



Installation Guide **Advanced Inventory Management (AIM)**

78-0649C
MFG/PRO Versions eB2, eB2.1, and Standard Edition
AIM Versions 3.0.5 and 3.0.5 SSD, Progress Database
October 2009

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About AIM

Advanced Inventory Management (AIM) is a module designed to work with QAD's MFG/PRO. AIM provides powerful but flexible stock control facilities. AIM enables you to control the receipt, stocking, storage, picking, and shipping of inventory using warehouses that exist within the MFG/PRO environment. AIM provides a suite of programs and parameters that let you set up the way that your inventory management processes operate, and a range of control, inquiry and reporting functions that let you run the system efficiently on a day-to-day basis.

Note The name of QAD's MFG/PRO product has changed during the life cycle of the eB2.1 release. To provide consistency, this document continues to use that product name for all versions.

Currently AIM is not supported in Oracle environments.

Other AIM Documentation

This guide provides detailed information on how to install the AIM system.

For details on how to implement the AIM system and how to use AIM in day-to-day operations, see *User Guide: Advanced Inventory Management*. For additional information on enhanced functionality in the AIM product, see the *Advanced Inventory Management Release Notes*.

These instructions are intended for the system administrator who is installing the database and is familiar with the UNIX operating system, the Microsoft Windows operating system, Progress software, and networking.

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 users with a QAD Web account, product documentation is available for viewing or downloading from the QAD Online Support Center at:

<http://support.qad.com/>

You can register for a QAD Web account by accessing the Web site. 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) files can be downloaded from the QAD Web site to your computer. You can view and print them with the free Adobe Acrobat Reader.
- HTML files let you view user documentation through your Web browser and use search tools for easily locating topics of interest.

Important Before you start the installation, check the Web site to make sure you have the most recent version of this document.

Conventions

This document supports the installation of AIM on both UNIX and Windows platforms. The instructions use character screens and Windows file and path conventions. In the few places where the two sets of instructions diverge, the headings and text explicitly declare which operating system is the focus of the current set of instructions.

4 Installation Guide — Advanced Inventory Management

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.
<i>italicized</i> <i>monospaced text</i>	A variable name for a value you enter as part of an operating system command; for example, <i>YourCDROMDir</i> .
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.

Installing AIM

This chapter provides information on installing AIM.

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Overview

This chapter provides instructions for installing the QAD Advanced Inventory Management (AIM) product in your MFG/PRO environments.

The AIM installation requires the following steps:

- Install AIM media to your server.
- Build the AIM database.
- Load translated labels.
- Load default data to AIM database.
- Load data to MFG/PRO database.
- Modify startup files.
- Compile AIM application with MFG/PRO.
- Load character help in MFG/PRO.

QAD recommends you complete the AIM installation in a test environment first.

If you are performing an upgrade of an existing AIM system, see “Upgrading AIM” on page 31.

QAD Product Name Changes

Because AIM still interfaces with and supports older versions of QAD products, previously called MFG/PRO, procedures in this guide refer to the QAD product under the older name. This simplifies the procedure and avoids multiple notes to substitute your version and product name.

To help you substitute the appropriate product name for the procedure when installing your QAD product, use the following information:

- The product was branded as MFG/PRO eB2.1 from the initial release through SP4.
- Service Packs 5 and 6 were called QAD 2007 and QAD 2007.1, respectively.
- Beginning with SP7, the product is called QAD Enterprise Applications Standard Edition (SE) and reflects the year of the release, so you may be installing AIM to work with:

- QAD 2008 SE
- QAD 2008.1 SE
- QAD 2009 SE

Installation Requirements

MFG/PRO Requirements

AIM 3.0.5 can be installed with the following MFG/PRO versions on a Progress database; Oracle is not currently supported:

- MFG/PRO eB2, initial release through Service Pack 13

AIM 3.0.5SSD (Shared Services Domain) can be installed with:

- MFG/PRO eB2.1, Service Packs 2 through 9 (QAD 2009 SE)

Progress Requirements

AIM can be used with the same versions of Progress supported by MFG/PRO including Progress 9.1D, 9.1E, OpenEdge (OE10).

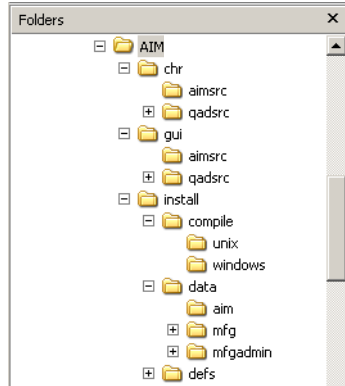
Note MFG/PRO eB2.1 SP4 requires Progress OpenEdge 10, and other MFG/PRO service packs can also be installed with OE10. While AIM can be installed in a Progress OE10 environment, an additional configuration step is required.

AIM Deployment

The recommended deployment of AIM on your server is to place the AIM directory structure (*AIMInstallDir*) parallel to the directory where you installed MFG/PRO (*MFGPROInstallDir*). On eB2 on Windows, for example, if the *MFGPROInstallDir* is `/dr01/mfgpro/eb2sp5`, the *AIMInstallDir* would be `/dr01/mfgpro/aim30`.

You can install AIM in a different directory structure or on a different drive. If you do so, make sure your PROPATH is updated to run AIM programs prior to baseline MFG/PRO code.

Fig. 1.1
CD Directories



The CD source directories are listed in Table 1.1.

Table 1.1
AIM CD Directory
Structure

Directory	Description
chr/aimsrc	AIM character source code.
chr/qadsrc/...	Source code for modified MFG/PRO programs required for the AIM application, sorted in subdirectories by MFG/PRO version and service pack level. (IR is initial release.) Each service-pack directory contains a list of MFG/PRO (qad.wrk) and AIM (aim.wrk) programs to compile.
gui/aimsrc	AIM GUI source code.
gui/qadsrc/...	Source code for modified MFG/PRO programs required for the AIM application, sorted in subdirectories by MFG/PRO version and service pack level. (IR is initial release.)
install/compile	Contains a UNIX and Windows directory with operating system-specific versions of the AIM compile utility whcomp.p and its subprogram whcompl.p.
install/conv	Contains a conversion utility to be run for upgrades.
install/data/...	Data (.d) files. Those under /mfg and /mfgadmin contain language-specific data directories. The character-client field help file is located under /mfg/us. Data for AIM-specific tables is in the /aim directory.
install/defs	Schema or data definition files (.df) for US English. Additional schema definition files containing translated labels are located beneath this directory in language directories.

If compiled source code is required, the structure of the compile destination directory is copied into a compiled source code directory named `/xcode`.

Languages

AIM supports the English (US), Dutch (DU), French (FR), German (GE), Castilian Spanish (CS), Brazilian Portuguese (BP), Italian (IT), Slovak (SK), Chinese (CH), Traditional Chinese (TW), Japanese (JP), Russian (RU), Lithuanian (LT) and Polish (PL) languages.

To create a US English-only install, no special steps are required. To create a single-language install that is not US English, you must install the `utddlng.p` program, located in `install/mfgutil` folder, located in the Install media and load a set of translated schema definitions and set your compile destination directory to reflect the language code.

To support multiple languages, you create an empty AIM database for each language (`aimUSEmpty`, `aimFREmpty`, and so on) and load the appropriate language-specific schema definition (`aimusv9.df`, `aimfrv9.df`, and so on) into each. You then compile each language separately, setting the compile destination directory to reflect the language code.

Later, after you create a production AIM database from an empty database, you load the language-specific AIM data files for each language you are implementing into the MFG/PRO production and admin databases.

Radio Frequency Terminal Implementation

Because AIM uses a radio frequency terminal (RF) and RF implementation requires a character client, if your MFG/PRO and AIM clients are GUI-only under Windows, you must also install MFG/PRO and AIM character clients to support an RF implementation. The database server can be either UNIX or Windows.

Installation Steps

AIM ships on a single CD that contains all AIM programs, modified MFG/PRO programs by version, and all available languages.

Install the AIM Media

- ▶ For Windows servers, insert the CD and go to “Install AIM Files” on page 11.

In this set of steps, you mount the AIM media and copy the required files to the server.

Mount the CD-ROM (UNIX Only)

- 1 Log on as `mfg`.
- 2 Mount the CD-ROM. Example commands are listed in Table 1.2.

Table 1.2
UNIX CD Drive
Mount Commands

Hardware	Mount Command
Sun	<code>volcheck cdrom</code>
HP	<code>/etc/mount -F cdfs /dev/dsk/YourCDDevice /cdrom</code>
Digital	<code>mount -r -o noversion -t cdfs /dev/YourCDDevice /cdrom</code>
AIX	<code>smitty mountfs</code> Then select file system, directory, and file system type (<code>cdarfs</code>).
Linux	<code>mount /dev/hdb /mnt/cdrom</code> Where <code>/hdb</code> could be <code>hdc</code> or <code>hdd</code> 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 <code>man mount</code> to determine the correct command.

Install AIM Files

Complete this section to install the AIM files on your server. The instructions provide first the UNIX method, then the Windows method if necessary. In most cases, these steps can be completed in the Windows Explorer.

- 1 In UNIX, log on as user `mfg` under the group `qad`. For Windows, log in as a user with administrator privileges.
- 2 Create an AIM directory parallel to `MFGPROInstallDir`; for example, if `MFGPROInstallDir` is `/dr01/mfgpro/eb2sp5`, then install AIM to `/dr01/mfgpro/aim30`. This is the `AIMInstallDir`.
- 3 Create the following directories within the `AIMInstallDir`:
 - `AIMInstallDir/triggers`
 - `AIMInstallDir/us`
 - `AIMInstallDir/us/src`
 - `AIMInstallDir/us/spX`

The `/spX` directory refers to your MFG/PRO service-pack level. For eB2 service pack 5, this directory would be `/sp5`.

- 4 Copy the contents of `/install/data` and `/install/defs` from the CD to the `AIMInstallDir`. You should end up with:
 - `AIMInstallDir/data`
 - `AIMInstallDir/defs`

Note If you choose, you can limit the number of files you copy. Both the `/data` and `/defs` directories contain directories for each supported language. You can copy only the directories for the languages you are implementing.

- 5 Copy `whcomp.p` and `whcomp1.p` from `/install/compile/os type`, where `os type` is either `/unix` or `/windows`, to `AIMInstallDir/us`.

- 6 Copy the contents of the `/chr/aimsrc` directory from the CD to `AIMInstallDir/us/src`.
- 7 Copy the specific directory for your MFG/PRO version and service pack from the `/chr/qadsrc` directory from the CD to `AIMInstallDir/us/spX`. For example, if you are running MFG/PRO eB2 Service Pack 5, you would end up with:
`AIMInstallDir/us/sp5`
- 8 To implement GUI clients for AIM, repeat steps 2 through 7, creating a complete AIM GUI installation parallel to `MFGPROInstallDir`. The only difference is the CD-ROM directories for steps 6 and 7 are `/gui` instead of `/chr`.

Important If you are installing Windows clients and want to run against UNIX databases, you must also have complete UNIX character interface AIM and MFG/PRO installations to support the database.

Create the AIM Empty Database

The `aimempty` database is used to compile additional languages and to create the production AIM database. If you are implementing multiple languages, you must create an empty AIM database for each language in order to compile the code for that language. If this is the case, name the empty databases accordingly: `aimUSEmpty`, `aimFREmpty`, and so on.

The following steps use MFG/UTIL. This utility is installed with your MFG/PRO application.

- 1 Launch MFG/UTIL from your `MFGPROInstallDir`.
For UNIX, run the command `./mfgutil`.
For Windows, select MFG/UTIL (Character) from your MFG/PRO database server icon in the Start menu.
- 2 Select Database|Create Database.

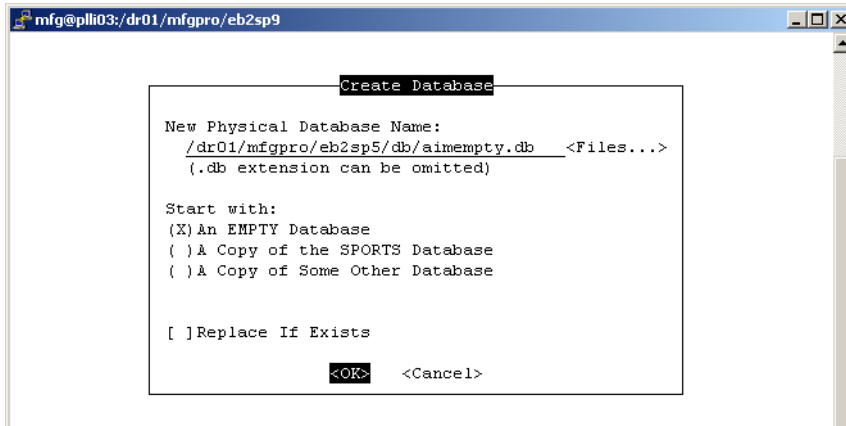


Fig. 1.2
Create the AIM
Empty Database

- 3 Enter `aimempty` and the full path to the `/db` directory as the new physical database name, start with an empty database, and choose OK. The new database is created.

Load Database Schema

The database schema files (`.df`) loaded in these steps contain the table, field, and index definitions for your AIM database.

The AIM database contains the Dataset field for use with Progress OE, which may cause a schema-load error when loading the database structure. To avoid this, use the following procedure before loading MFG/UTIL:

- 1 Using an editor such as Notepad or `vi`, create a plain text file containing the word `dataset`. For example:

```
$ vi ignore.lst
dataset
```

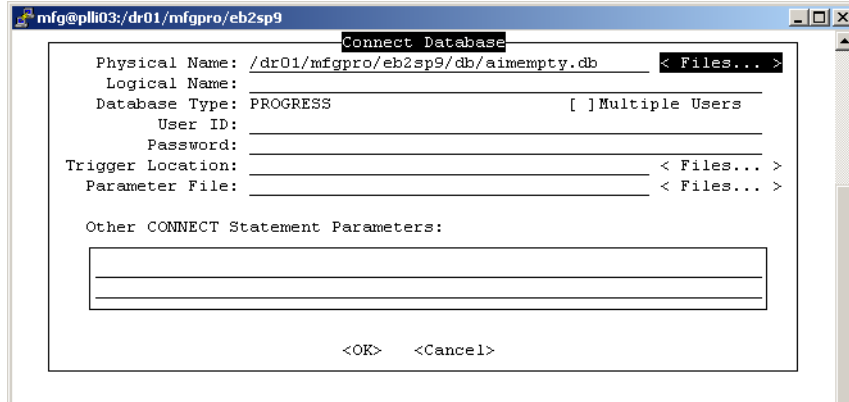
- 2 Add the `-k ignore.lst` parameter in the `mfgutil` file. This file is located in the root directory of your MFG/PRO installation. For example:

```
[mfg:/usr/qad/mfgpro/eB2.1] $ vi mfgutil
# execute mfgutil.p
cd /usr/qad/mfgpro/eB2.1
$DLC/bin/_progres -p /usr/qad/mfgpro/eB2.1/xmfgusrc/mfgutil.p
-c 500 -s 63 -D 50 -TM 31 -TB 31 -B 1000 -yy 1920 -d mdy -ininame
mfguprog.ini -k ignore.lst
```

To load the schema, use the following procedure:

- 1 MFG/UTIL, select Database|Load Database Schema (.df) File.
- 2 Connect to the `aimempty.db` and choose OK.

Fig. 1.3
Connect to the AIM Database



- 3 The Data Definition File to Load screen displays. Enter the correct data definition file and path:
 - For US English, choose `AIMInstallDir/defs/aimusv9.df`.
 - For a language other than US English, choose `AIMInstallDir/defs/xx/aimxxv9.df` where `xx` is the language code.

Fig. 1.4
Load the AIM Data Definitions



- 4 A load window displays. When the load is complete, choose Close to exit the load. You return to the data definition file load screen. Choose Close to exit.

Create Empty Databases for Additional Languages

To create a US English-only install, skip this section. To create a single-language and non-US English language install, you can also skip this section.

- 1 Repeat the steps in “Create the AIM Empty Database” on page 12 for another empty database; for example, `aimFRempty.db`.
- 2 Repeat the steps in “Load Database Schema” on page 13 for the new empty database.

Repeat these three steps as often as needed to supply yourself with a new empty database for each language you are implementing.

Build the AIM Production Database

These steps create a production database. Only one production AIM database is required; all implemented languages are supported by the one database.

- 1 In MFG/UTIL select Database|Create Database.

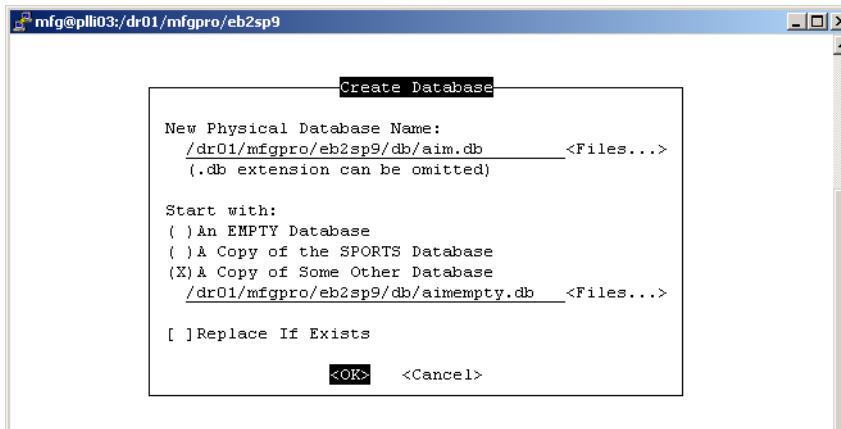


Fig. 1.5
Create the AIM Database

- 2 Enter `aim` and the full path to the `/db` directory as the new physical database name. Under Start With, select A Copy of Some Other Database. Use the Files button to browse for the correct language-specific empty AIM database. For US English, this would be `aimempty.db`. Choose OK.

- 3 The new database is created.

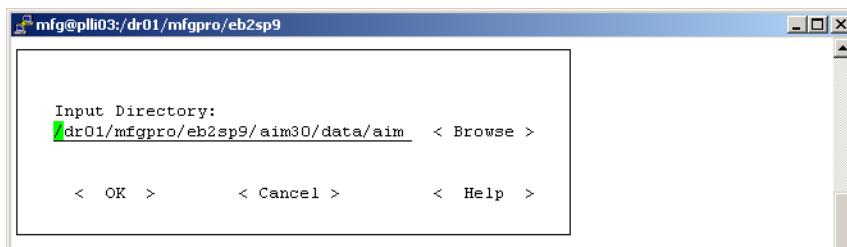
Load AIM Data

Data must be loaded into MFG/PRO and AIM databases through MFG/UTIL including `aim.db`, `mfgprod.db`, and `admprod.db`. The following steps walk you through the first connection and load. Table 1.3 on page 17 lists the other loads required and the source directories. Repeat these steps for each required load.

- 1 Choose Database|Load Data into Database.
- 2 Connect to `aim.db` and choose OK.
- 3 Enter the correct input directory:

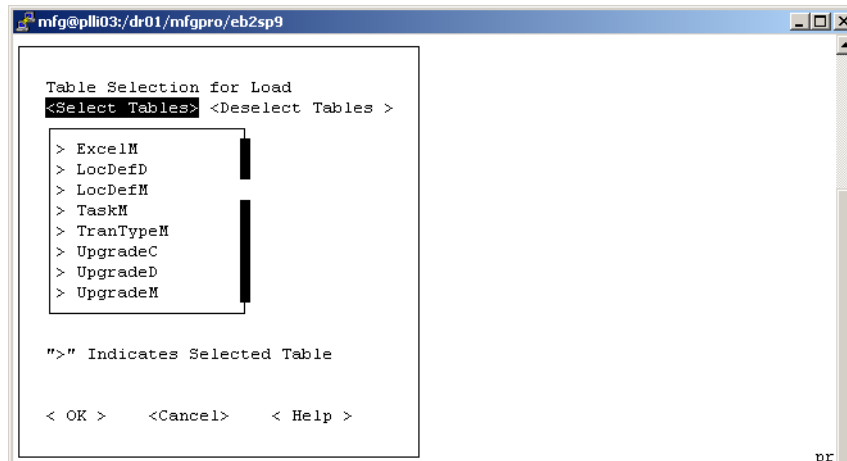
`AIMInstallDir/data/aim`

Fig. 1.6
Load the AIM
Default Data



- 4 When the tables display, make sure all are selected and choose OK.

Fig. 1.7
Select All Tables
for Load



- 5 When the load is complete, press spacebar to close the window.
- 6 Repeat steps 1 through 5 to connect to the databases listed in Table 1.3 and to load data from the associated directories.

In the input directory names, replace /xx with the language code being loaded; for example /fr.

Important For additional languages, repeat the loads from the /xx directories for each language you are implementing, including /us.

Database	Description	Input Directory
mfgprod	MFG/PRO production database	<i>AIMInstallDir</i> /data/mfg <i>AIMInstallDir</i> /data/mfg/xx
admprod	MFG/PRO admin database	<i>AIMInstallDir</i> /data/mfgadmin <i>AIMInstallDir</i> /data/mfgadmin/xx

Table 1.3
AIM Data Loads
and Directories

Note You may get record already exists errors. These can safely be ignored.

Load MFG Definitions

When installing AIM on languages other than US English, the mfgprod database must be loaded with schema labels for each language using MFG/UTIL. The following steps walk you through the first connection and load. Repeat these steps for the aim and admprod databases.

MFG/UTIL installs with your MFG/PRO application; however, MFGUTIL does not load labels for MFG/PRO eB2 and eB2.1 versions. So, even though you load the xdc_mstr files, provided with the AIM CD, labels do not change.

To correct this, use the modified version of utddlng.p, provided in install/mfgutil/ folder of the installation CD, to load the xdc_mstr.d file for non-English languages. You should verify that the new version is copied into the ../mfgutil/xmfgusrc directory and the ../mfgutil/mfgusrc directory, if it exists.

- 1 In MFG/UTIL select Database| Load Translated Labels.
- 2 Connect to mfgprod and choose OK. Be sure to turn on the Multiple Users flag for Multiple Users db.

- 3 Enter the correct input directory of the `xdc_mstr.d` file:

```
AIMInstallDir/defs/xx/xdc_mst.d
```

Where `xx` is the two-letter code for the language to be installed. For example, `jp` for Japanese.

The schema labels are loaded for the language.

Compiling AIM: UNIX

For Windows compiles, go to “Compiling AIM: Windows” on page 22.

Prior to running AIM under MFG/PRO, you must compile the AIM code and several modified MFG/PRO programs specific to your release and service pack. Appropriate compile list files (`aim.wrk` and `qad.wrk`) are located in the MFG/PRO version and service-pack specific directories.

To compile for a language other than US, add the language directory, `/XX`, in your `PROPATH` where `XX` is the language code.

Before compiling, a compile script must be created.

Create UNIX Compile Script

Compiling under UNIX requires a script to launch Progress, connect to the required databases, and start the compile program. The example is called `aimcomp.sh` and resides in `MFGPROInstallDir`.

```
MFGDIR=/dr01/mfgpro/eb2sp9;export MFGDIR
AIMDIR=/dr01/mfgpro/aim30;export AIMDIR
stty intr '^c'
DLC=/dr01/progress/dlc91e;export DLC
PATH=$PATH,$DLC;export PATH
PROMSGS=$DLC/promsgs;export PROMSGS
PROTERMCAP=$WDLC/protermcap;export PROTERMCAP
PROPATH=
.:$AIMDIR:$AIMDIR/us:$AIMDIR/us/src:$AIMDIR/us/sp5:$MFGDIR:$MFG
DIR/us:$MFGDIR/xrc;export PROPATH

cd $AIMDIR
exec $DLC/bin/_progres -inp 8192 -pf aim.pf;
```

Note Make sure to include the parameter `-inp 8192` in the `exec` line of the file.

Note For a language compile, you must also indicate the language code in the `PROPATH`, as in the following example for the French language:

```
PROPATH=
.:$AIMDIR:$AIMDIR/us:$AIMDIR/us/src:$AIMDIR/us/sp5:$MFGDIR:$MFG
DIR/us:$MFGDIR/xrc:LANG=FR;export PROPATH
```

Include the following directories in the `PROPATH` in the sequence shown:

```
AIMInstallDir
AIMInstallDir/us
AIMInstallDir/us/src
AIMInstallDir/us/SPlevel
MFGPROInstallDir
MFGPROInstallDir/us
MFGPROInstallDir/xrc
```

The `-pf` file lists the databases the script connects to; it must include the `aim` database. It also includes several connection parameters.

Create `aim.pf` in `AIMInstallDir`.

```
-db mfgprod -ld qaddb -H plli03 -S eb2sp9prod-srv -trig triggers
-db aim -ld aimdb -H plli03 -S eb2sp9aim-srv -trig triggers
-db admprod -ld qadadm -H plli03 -S eb2sp9adm-srv -trig triggers
-db hlpprod -ld qadhelp -H plli03 -S eb2sp9hlp-srv
-cpstream ibm850 -cpinternal iso8859-1 -cprcodein iso8859-1
-cpcoll basic -inp 8192 -Bt 350 -c 30 -D 100 -mmax 3000 -nb 200
-s 96 -q -T /dr01/tmp -h 7
```

The logical database name for `aim.db` must be `aimdb`. The `-inp` parameter is required to increase the size allowed for individual lines of source code.

Important For additional language compiles, change the `.pf` file name to reflect the language you are compiling. The language-specific `.pf` file must reference the empty database loaded with the language-specific schema.

Fix qad.wrk Errors

There are two errors in the `qad.wrk` compile list. Following two of the file names, the letters `chr` appear.

- 1 Open `AIMInstallDir/us/qad.wrk` in a text editor.
- 2 Delete the two instances of `chr`.
- 3 Save and exit the file.

Compile Under UNIX

You run through a portion of these steps twice to compile both AIM and modified MFG/PRO code.

- 1 In a UNIX session, navigate to *MFGPROInstallDir*.
- 2 Launch the script:

```
./aimcomp.sh
```
- 3 The Progress Editor displays.
- 4 Use File|Open to locate and open *AIMInstallDir/us/whcomp.p*.
- 5 Make the following changes:

wk_home. Enter the destination where the compiled code is saved. The slash at the end of the directory name is required. This should be *AIMInstallDir*.

wk_log. The name and location of the log file from the compile; for example, *AIMInstallDir/us/aimchr.001*.

wk_list. The name and location of the compile list. The files—*aim.wrk* and *qad.wrk*—are located in *AIMInstallDir/us*.

Important It is mandatory to compile the programs contained in the *qad.wrk* list against the same Database Set the MFG/PRO standard programs are compiled against. This avoids frame layout incompatibilities and other problems; *qad.wrk* contains standard MFG/PRO programs with changes to work with AIM. The *aim.wrk* list can be compiled against other Database Set, as these are strictly AIM programs (nonintrusive to MFG/PRO).

A portion of the file appears with sample changes in bold below.

```

/**SET DISPLAY TYPE**/
if session:display-type = "TTY" then
    assign wk_home = "/dr01/mfgpro/aim30/"
    wk_log = "/dr01/mfgpro/aim30/us/aimchr.001".
else
    assign wk_home = "../obj.p8/90a/gui/"
    wk_log = "../admin/install/compile/aimgui.res".

/**SET LANGUAGE**/
&IF index(propath,"LANG=fr") <> 0 &THEN
    wk_lang = "fr/".
&ELSEIF index(propath,"LANG=du") <> 0 &THEN
    wk_lang = "du/".

```

```

&ELSE
    wk_lang = "us/".
&ENDIF

assign wk_list = "/dr01/mfgpro/aim30/us/aim.wrk".

```

- 6 Save your changes.
- 7 Select Compile|Run from the Progress Editor menu. The AIM compile screen displays. On the first pass, the values should be correct from your edit of the file in the previous steps. On the second pass, change `aim.wrk` to `qad.wrk`.

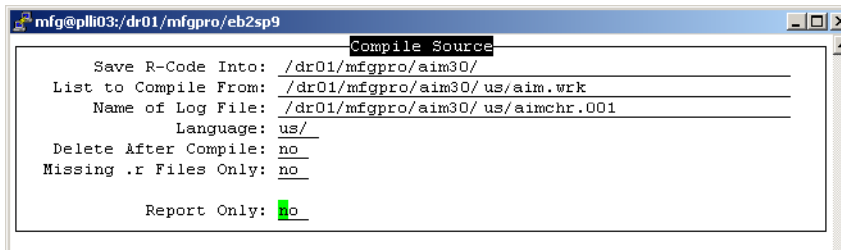


Fig. 1.8
AIM Compiler

- 8 Press Go to launch the compile. A report window displays showing compile progress and error status.
- 9 When the compile is complete, press the spacebar to close the report window. The Progress session ends.
- 10 Repeat steps 2 through 9 for the `qad.wrk` compile list. Make sure to change `aim.wrk` to `qad.wrk` in List to Compile From in the Compile Source screen.
- 11 Repeat steps 2 through 9 for additional languages, making sure to edit the launch command in step 2 and the paths in step 7 to include the language-specific `.pf` file and paths.
- 12 Press the spacebar to end the session following the final compile.

Compiling AIM: Windows

See “Compiling AIM: UNIX” on page 18 for UNIX systems.

Prior to running AIM under MFG/PRO, you must compile the AIM code and several modified MFG/PRO programs specific to your release and service pack. Appropriate compile list files (`aim.wrk` and `qad.wrk`) are located in the MFG/PRO version and service-pack specific directories.

To compile for a language other than US, add the language directory, `\XX`, in your PROPATH where `XX` is the language code.

Before compiling, initialization files and scripts must be created or modified.

Modify Windows .ini and .pf Files

- 1 In `MFGPROInstallDir`, create a copy of `Production.ini` named `aimcomp.ini`.
- 2 Create a copy of `Production.pf` named `aimcomp.pf`.
- 3 Open `aimcomp.ini` in a text editor. Insert the following entries at the beginning of the PROPATH as a comma-separated list in the order shown:

```
\AIMInstallDir,  
\AIMInstallDir\us,  
\AIMInstallDir\us\src,  
\AIMInstallDir\us\sp5,  
\MFGPROInstallDir,  
\MFGPROInstallDir\us  
\MFGPROInstallDir\xrc
```

For Windows, update both the [Startup] and [WincharStartup] section PROPATH.

- 4 Save your changes.
- 5 If you are planning to compile additional languages, edit each `.ini` file PROPATH as described in steps 3 and 4; for example, `aimFRcomp.ini`.
- 6 Open `aimcomp.pf` in a text editor. Add the `aim` database as shown.

```
-db e:\mfgpro\eb2sp5\db\mfgprod -ld qaddb -trig triggers  
-db e:\mfgpro\eb2sp5\db\admprod -ld qadadm -trig triggers
```

```
-db e:\mfgpro\eb2sp5\db\hlpprod -ld qadhelp
-db e:\mfgpro\eb2sp5\db\aim.db -ld aimdb -trig triggers
```

7 Save your changes

Compile Under Windows

1 Launch a command session and navigate to *AIMInstallDir\us*.

2 Run the following command:

```
%DLC%\bin\_progres.exe -inp 8192
-pf MFGPROInstallDir\aimcomp.pf
-ininame MFGPROInstallDir\aimcomp.ini
```

The command contents are:

%DLC%\bin_progres.exe. The Progress executable that launches the Progress session.

-inp 8192. A parameter to increase the size allowed for individual lines of code.

-pf MFGPROInstallDir\aimcomp.pf. The set of databases started and connected during this Progress session.

-ininame MFGPROInstallDir\aimcomp.ini. The initialization file for the Progress session, including screen colors, PROPATH, and so on.

Important For additional language compiles, change the *.pf* and *.ini* file names to those you created for the language you are compiling. The *.pf* file must reference the empty database loaded with the language-specific schema.

3 The Progress Editor displays.

4 Use File|Open to locate and open *AIMInstallDir/us/whcomp.p*.

5 Make the following changes:

wk_home. This is the compile destination where the r-code is saved. The slash at the end of the directory name is required. This should be *AIMInstallDir*.

wk_log. The name and location of the log file from the compile; for example, *AIMInstallDir/us/aimchr.001*.

wk_list. The name and location of the compile list. The files—*aim.wrk* and *qad.wrk*—are located in *AIMInstallDir/us*.

Important It is mandatory to compile the programs contained in the *qad.wrk* list against the same Database Set the MFG/PRO standard programs are compiled against. This avoids frame layout incompatibilities and other problems; *qad.wrk* contains standard MFG/PRO programs with changes to work with AIM. The *aim.wrk* list can be compiled against other Database Set, as these are strictly AIM programs (nonintrusive to MFG/PRO).

A portion of the file appears with sample changes in bold below.

```

/**SET DISPLAY TYPE**/
if session:display-type = "TTY" then
    assign wk_home = "c:\mfgpro\aim30\"
    wk_log = "c:\mfgpro\aim30\us\aimchr.001".
else
    assign wk_home = "../obj.p8/90a/gui/"
    wk_log = "../admin/install/compile/aimgui.res".

/**SET LANGUAGE**/
&IF index(propath,"LANG=fr") <> 0 &THEN
    wk_lang = "fr/".
&ELSEIF index(propath,"LANG=du") <> 0 &THEN
    wk_lang = "du/".
&ELSE
    wk_lang = "us/".
&ENDIF

assign wk_list = "c:\mfgpro\aim30\us\aim.wrk".

```

- 6 Save your changes.
- 7 Select Compile|Run from the Progress Editor menu. The AIM compile screen displays. On the first pass, the values should be correct from your edit of the file in the previous steps. On the second pass, change *aim.wrk* to *qad.wrk*.

Fig. 1.9
AIM Compiler

Compile Source	
Save R-Code Into:	c:\mfgpro\aim30\us\
List to Compile From:	c:\mfgpro\aim30\us\aim.wrk
Name of Log File:	c:\mfgpro\aim30\us\aimchr.log
Language:	us/
Delete After Compile:	no
Missing .r Files Only:	no
Report Only:	no

- 8 Press Go to launch the compile. A report window displays showing compile progress and error status.
- 9 When the compile is complete, press the spacebar to close the report window. The AIM Compiler redisplay.
- 10 Repeat steps 7 through 9 for `qad.wrk`.
- 11 Repeat steps 2 through 9 for additional languages, making sure to edit the launch command in step 2 to include the language-specific `.pf` and `.ini` files.
- 12 Press Exit to exit the compiler. You enter the Progress Editor. Access the menus and choose File|Exit to close the editor.

Creating a Launch Script

After the compile, copy `client.Production` for UNIX, or `ClientProduction.bat` for Windows, and modify them to enable the scripts to launch AIM. Alternately, for UNIX, you can copy or modify `aimcomp.sh`.

- 1 Copy the appropriate script for your operating system:

OS	File Name	Copy to:
UNIX	<code>client.Production</code>	<code>client.AIM</code>
Windows	<code>clientProduction.bat</code>	<code>clientAIM.bat</code>

- 2 Open the new copy in a text editor.
- 3 At the `-p` argument, change the run program from `mf.p` to `cpdmf.p`.
- 4 Modify the `-pf` argument to call `aimcomp.pf`.
- 5 Radio Frequency (RF) Terminals are supported on character clients. In addition, to run an RF session, the following lines must be added to the `-ini` file for Windows and set as variables in UNIX.

```
AIMSystemCode=RF;export AIMSystemCode
AIMShortMsg=YES;export AIMShortMsg
AIMSelectType=select-b;export AIMSelectType
```

For example, in the UNIX script:

```
MFGDIR=/dr01/mfgpro/eb2sp9;export MFGDIR
AIMDIR=/dr01/mfgpro/aim30;export MFGDIR
AIMSystemCode=RF;export AIMSystemCode
```

▶ See “Setting OS Variables” in the Radio Frequency (RF) Terminals chapter in *User Guide: Advanced Inventory Management*.

```

AIMShortMsg=YES;export AIMShortMsg
AIMSelectType=B;export AIMSelectType
stty intr '^c'
DLC=/dr01/progress/dlc91e;export DLC
PATH=$PATH,$DLC;export PATH
PROMSGS=$DLC/promsgs;export PROMSGS
PROTERMCAP=$DLC/protermcap;export PROTERMCAP
PROPATH=
.:$AIMDIR:$AIMDIR/us:$AIMDIR/us/src:$AIMDIR/us/sp5:$MFGDIR:$MFG
DIR/us:$MFGDIR/xrc;export PROPATH

$DLC/bin/_progres -inp 8192 -c 30 -d mdy -yy 1920 -Bt 350 -D 100
-mmax 3000 -nb 200 -s 63 -noshvarfix -p cpdmf.p -pf
/dr01/mfgpro/eb2sp9/prodaim.pf

```

Note Make sure to include the parameter `-inp 8192` in the program execution line that starts `$DLC/bin/_progres`. Also, QAD recommends that you set the stack size as 128. So, you can include the `-s 128` parameter.

6 Save the file.

Updating Help

Important Updates to AIM help exist only in the character-client help. To make these changes available in a GUI environment, follow the steps outlined in “Access Revised Character Help Information” on page 28.

Load Online Help

The online help database is character only. You can load online help data at any time after you create your databases.

- 1 Launch MFG/PRO.
- 2 From the Main Menu, open Field Help Load (36.4.19).
- 3 In the Language field, enter the code of the language that you are loading help for and press Enter.

Note AIM ships only English help. The language code is `us`.

- 4 Skip to Field Help Load File, leaving all other fields blank, and enter the two-letter language code directory followed by the name of the help file, which is always `fieldhlp.fhd`. In the AIM installation, the file is located in:

```
AIMInstallDir\data/mfg/us/fieldhlp.fhd
```

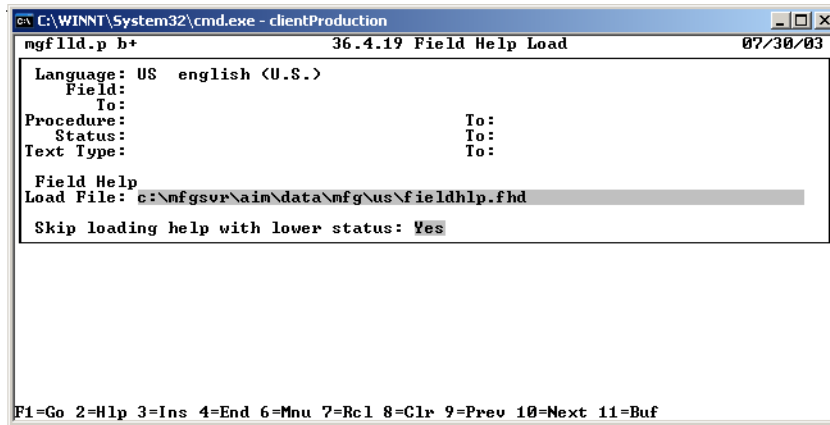


Fig. 1.10
Field Help Load in
MFG/PRO

- 5 Accept the default values in all other fields and press Go to begin the load process.

As the load proceeds, the number of records that have been read and loaded displays at the bottom of the screen. On completion, the screen should look like Figure 1.11.

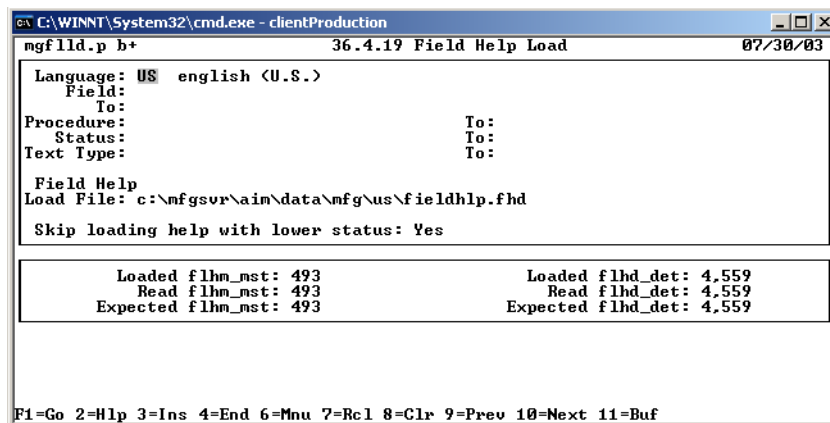


Fig. 1.11
Field Help Load
Completion Screen

Access Revised Character Help Information

This step is not required if you are using MFG/PRO eB2.1 or higher.

Updated help is available in character mode only. If your configuration includes Windows GUI clients, perform these additional steps to make the character-based help viewable from those clients:

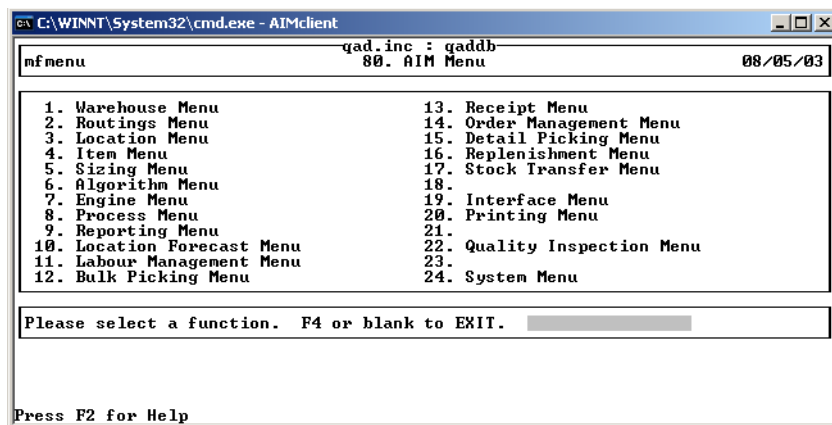
- 1 Open User Maintenance (36.3.18).
- 2 For each user accessing the new functions, set WinHelp to No.
- 3 Press Go to save the changes.

Starting AIM

Start AIM by launching the modified `.bat` or `.sh` file created under “Creating a Launch Script” on page 25.

Once MFG/PRO starts, enter menu 80 in the character client, or locate AIM on the Custom menu in GUI.

Fig. 1.12
AIM Main Menu



- 4 Navigate to Installed Products, CPD Control File Maintenance (80.24.21.19).

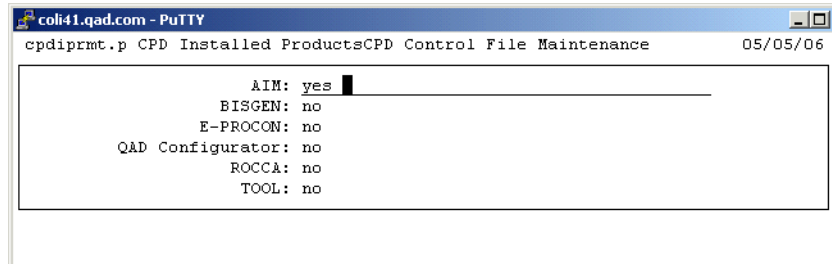


Fig. 1.13
CPD Control File
Maintenance

- 5 Set AIM to Yes.

See *User Guide: Advanced Inventory Management* for additional information on starting and using AIM.

Language Settings

For languages other than US English, you must set the labels to be translated in MFG/PRO.

- 1 From the Main Menu, open Language Code Maintenance (36.4.1).
- 2 In the Language field, enter us.
- 3 Skip to Field Directory, and enter the two-letter language code directory you have installed. For example, jp for Japanese.
- 4 Press F4 to exit the program.
- 5 From the Main Menu, open Label Control (36.4.17.24).
- 6 Set Field Translate Frames to Yes.

Upgrading AIM

This chapter provides information on upgrading an earlier version of AIM to the current version.

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Overview

This upgrade chapter supports the conversion of all previously released versions of AIM to the current version, AIM 3.0.5. The previously released versions are AIM 2.0, 2.1b, 2.1c, 2.2a, 2.3a, 2.3b, 2.3d, and 3.0. Database changes in this sequence were introduced in version 2.2a and version 3.0.

Two delta `.df` files are provided containing the database changes. All upgrades require one of these files.

In addition, this chapter includes instructions for updating your AIM installation when you upgrade your MFG/PRO service pack level.

Note If you are upgrading your version of Progress from 9.x to OpenEdge 10, you must also add a parameter to the client startup script.

Updating the MFG/PRO Service Pack Level

If you upgrade your MFG/PRO service pack level, you must also upgrade your AIM installation. The examples in this section assume you are upgrading from eB2 service pack 5 to eB2 service pack 9.

- 1 If your existing AIM media does not contain the MFG/PRO version and service pack level in `AIM/chr/qadsrc`, contact QAD to obtain AIM media that includes the MFG/PRO version and service pack level.
- 2 Create a service pack directory in `AIMInstallDir/us`:

```
AIMInstallDir/us/sp9
```
- 3 Copy the specific directory for your MFG/PRO version and service pack from the `/chr/qadsrc` directory from the CD to `AIMInstallDir/us/sp9`.
- 4 Copy the new `qad.wrk` for your MFG/PRO version and service pack from the `/chr/qadsrc` directory from the CD to `AIMInstallDir/us`.
- 5 Modify `MFGPROInstallDir/aimcomp.sh` to reflect the new `PROPATH`.

```
AIMDIR=/dr01/mfgpro/aim30;export AIMDIR
```

```
PROPATH=
.: $AIMDIR/$AIMDIR/us:$AIMDIR/us/src:$AIMDIR/us/sp9:$MFGDIR:$MFG
DIR/us:$MFGDIR/xrc;export PROPATH
```

- 6 Compile only the new `qad.wrk` using the instructions in “Compile Under UNIX” on page 20 or “Compile Under Windows” on page 23.
- 7 This completes the AIM update. No database changes are required.

Upgrading the AIM Version

Prior to Starting

Before starting the upgrade, complete the following steps:

- Shut down your AIM production system.
- Back up your existing AIM database.

Install New AIM Media

Follow the instructions in “Install AIM Files” on page 11. Make sure your new `AIMInstallDir` is parallel to both `MFGPROInstallDir` and your existing `AIMInstallDir`.

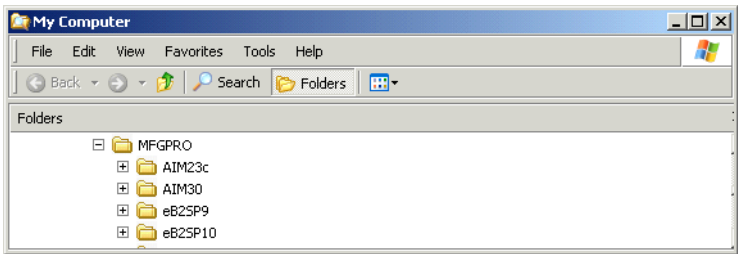


Fig. 2.1
New AIM
Directory for
AIM30

Update Existing aimempty

The `aimempty` database from your prior release should already exist in your AIM environment. For all versions prior to AIM 2.3a, you must load the language-specific delta `.df` file.

Note If you are supporting multiple languages, you must repeat these steps for each language-specific empty database.

Load Schema Updates

Complete these steps for all upgrades.

- 1 In MFG/UTIL, select Load Database Schema (.df) File from the Database menu.
- 2 In the Connect Database screen, enter the empty database name and location. Choose OK.
- 3 In the Enter Data Definition File to Load screen, use the Browse button to navigate to the appropriate delta schema definition file, located in *AIMInstallDir/defs/*.

If you are upgrading from 2.3a or a more recent version:

- For US English, choose `deltaaimusV9.df`.
- For a language other than US English, choose `xx/deltaaimxxV9.df` where *xx* is the language code.

If you are upgrading from 2.2a or an earlier version:

- For US English, choose `deltaaimusprev22a.df`.
- For a language other than US English, choose `xx/deltaaimxxprev22a.df` where *xx* is the language code.

- 4 Choose OK.
- 5 A log window displays and shows load progress. When the load completes, choose OK to close the window.
- 6 Repeat these steps for each empty language-specific AIM database.

Compile Upgraded AIM Version

For a more detailed set of compile steps, see the section “Compiling AIM: UNIX” on page 18 or “Compiling AIM: Windows” on page 22.

Compile New Code

For additional language compiles, change the .pf file name to one you created for the language you are compiling. This .pf file must reference the empty database loaded with the language-specific schema.

- 1 Open your aimcomp.sh (UNIX) or aimcomp.ini (Windows) file and modify the paths in the file to reflect the new AIM installation path.

```
AIMDIR=/dr01/mfgpro/aim30;export AIMDIR
PROPATH=
.:$AIMDIR:$AIMDIR/us:$AIMDIR/us/src:$AIMDIR/us/sp9:$MFGDIR:$MFGDIR/us:$MFGDIR/xrc;export PROPATH
```

- 2 Create the target /triggers directory for the compile:

```
AIMInstallDir/triggers
```

- 3 Launch a command session and for UNIX navigate to MFGPROInstallDir and run aimcomp.sh:

```
./aimcomp.sh
```

For Windows, navigate to MFGPROInstallDir and run:

```
%DLC%\bin\_progres.exe -inp 8192 -pf aimcomp.pf -ininame aimcomp.ini
```

- 4 The Progress Editor displays.
- 5 Use File|Open to locate and open AIMInstallDir/us/whcomp.p.
- 6 Select Compile|Run from the Progress Editor menu. The AIM compile screen displays. Modify the paths as necessary. Make sure the List to Compile From references AIMInstallDir/us/qad.wrk.

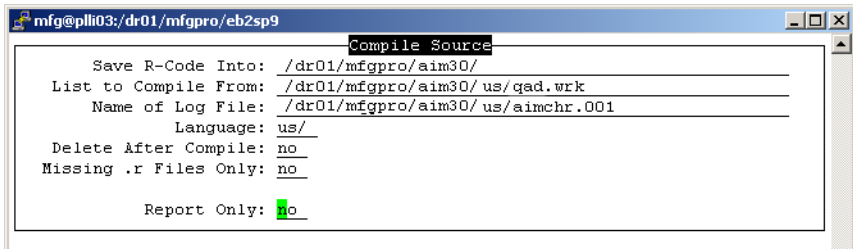


Fig. 2.2
AIM Compiler

- 7 Press Go to launch the compile. A report window displays showing compile progress and error status.
- 8 When the compile is complete, press the spacebar to close the report window. The Progress session ends.
- 9 Repeat steps 3 through 8 for additional languages, making sure to edit the launch command in step 3 to include the language-specific `.pf` and `.ini` files.

Update the AIM Production Database

Though you have loaded the schema changes into the empty databases, you must load them into the production database as well. Then you run a conversion utility and load new administrative data such as new messages and field values into the AIM database, as well as into `mfgprod` and `mfgadmin`.

Load Schema Updates

Complete these steps for all versions prior to AIM 2.3a.

- 1 In MFG/UTIL, select Load Database Schema (.df) File from the Database menu.
- 2 In the Connect Database screen, enter the production database name and location. Choose OK.
- 3 In the Enter Data Definition File to Load screen, use the Browse button to navigate to the appropriate delta schema definition file.
- 4 In the Enter Data Definition File to Load screen, use the Browse button to navigate to the appropriate delta schema definition file, located in `AIMInstallDir/defs/`.

If you are upgrading from 2.3a or a more recent version:

- For a US English production database, choose `deltaaimusv9.df`.
- For a production database with a language other than US English, choose `xx/deltaaimxxv9.df` where `xx` is the language code.

If you are upgrading from 2.2a or an earlier version:

- For a US English production database, choose `deltaaimusprev22a.df`.
- For a production database with a language other than US English, choose `xx/deltaaimxxprev22a.df` where `xx` is the language code.

- 5 Choose OK.
- 6 A log window displays and shows load progress. When the load completes, choose OK to close the window.

Run Conversion Utility

- 1 Copy the contents of `/install/conv` from the CD to the `AIMInstallDir`.
- 2 From the Progress Editor, run:
`AIMInstallDir/conv/whutmig3.p`
- 3 Quit from the Progress editor.

Load Data Updates

Complete these steps for all previous versions.

Note During the data load, errors display for already existing records. This is normal; you can safely ignore the messages.

- 1 In MFG/UTIL, select Load System Data into Database from the Database menu.

Important If your MFG/PRO version is eB2.1 Service Pack 4, you *must* use MFG/UTIL to avoid errors related to missing OID (object identifiers) fields. Do not use Progress utilities.

- 2 In the Connect Database screen, enter the AIM production database name and location. Choose OK.
- 3 A log window displays to confirm the connection. Choose Close.

- 4 In the Load Data Contents screen, use the Browse button to navigate to *AIMInstallDir\data\aim*. Select any file in the directory and choose Open. Then choose OK in the Load Data Contents screen.

The *mfgprod* data files are in *AIMInstallDir\data\mfg* and in *AIMInstallDir\data\mfg\us*.

Note Do not load the *fieldhlp.fhd* file from MFG/UTIL. See the next section on updating help.

For *admprod*, go to *AIMInstallDir\data\mfgadmin* and *AIMInstallDir\data\mfgadmin\us*.

- 5 A list of tables in the directory is built and all tables with data updates are selected by default. Choose OK to start the load.
- 6 A log window displays to show progress. When the load completes, choose Close.

Note When performing an upgrade, the data files contain all data, not just deltas. Error files are generated for the data records that already exist in the database. These can be safely ignored.

- 7 Repeat steps 1 through 6 for your *mfgprod* and *admprod* databases, using the paths identified in step 4.
- 8 Repeat steps 1 through 6 for each additional language as well, loading only the language-specific data for *mfgprod* and *admprod* in step 4.

Updating Help

Help files were updated for AIM 3.0. Updates to AIM help exist only in the character-client help. To make these changes available in a GUI environment, follow the steps outlined in “Access Revised Character Help Information” on page 39.

Load Online Help

The online help database is character only. You can load online help data at any time after you create your databases.

- 1 Launch MFG/PRO.
- 2 From the Main Menu, open Field Help Load (36.4.19).

- 3 In the Language field, enter the code of the language that you are loading help for and press Enter.

Note AIM ships only English help. The language code is `us`.

- 4 Skip to Field Help Load File, leaving all other fields blank, and enter the two-letter language code directory followed by the name of the help file, which is always `fieldhlp.fhd`. In the AIM installation, the file is located in:

```
AIMInstallDir\data/mfg/us/fieldhlp.fhd
```

- 5 Accept the default values in all other fields and press Go to begin the load process.

As the load proceeds, the number of records that have been read and loaded displays at the bottom of the screen.

Access Revised Character Help Information

Note This is not required in version eB2.1 or above.

Updated help is available in character mode only. If your configuration includes Windows GUI clients, perform these additional steps to make the character-based help viewable from those clients:

- 1 Open User Maintenance (36.3.18).
- 2 For each user accessing the new functions, set WinHelp to No.
- 3 Press Go to save the changes.

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