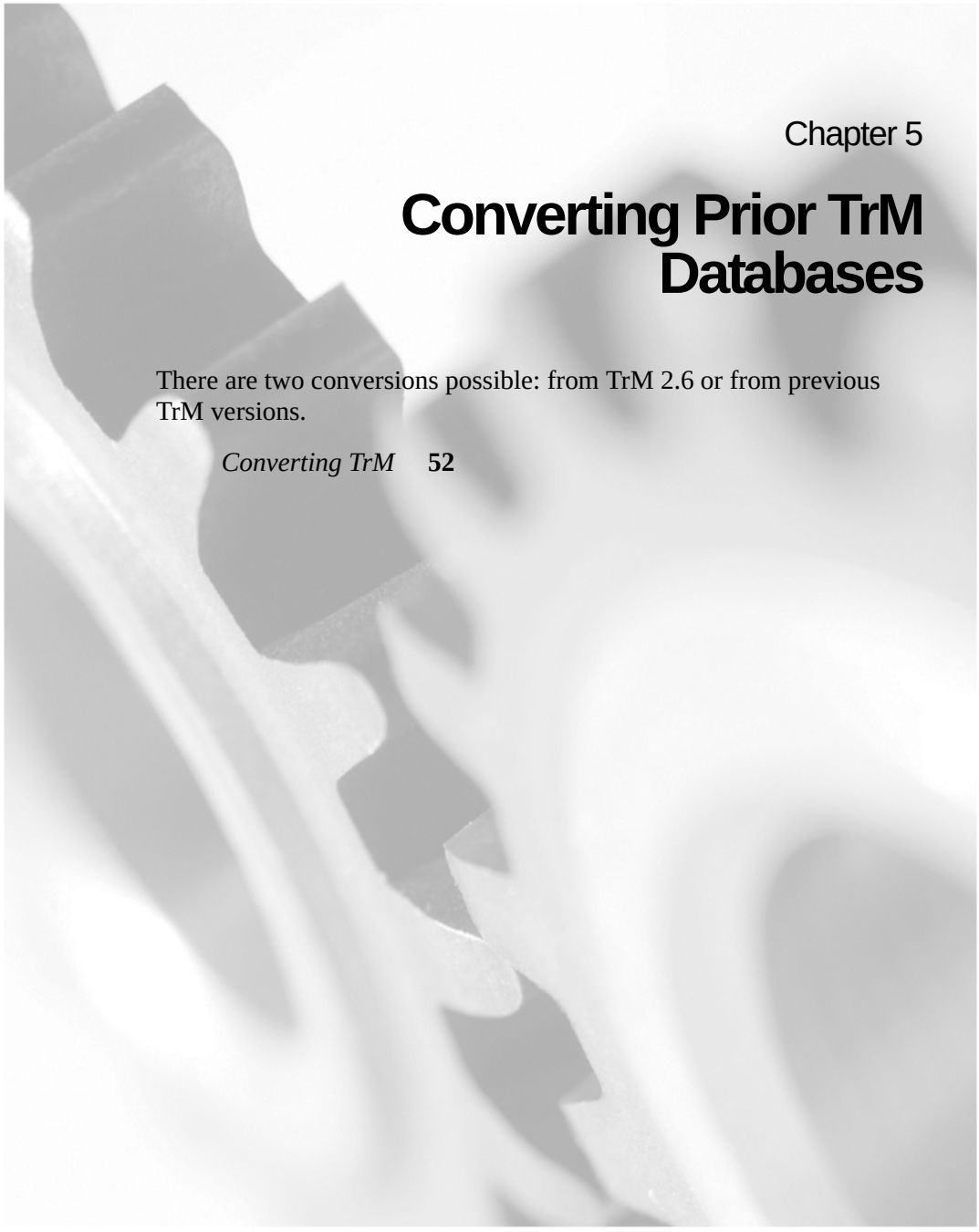
Setting Up TrM Control

Trade Management must be integrated with MFG/PRO prior to adding or updating any records.

1. In MFG/PRO, go to TrM Control (7.20.19.1).
2. The Control ID defaults to 1. Press Go once to enter the program.
3. Press Page Down to access page 10.
4. Change MFG/PRO? to Yes to integrate with MFG/PRO.
5. Press F1 to save; press F4 to exit.

Restarting Applications

Restart both TrM and MFG/PRO so that the MFG/PRO startup routine can run the TrM interface program.



Chapter 5

Converting Prior TrM Databases

There are two conversions possible: from TrM 2.6 or from previous TrM versions.

Converting TrM

There are two conversion scenarios: from any version prior to 2.6, and from 2.6 or later. Each conversion type has its own workflow. The first, called Convert Trade Management (2.6 and up) is the file `wk0615.ini`. The second, Convert Trade Management (pre 2.6), is contained in `wk0616.ini`.

In versions prior to 2.6, some TrM data was stored in three TrM databases. Therefore, the difference between the workflows is that the pre-2.6 workflow must connect to, and convert data from, a set of databases.

The following steps are valid for both workflows. The pre-2.6 version requires a few more steps. A summary of the steps for both flows follows

Table 5.1 Summary of Conversion Steps for 2.6 and pre-2.6 conversions

Pre 2.6 conversions	2.6 and later conversions
Connect to target mfgprod	Connect to target mfgprod
Load pcded.df to mfgprod	Load pcded.df to mfgprod
Connect to source database apmded.db	Connect to source database trmprod26
Connect to target mfgprod	Connect to target mfgprod
Connect to source database apmdb.db	
Connect to source database apmtran.db	
Connect to source database apmdb.db	Connect to target database trmprod27
Connect to target database trmprod27	
Connect to source database apmtran.db	
Connect to target database trmprod27	

1. Launch MFG/UTIL from *`MFGPROInstallDir`* using the following command: `./mfgutil`.
2. Choose MFG/PRO Guided Setup from the Configure menu.
3. Select the workflow that supports your source version:
   - Convert Trade Management (2.6 and up)
   - Convert Trade Management (pre 2.6)
4. Choose Run Set and press Enter.

Load Trade Management Data Definitions into Target MFG/PRO

5 Connect to your main MFG/PRO production database; for example, `mfgprod`.

Note You loaded this file into `mfgempty` to support compiles in Step 8 on page 28. This load modifies your MFG/PRO production database.

6 In the Load Data Definition screen, select Browse to locate *`MFGPROInstallDir`*`\db\pcded.df`. This file includes tables required for payment centers and deductions. Choose OK to start the load.

Run Payment and Deductions Conversions

7 For 2.6 and later conversions, you now connect to your original TrM database; for example `trmprod26`. For versions prior to 2.6, you connect to the TrM deductions database, `apmded.db`. This is your source database for this portion of the conversion. Choose OK to connect.

8 Connect to your target MFG/PRO production database, as in step 5; for example `mfgprod`. This is your target database for this portion of the conversion. Choose OK to connect.

9 Pre 2.6 conversions only: you now connect to `apmdb.db` and `apmtran.db`.

The payment centers and deductions conversion runs automatically.

Copy Source Data to Target Databases

10 For 2.6 and later conversions, you now connect to your new TrM database; for example `trmprod27`. For versions prior to 2.6, you first connect to the source TrM database, `apmdb.db`. Choose OK.

11 Pre 2.6 conversions only: you now connect to `apmtran.db`.

12 Data is automatically copied from your source TrM database into the new TrM database.

This completes the conversion.

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