Industry-specific

QAD SOLUTIONS

Manufacturing Applications

Installation Guide

QAD Multi-Level Pegging (MLP)

QAD

MFG/PRO Version eB, eB2
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CHAPTER 1

MLP Installation

Use this guide to install MLP eB2 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.

Chapter **2** describes the modifications made from MLP eB to install it on MFG/PRO eB2.

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.
- Create services on your servers for the MLP databases, `mlpempty`, `mlpprod`.
- Determine the following information:
  - The MLP installation directory where you want to install the MLP server files, referred to as *`MLPInstallDir`*
  - The Progress directory
  - The host name for the database server

Installing MLP

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

Mount the CD (Unix Only)

1. Log on as mfg.
2. Mount the CD-ROM. Example commands are listed in the following table.

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 Then select file system, directory, and file system type (cdrfs).
AIX	smitty mountfs
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 the next section.

Install Files from CD

Complete this section to install the MLP 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.

5. A welcome screen displays. Press Enter.

   ```
   Welcome to QAD's MLP for eB2 installation.
   We are installing MLP for eB2 for hpux.
   Press <Enter> to view license agreement.
   ```

6. 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 MLP for eB2 , you must accept this agreement. (y/n)?
   Default is n
    ->y
   ```

7. 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 location where the log file should be written.
   Default is /home/mfg/instlog
    ->/home/mfg/instlog
   ```

On Windows systems, the default is `c:\instlog`.

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

8. Enter the Progress installation directory path or accept the default.

   The script verifies the location and version. Specify Yes to confirm.

   The message Installing MLP displays.

9. Enter the path and directory where you want to install the MLP server files (*`MLPInstallDir`*). By default, the installation is to `/home/mfg/mlpsvr`. In Windows, this is `c:\qad\mlpsvr`. If this directory does not exist, it is created.

   The following message displays:

   ```
   Please enter the destination location for this installation
   Default is /home/mfg/mlpsvr
    ->
   ```

   You are then asked to confirm the MLP installation directory.

10. On Windows system, enter the name for the folder to contain MFG/UTIL icons. By default, this is MLP eB2.

11. Review the summary and confirm by entering y and pressing Enter.

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

MLP Guided Setup

In the following section, you create the empty MLP production database from the default 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:

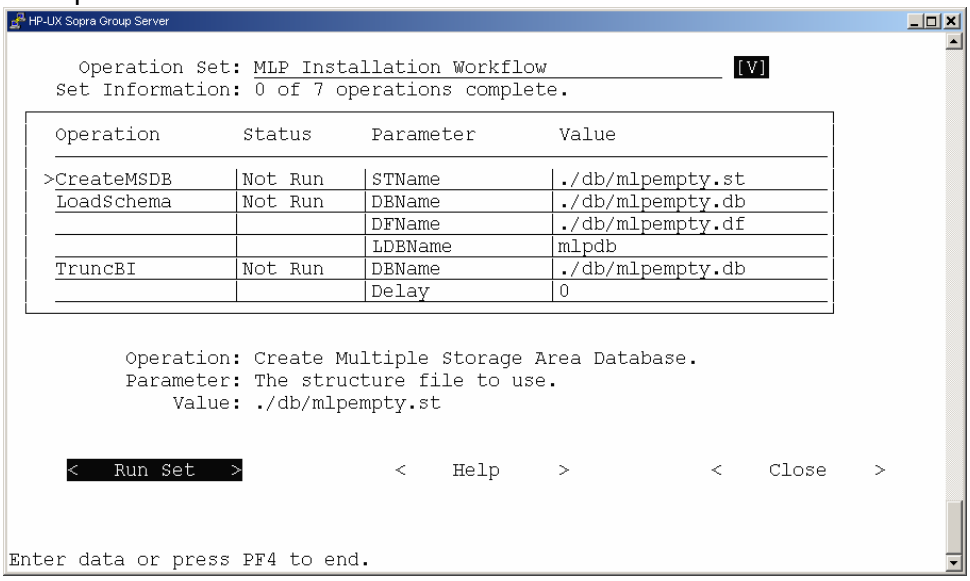
   ```
   ./mfgutil
   ```

2. Choose MFG/PRO Guided Setup from the Configure menu.

3. Select **MLP Installation workflow** in the Operation Set list box.

The MFG/PRO Guided Setup program provides a workflow of the operations required to set up your MLP 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 `wkmlp.ini`.



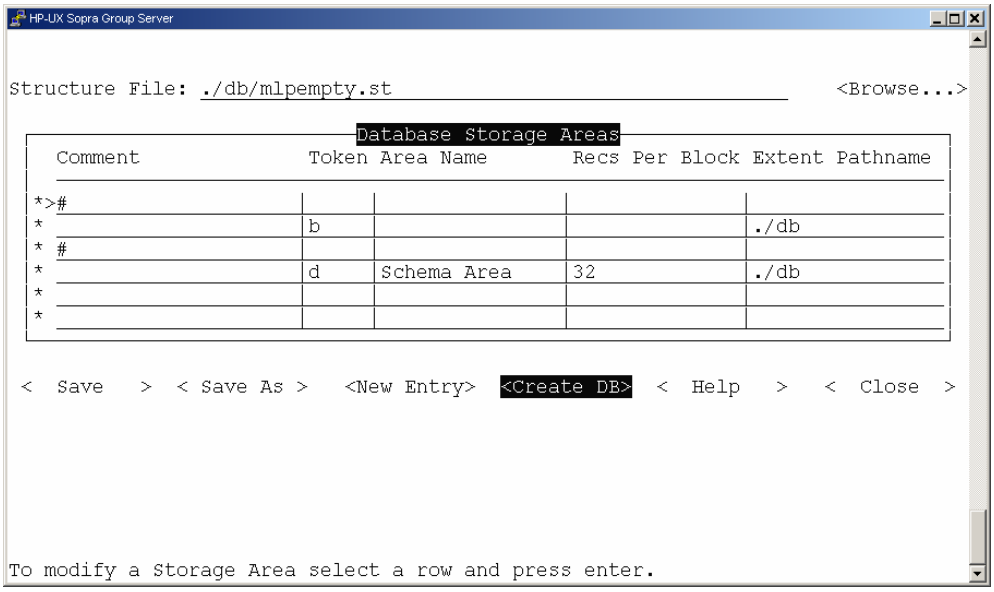
Operation sets are groups of installation activities. The operations in a set display in the Operation frame. On completion, the status changes to Done. If errors occur or if you cancel processing prior to completing a step, the status is Error. Below the Operation frame, the operation, the key variable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

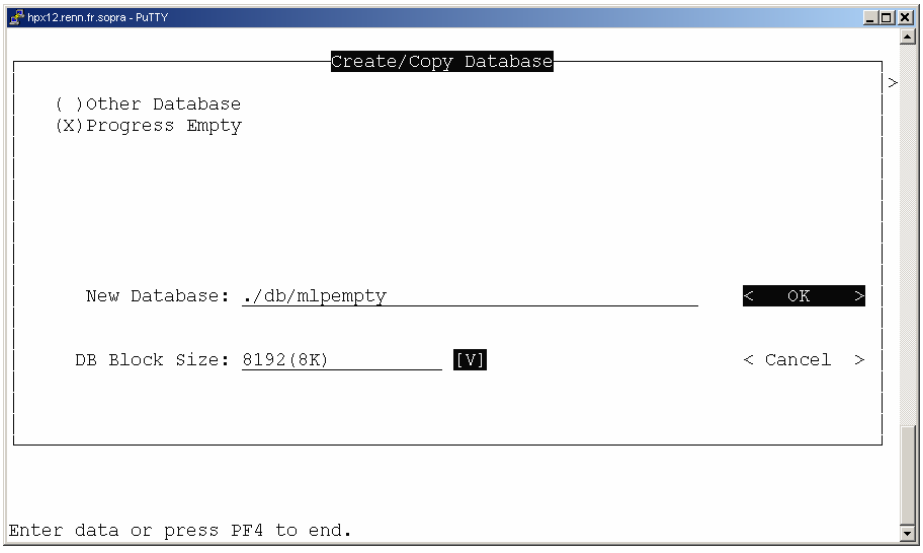
4. Choose Run Set and press Enter.

Create the Empty MLP Database

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



2. 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.

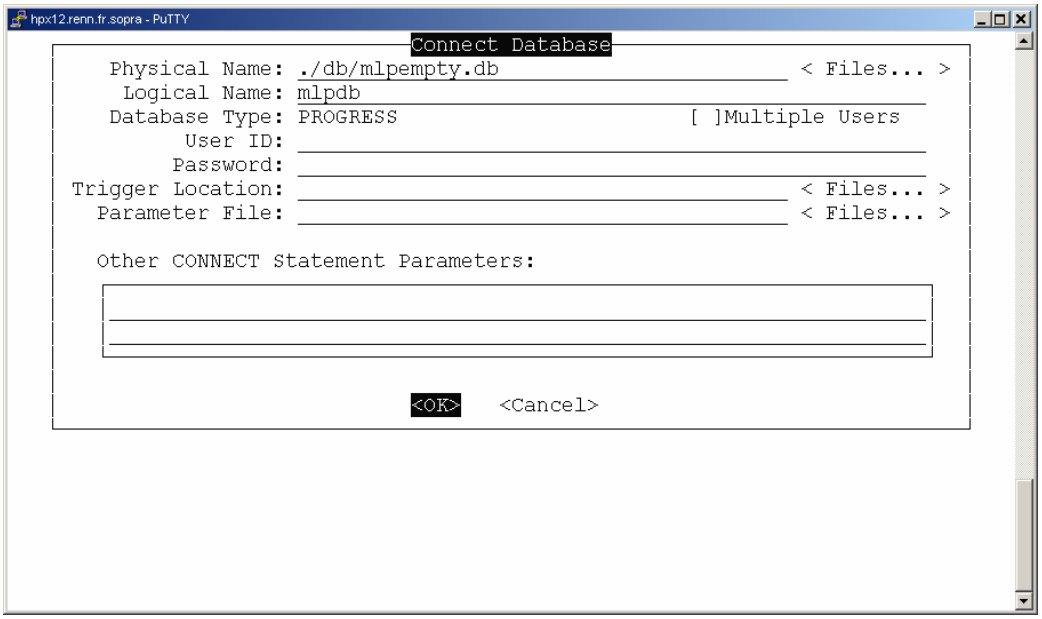


3. Choose OK to build the main empty database, `mlpempty`.

4. When `mlpempty` is built, a log of the database build process displays.

Choose Close to exit the log window.

5. After you close the Edit Structure File/Create Database screen, the **Connect Database** screen displays. Accept the defaults and choose OK to connect to `mlpempty`.

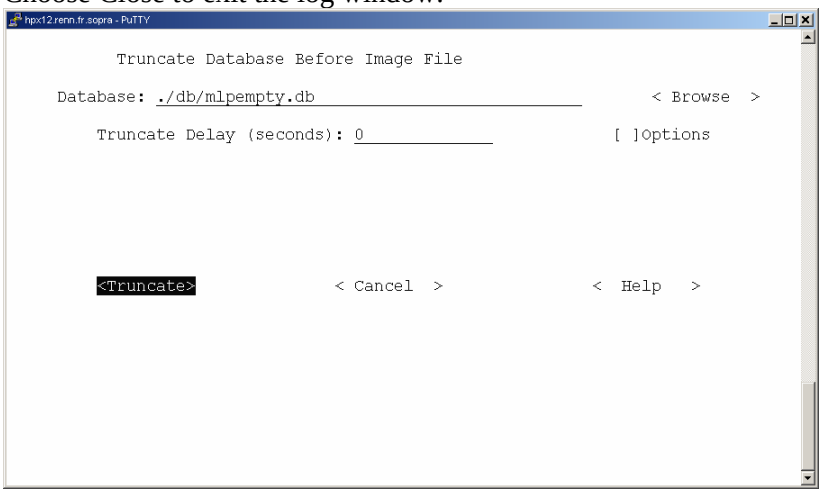


6. The default data definition file displays. Choose OK to begin loading the database schema.

   Choose Close twice: to exit the log window and exit the `.df` file window.

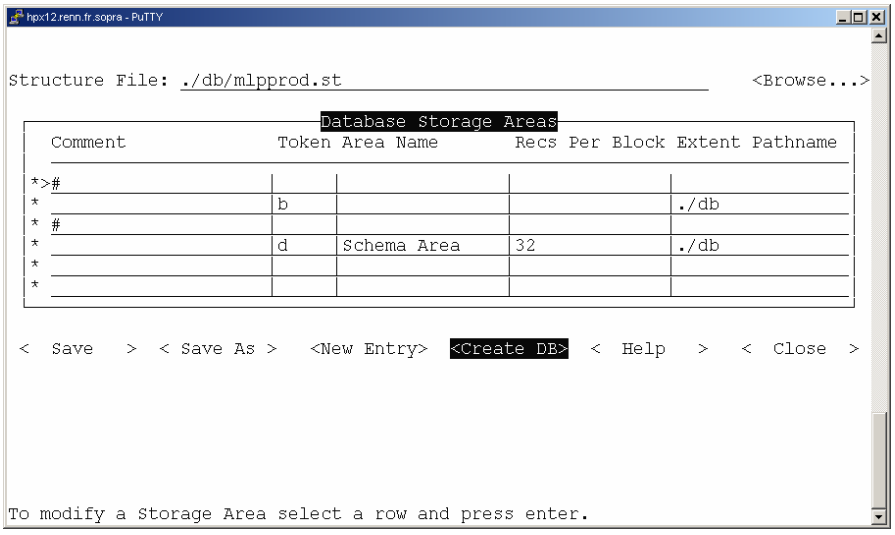
7. In the **Truncate Database Before Image File** screen, accept the default path to `mlpempty` and choose Truncate.

Choose Close to exit the log window.



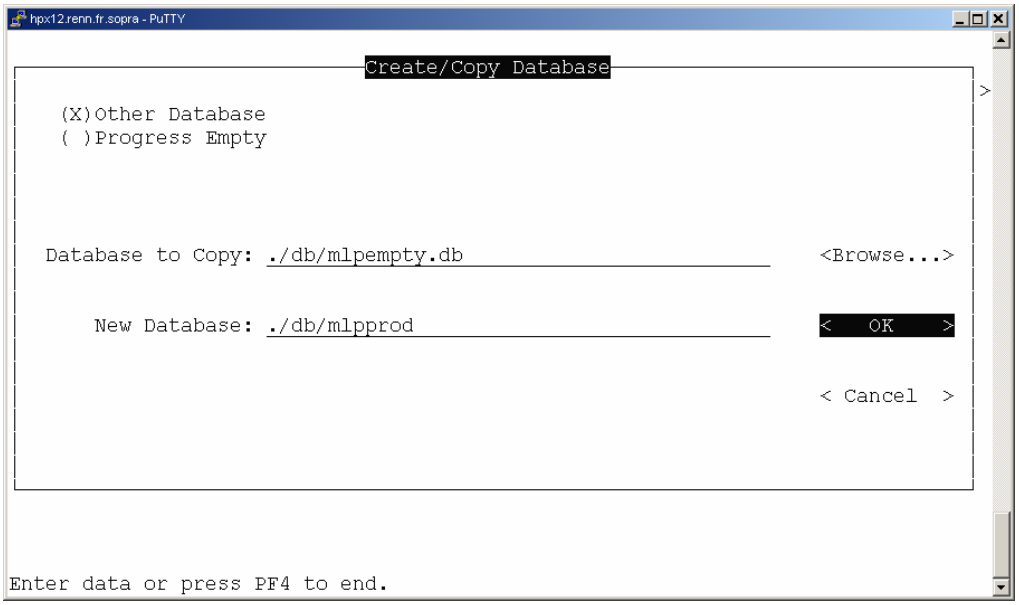
Create Production MLP database

1. In the Structure File Edit screen, a structure file for the production database, `mlpprod.st`, defaults in the Structure File field. The MFG/UTIL screen that displays lets you assign disk locations and sizes to your storage areas.
2. Edit the storage area definition. Typically you would edit only the Storage Area Path and Extent Size (on fixed-length extents).
3. Choose OK to save the edits.
4. Chose Create DB to save your entries and close the screen.



5. The Create/Copy Database screen displays. Select Other Database and verify the path to `mlpempty.db`. Choose OK. The New Database name defaults from the `.st` file name. You can enter a different database name here if you choose.

   Choose Close twice: to exit the log window and exit the Database Storage window.



Load System Data

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

After the Database Storage Areas screen closes, the **Processing Service Pack Data** screen displays.

You needs to be aware of the following sections of the screen:

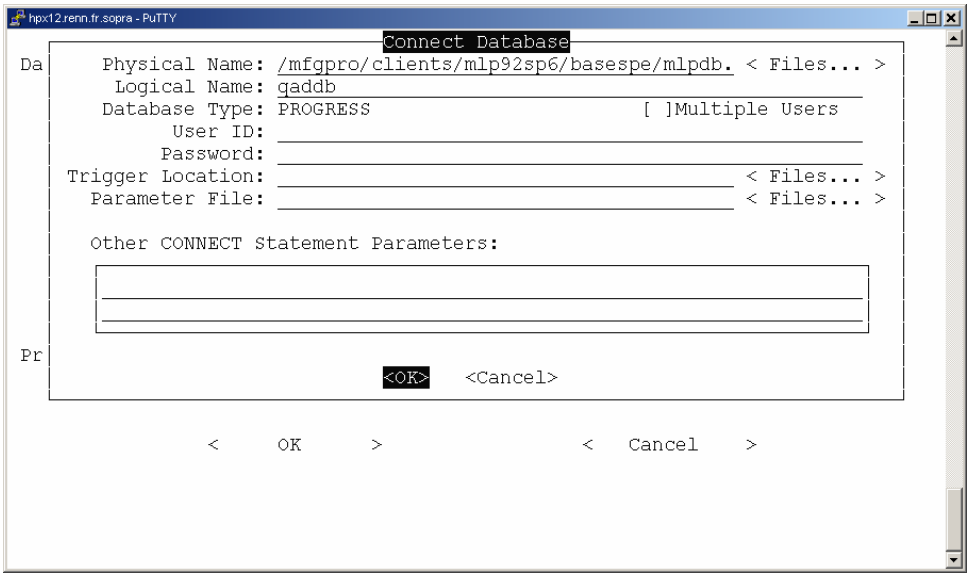
Data Directory	This is the directory where the service pack data or the MLP data is located. You can change this directory.

Language	This is where the you can select or deselect which language to process.
Process language tables only	This option is used for loading new language tables. If you previously installed the MLP data and want to add a new language to the system, this option ensures that only the language tables are loaded.
Database window	This lists the databases that can be processed. Use the cursor and space keys to select or deselect the databases to be processed. You can add new databases to the list using the Add DB button.

To load the base data, use the following steps:

1. Change the directory defined in the Data Directory fields to the directory where the MLP data was installed: *MLPInstallDir*/mlpdata
2. Next select the languages that should be loaded. A number of language files are included on the MLP installation CD. Select only the languages that have been installed into the MFG/PRO database.
3. Ensure that the Process Languages Tables Only box is unchecked.
4. Select the databases that require the MLP data. If the databases are not included in the list, then add the databases to the list and ensure that the databases are selected. The only databases in a database set that will require processing is the main MFG/PRO database as well as the administration database and MLP database. The help database will not require processing.
5. Check the settings on the screen to make sure that everything is correct. If so, then press the Go key (F1 for character screens, F2 for Windows GUI) or move the cursor to the OK button and press the return key.

   This will start the deleting and loading of data. The program will connect to each selected database in turn. When the database is connected to, the user will be presented with the standard Progress database connection screen:



The physical name and the logical name of the database will be filled in for the user. However, the user will need to select any other connect options before proceeding. Once the user confirms the database connect settings, the program will proceed to connect to the database.

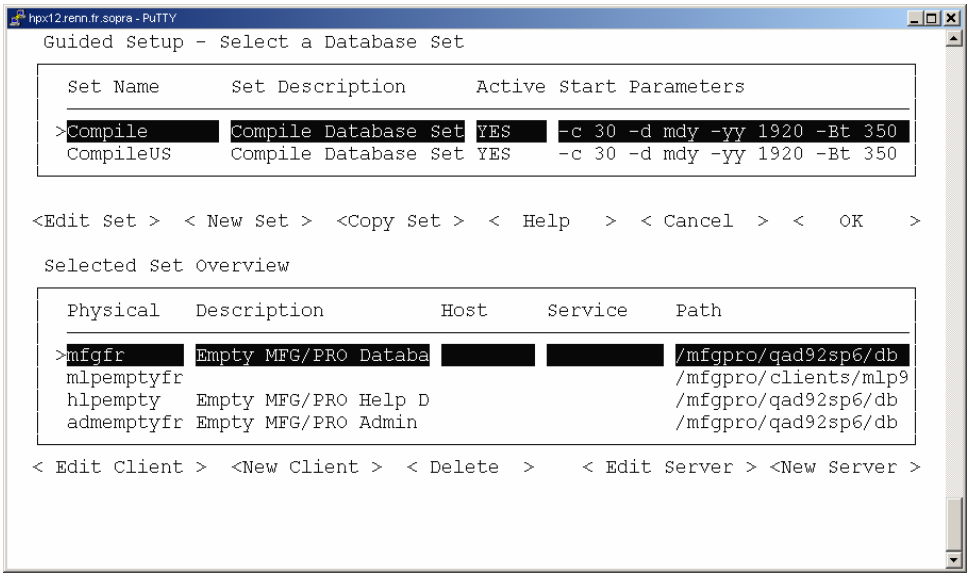
Note that databases should be connected to in single-user mode. While it is possible to connect to the database in multi-user mode, it is not advisable to upgrade a database in this way. For more information on multi-user database access, please consult the Progress Database Administration guide.

Once the database connection is established, the processing program will load the MLP data into the database.

Configure Database Set

In this task, you define the databases used to compile MLP programs.

After the previous screen closes, the **Configure Database Set** screen displays.



1. Select the Compile database set in the top frame. Then Tab to the Selected Set Overview window. If a MLP database is displayed there, select it and choose Edit Server. Otherwise, choose New Server.

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

Physical	Enter the physical database name. For the Compile database set, this is `mlpempty`.
Logical	Enter the logical database name for `mlpempty`: mlpdb.
Connect Param	Enter –RO to connect in Read-Only mode.
Connection Type	Enter Local.
Path	Enter the full path to the database.

When you finish, choose OK.

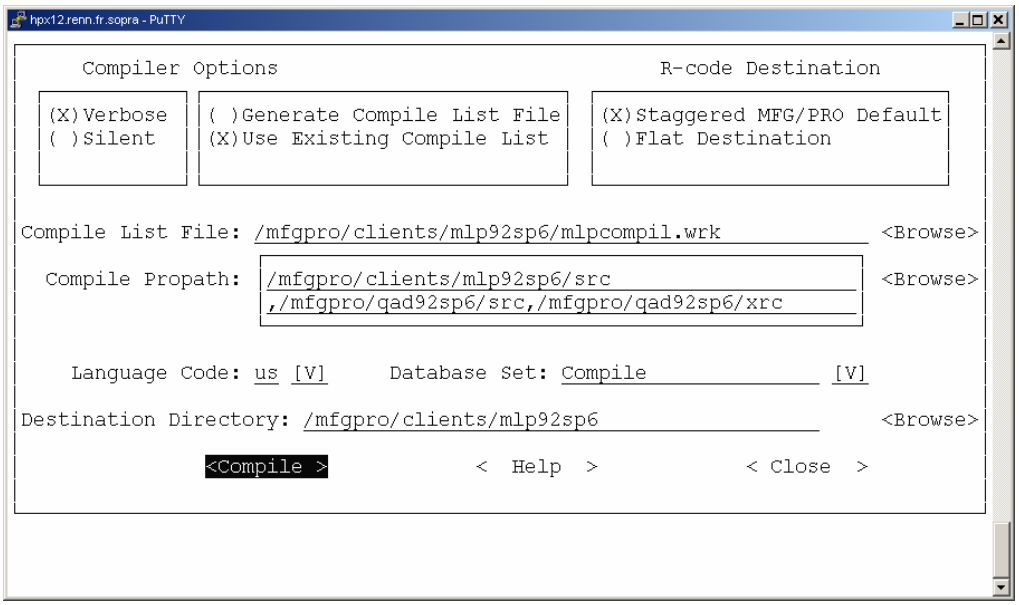
3. Update the Production database set in the same way for mlpprod.
4. Tab to the top frame again. With the Production database set selected, choose Edit Set. Add the *`MLPInstallDir`* to the PROPATH and choose OK.
5. When you complete the configuration of all applicable database sets, return to the main Database Set Maintenance window and choose OK to save your work.

Note: If you install MLP in a non-US language, you need to create the `mlpempty` database for this language and load the language specific schema into it. Refer to the section on non-US installs for more information.

Compile MLP Code

A full compile of MLP 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 *`MLPInstallDir`*. For example, `mlpworp.p` compiled for U.S. English is placed in *`MLPInstallDir`*`/us/ml`.

1. The Compiler Options screen then displays automatically. 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.



2. When ready, choose Compile.
3. 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.
4. When the compile is complete, check for errors in the log window, and choose Close.

Setting Up MLP with MFG/PRO

Generate scripts

If you defined the production database set and the PROPATH in the previous steps, just follow those additional steps :

1. In MFG/UTIL, choose Generate Scripts from the Scripts menu.
2. 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.
3. You are asked to confirm the script generation. Choose Yes.
4. The log window displays progress. When the process completes, choose Close.

Non-US Installation

The following are the steps to create a single-language installation that is not a U.S. English installation:

- Copy empty MLP databases to empty language specific database.
- Load translated labels into this empty databases for translated validation messages and logical values.

Create Language-Specific Empty Database

You need to make a copy of the `mlpempty` database created previously :

```
cd MLPInstallDir/db
DLC= ProgressInstallDir; export DLC
$DLC/bin/procopy mlpempty mlpempty<lg code>
```

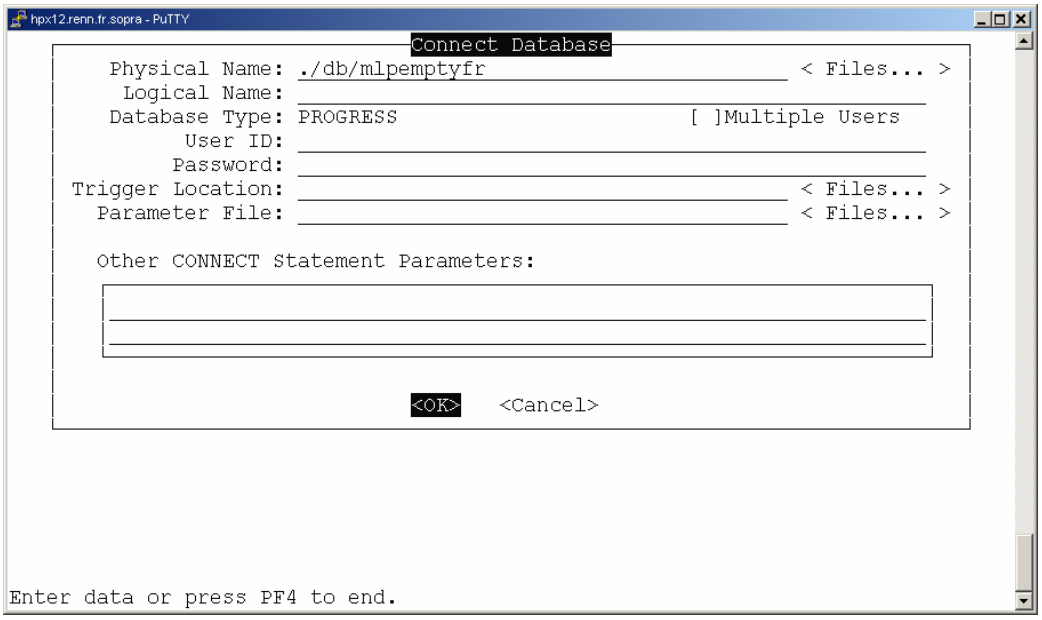
For example for a French install :

```
cd /mfgpro/mlp92sp9/db
DLC=/progress/dlc9.1D; export DLC
$DLC/bin/procopy mlpempty mlpemptyfr
```

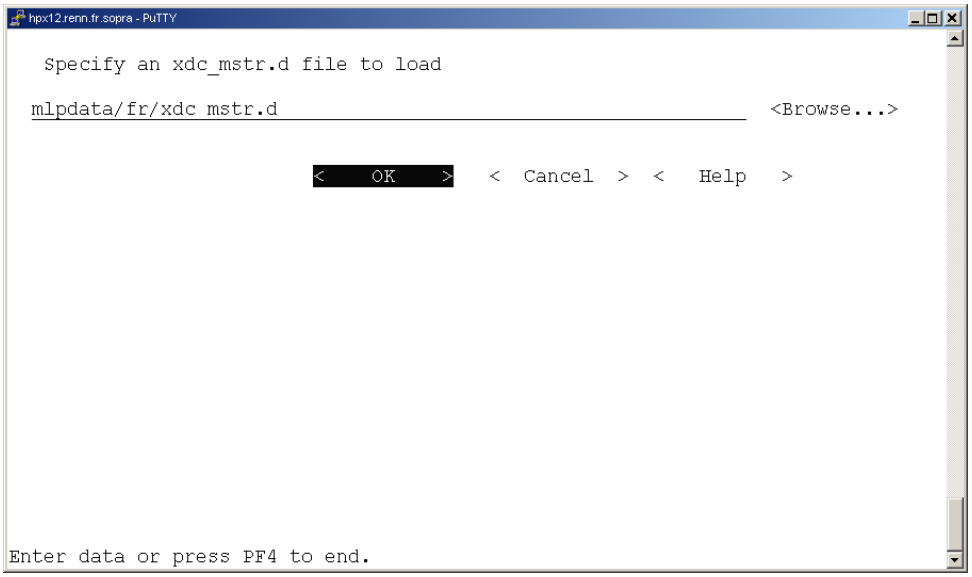
Load Translated Labels

Start MFG/UTIL, choose Database ➔ Load Translated Labels:

1. In the Connect Database screen, enter the correct empty database. Choose OK.



2. Enter the location of the `xdc_mstr` file here. It is located in the language directory of each language under mlpdata (only FR for the moment). Choose OK to start the load.



3. The load completes. Choose OK to close the load window.

CHAPTER 2

Modifications to Install MLP with MFG/PRO eB2

In order to create the new version of MLP for MFG/PRO eB2, few changes have been made to the initial release MLP for eB.

Installations steps

The `mlpload.p` program used to load the data in MFG/PRO eB does not run anymore in eB2: some tables do not exist anymore.

Therefore, the new installation process, which follows the new installation process in eB2, has been created to replace it:

1. The `wkmlp.ini` describes the steps to run.
2. the original `mlp.dmp` file has been replaced by the `.d` files in the `mlpdata` directories.
3. the data definition file is now only on US; some `xdc_mstr.d` files have been created under `mlpdata/<language>` directory to load the language-specific schema.

Programs modified

The two programs `mlpload` and `mlplddef.i`, used for the installation in eB, have been removed from the src and `xrc` directories; the `mlpload.p` has also been removed from the `mlpcom.wrk` list file.

The two programs `pxgblmgr.p` and `pxmsglib.p` have been deleted from `src` and `xrc` directories but they still are in the `mlpcomp.wrk` list files (so the compilation process compile the standard one but using the custom `cxcustom.i` file).

Patchs Summary

The following table lists patches added to the original MLP release for MFG/PRO eB SP1 and included in MLP for eB2.1.

Patch Number	Description	Modified Files
M1MW	Now the Multi Level Pegging Report shows details about the open Sales Orders when the Supply Type = ST. Previous these details could only be seen in the Multi Level Pegging Inquiry.	mlpworp.i
M1P0	Now a proper help window is displayed in the Multi-Level Pegging Report (60.5 - mlpworp.p). Previously when pressing F2 (Help) on the Item field in the selection screen for the report you would receive a Progress error.	mlpworp.p
M1RC	MLP can peg Works Order scrap quantities to the orders which supply those quantities. Previously, Works Order scrap quantities could not be processed in this manner.	mlmpmt.p mlprogr.p mlpsoiq.i mlpsopr.i
N1M0	MLP now works with Supplier Schedules. Previously, users could not pegs supplier schedules to demand or supply orders.	mldesorp.p mlmlpm.p mlpsoiq.i mlpwoiq.p mlpworp.i mlpworp.p mlschdp1.i mlschdp2.i mlsumfr.i mlsumiq.p mltotiq.p mlworpir.p mlworppo.p mlworppr.p mlworpst.p mlworpwo.p
N1M5	Order Progress Inquiry (60.1 - mlpsoiq.p) and Order Progress Report (60.2 - mlpsorp.p) now allow the user to choose which Worder Order Lot number to run the program on. Previously the program would automatically choose the first Work Order lot number for a given work order.	mlpsopr.i
M1D1	All MLP reports and inquiries now correctly show quantities to 4 decimal places. Previously, the reports and inquiries only showed quantities to 1 decimal place.	mldesorp.p mldetfr.i mlpscrol.p mlsodfr.i mlsorpfr.i mlsumfr.i mlsumiq.p
N2LL	In MLP (Multi Level Pegging) functions, Order Progress Inquiry (60.1 - mlpsoiq.p) and Order Progress Report (60.2 - mlpsorp.p), now user can scroll line/id field. Previously in the above scenario, the scroll function was not working.	mlpsopr.i
N2LP	In EPM, for Multi Level Pegging, Order Progress Inquiry (60.1 - mlpsoiq.p) and Order Progress Report (60.2 - mlpsorp.p) now display the order information of the components when all the components of a parent item have operation assigned in Product Structure Maintenance (13.5 - bmpsmt.p). Previously in the above scenario the order information of the components were not displayed.	mlprogr.p

Patch Number	Description	Modified Files
N2N8	In MLP (Multi Level Pegging) environments the detail information on requisition is now displayed when GRS is enabled and requisitions are created with Requisition Maintenance (5.2.3 rqrqmt.p). Previously, in the above scenario the details for the requisitions were not displayed.	mlbr023.p mlbr024.p mllu023.p mllu024.p mlmddpdd.p mlmdprdp.p mlpwoiq.p mlworppr.p
N2P7	In MLP, Multi-Level Pegging Report (60.5 - mlpworp.p) now displays correct item number, quantity and due date when the top level demand is a Work Order and correct due date when Intersite is the top level demand. Previously, in the above scenario, incorrect item number, quantity and due date were displayed.	mldtrp.i mlsumrp.p
N2S9	In Multi-Level Pegging functionality, Multi-Level Pegging Report (60.5 - mlpworp.p) now displays correct data in terms of item number and quantity when the option Detail/Summary is set to Summary. Previously, in the above scenario, incorrect data was displayed.	mlpworp.i mlsumrp.p