

6.0 Stand-Alone Installation of FEMIS v1.4.7

The following section contains instructions on the installation of a stand-alone Oracle database and the configuration of the FEMIS v1.4.7 application on the stand-alone system. Additional documentation and software that will be required to complete this installation are as follows:

- Oracle8i Server for Windows NT v8.1.6 or Personal Oracle8i v8.1.6.
- FEMIS v1.4.7 COTS CD.

6.1 Stand-Alone PC System Requirements

Since the stand-alone PC will be running an Oracle database as well as the FEMIS application and COTS software, the system hardware should be as robust as possible. The following hardware requirements should be used as minimum requirements:

- IBM compatible PC with Windows NT v4.0 and Service Pack 5
- Pentium 266MHz
- 128MB of RAM
- CD ROM Drive
- Network Adapter or PC Card
- 800X600 pixels and 256 color Display Graphics
- 2GB of free hard disk space.

6.2 Location of Oracle

The Standalone requires that Oracle8i v8.1.6 database software be installed on the PC. Based on the space requirements for Oracle8i and Personal Oracle8i for v8.1.5, the amount of disk space required for a minimal installation of these products is

- ~586MB for Oracle8i or Personal Oracle8i
- ~500MB-900MB for FEMIS data files.

Space requirements for v8.1.6 were not available at this time.

6.3 Stand-Alone PC Installation Process

The following sections provide instructions for installing the Oracle database and configuring the FEMIS v1.4.7 application.

6.3.1 Removing Existing Stand-Alone Database

If you have an existing Oracle7 database installed on the PC, complete the following steps.

1. Delete all shortcuts from the Startup folders. The All User Startup folder is located in %WINDIR%\PROFILES\ALL USERS\START MENU\PROGRAMS.
2. Remove the existing Oracle instance by running the Instance Manager ORACLE_HOME\bin\oradim73.exe. Select instance and click Delete.

6.3.2 Installing PC COTS and FEMIS v1.4.7

Follow the instructions in Section 4.0, FEMIS PC Installation, to install the FEMIS v1.4.7 COTS and the FEMIS application.

Be sure to follow the steps in Section 4.1.3.1 Uninstalling Oracle SQL*Net Client v2.3.4 and Oracle7 ODBC Driver during the installation of the PC COTS and FEMIS v1.4.7. You **should not restore** your TNSNAMES.ORA and SQLNET.ORA.

Install the Oracle Net8 products at the same location you expect to install Personal Oracle or Oracle8i Server and keep in mind the space requirements required for the software.

6.3.3 Installing Oracle8i Server or Personal Oracle8i

To install Oracle8i Server Enterprise Edition, Oracle8i Server, or Personal Oracle8i, complete the following steps:

1. Insert the Oracle installation CD into the CD drive.
2. Select Install/Deinstall Products in the window that appears or click Start → Run, and enter <CD DRIVE>:\ SETUP.EXE.
3. Click Next in the Oracle Universal Installer – Welcome window.
4. Verify the destination Name and Path of the Oracle Home directory (typically OraHome81 and C:\ORACLE\ORA81), and click Next.

Note: You should install Oracle to the same Oracle Home Name and Path as the Net8 Client was installed during the COTS installation. This will upgrade the installed v8.1.5 components to v8.1.6.

5. Select Oracle8i or Personal Oracle8i. Click Next.

6. Select Minimal Installation Type, and click Next.
7. Select No in the Select Starter Database window, and click Next.
8. Click Install in the Summary window.

Note: You may receive messages the message—Error in writing to file C:\winnt\system32\<filename>.dll—when the install is copying files to the PC. Browse to the location of the file, right click on the file and select properties. Uncheck the Read-only box and click OK. Then return to the message, and click Retry.

9. Click Cancel in the Net8 Configuration Assistant Welcome window that displays after the installation is complete.
10. Click OK in the Error window that follows.
11. Click Next in the Configuration Tools window.
12. Click Exit in the End of Installation window.

6.3.4 Configuring Oracle Network Components

Before the database instance can be installed, the Net8 components and Listener need to be configured. Complete the following steps to configure these.

1. Click Start → Programs → Oracle Oracle-OraHome81 → Network Administration → Net8 Assistant.
2. Go to Net8 Configuration → Local, and select Profile.
3. Go to the Naming section, and select the Methods tab. Use only TNSNAMES as Selected Methods. To add or remove selected items, use the < and > buttons.
4. Click the Oracle Names tab, and enter World as Default Domain.
5. Click File on the menu bar, and select Save Network Configuration.
6. Click on File, and select Exit.
7. Click Start → Programs → Oracle Oracle-OraHome81 → Network Administration → Net8 Configuration Assistant.
8. Select Listener Configuration in the Net8 Configuration Assistant: Welcome window, and click Next.
9. Select Add, and click Next.

10. Use the default Listener name, LISTENER, and click Next.
11. In the Select Protocols window, TCP should be the only item in the Selected Protocols field. Use the < and > buttons to add or remove Selected Protocols. Click Next.
12. Use the standard port number of 1521 for the TCP/IP port number. Click Next.
13. Select No for Would you like to configure another listener? Click Next.
14. Click Next for Listener configuration complete!

You will be returned to the Net8 Configuration Assistant: Welcome window.

15. Click Finish.

6.3.5 Building the Database

Complete the following to build the database:

1. Click Start → Programs → Oracle Oracle-OraHome81 → Database Administration → Database Configuration Assistant.
2. Select Create a database, and click Next.
3. Select Custom for type of database to create. Click Next.
4. Select Multipurpose for Primary type of application that will be used. Click Next.
5. Enter 1 for Concurrently connected users, and click Next.
6. Select Dedicated Server Mode for mode in which you want your database to operate by default. Click Next.
7. Deselect the Oracle JServer and verify that only the following items are checked for the Select Options that will be configured for use in your database window.

Advanced Replication
SQL*Plus Help

Click Next.

8. Enter fi0.world for the Global Database Name. fi0 will be automatically entered for the SID. Accept the default Initialization Filename location. For Compatible Parameter, select 8.1.0. **Do not select** Change Character Set. Click Next.

9. Enter a password in the Password and Confirm fields for the Internal privileged account. Keep track of the password for later use. Click Next.
10. Accept the default locations and parameters for the Control Files if you are installing on a system that has only one physical disk. If you have multiple disks, locate the control files on separate disks, whenever possible. To change the drive location, only change the drive letter and leave the file location path intact. Click Next.
11. Change each to the following for the Size parameter of the tablespaces. Each tablespace that is going to be created by the Oracle Database Configuration Assistant is represented by a tab in this window. Use the default Name, File, Extent and Storage parameters for all tablespaces.

System - 100MB
Tools – 3MB <only in Oracle8i Enterprise Edition>
User – 3MB
Rollback – 50MB
Index – 3MB
Temporary – 20MB

Click Next.

12. Accept the default location and parameters for the Redo Logs. If you have multiple disks, locate the Redo Logs on the separate disks, whenever possible. To change the drive location, only change the drive letter and leave the file location path intact. Click Next.
13. Accept the defaults Checkpoint Interval and Checkpoint Timeout. **Do not check** Enable Archive Log. Click Next.
14. Accept the default SGA parameter information, and click Next.
15. Accept the default Trace File Directory locations, and click Next.
16. Check Create database now. Click Finish.
17. Click Yes on the Message box that follows to create the instance. This can take up to 1 hour depending on the speed of your PC.
18. Note the password information for sys and system in the Oracle Database Configuration Assistant Alert that displays after the database has been created. Click OK.

6.3.6 Creating Stand-Alone Working Directory

Complete the following steps to create a working directory to store the export file, scripts, and log files which are needed to create a FEMIS database.

1. Click Start → Programs → Windows NT Explorer.
2. Browse to the base directory where Oracle was installed, usually C:\ORACLE.
3. Select the Oracle directory, click File on the menu bar, and select New → Folder.
4. Enter STANDALONE for name of your working directory.
5. Insert the FEMIS v1.4.7. COTS CD into the CD drive.
6. Copy the contents of the STANDALONE directory from the CD to the STANDALONE directory on the PC.

6.3.7 Creating FEMIS Database Tablespaces

To prepare the database for FEMIS data, additional tablespaces and public rollback segments need to be created.

1. Use Windows NT Explorer to browse to the stand-alone working directory, usually C:\ORACLE\STANDLALONE.
2. Use a text editor, such as Notepad, to open the CR_TABLESPACE.SQL file.
3. Modify, if necessary, the path locations for the FMAIN, FINDEX, FSNAPSHOT, and FSNAPLOG DATAFILES to be located in the ORADATA folders created by the instance installation. If you have multiple hard drives on which to install, preferably locate them on drives other than the drive where Oracle was installed. If you had three drives, for example:

Oracle installed drive	C:\ORACLE\ORA81
FMAIN	D:\ORACLE\ORADATA\FI0\FMAIN01.DBF
FINDEX	E:\ORACLE\ORADATA\FI0\FINDEX01.DBF
FSNAPSHOT	D:\ORACLE\ORADATA\FI0\FSNAPSHOT01.DBF
FSNAPLOG	E:\ORACLE\ORADATA\FI0\FSNAPLOG01.DBF

4. Ensure the paths specified in the CR_TABLESPACE.SQL exist. If not, create them.

5. Verify you have sufficient disk space for the data files Size parameter in the CR_TABLESPACE.SQL and room for additional growth when FEMIS data is imported.

Note: Disk space requirements will vary depending on the amount of FEMIS data that has been inputted at your site. FMAIN or FSNAPSHOT can exceed 300MB in some installations.

6. Verify at the Command Prompt window that you are located in the stand-alone working directory, C:\ORACLE\STANDALONE.
7. Enter `sqlplus system/manager @cr_tablespace.sql` at the command prompt.

The script will take a few minutes to create the data files and rollback segments and will exit to the command prompt when done.

8. Locate the Instance initialization file, INITFIO.ORA, located in the <INSTALL DRIVE>\ORACLE\ADMIN\FIO\PFIL.
9. Edit the file to match the following. This will uncomment the line for private rollback segments.

```
ROLLBACK_SEGMENTS = (RBS0, RBS1, RBS2, RBS3, RBS4, RBS5)
```

6.4 Importing or Changing FEMIS Data

The stand-alone database can use data from the FEMIS database located on the server using export files it generates. This allows you to use current data or specify a time when certain data you wish to use was in the database but may have been archived. After a stand-alone database has been created, you can use this section to either make the stand-alone current using the latest exports generated by the server or use older FEMIS v1.4.7 database exports to review older data.

6.4.1 Removing Database Data Owners

Complete this step only if you previously imported data into the stand-alone database.

1. Click on Start → Programs → Command Prompt. The Command Prompt window will display.
2. Change directories to the stand-alone working directory you created.

```
cd c:\oracle\standalone<enter>
```

3. At the command prompt, enter `sqlplus -s system/<password> @dropusers.sql`

This script will take several minutes to complete.

6.4.2 Obtaining FEMIS Database Export

The data needed to create a FEMIS database on the PC is located on the FEMIS server where your EOC's database resides. You will need to know the password for the oracle account on the server to complete this step. To obtain a FEMIS database export file, complete the following steps:

1. Click on Start → Run. Enter telnet <femis server>.
2. Enter oracle at the login prompt, and press Enter.
3. Enter the oracle user password for the FEMIS server at the password prompt.
4. Enter cd \$ORACLE_EXPORT.
5. Enter the command pwd to display your current path and note this for later use.
6. Enter the command ls -l to list the files in the current directory.
7. Determine the FEMIS database export file you wish to use for the database. If you want the most current data, use the file with the latest date.

Note: The database exports are created nightly by Oracle provided the cron jobs have been enabled. These files remain on the system until the oracle cron deletes the older files. If you wish to use older database exports than those that are present, you will need to restore them from tape backup. The export files are created and named system_<fi#_date>.dmp and then compressed adding the .Z extension on the end. You can verify the export was created successfully by viewing the .log file with the same name.

8. Enter unzip <export_file.Z> to unzip the file. This will take a few minutes depending on the size of the export file. The export file will no longer have the .Z extension after it is unzipped.
9. Enter ls -l to see the size of the export file you have unzipped.
10. Go back to the PC, and click on Start→Programs→Command Prompt. The Command Prompt window will display.
11. CD to the stand-alone working directory you created (usually C:\ORACLE\STANDALONE).
12. Enter ftp <femis server>.
13. Logon using the oracle user and password.

14. Enter `cd <export path>`. This is the path you observed from the `pwd` command in Step 8.
15. Enter `bin` to establish binary mode.
16. Enter `get system_<fi#_date>.dmp`. This will take a few minutes depending on size of export file and the speed of your network.
17. Enter `quit` to return the command prompt after the ftp has successfully finished.
18. Return to the telnet `<femis server>` window initiated earlier in this section.
19. Enter `compress system_<fi#_date>.dmp`. This will take a few minutes.
20. Enter `exit` to close the telnet window when the prompt returns.

6.4.3 Importing FEMIS Data into the Database

To import the FEMIS data into the database, complete the following steps. During the execution of the scripts, ignore the import message “IMP-00015: following statement failed because the object already exists:”.

In the command prompt window, you should be located in the stand-alone working directory (usually `C:\ORACLE\STANDALONE`).

1. Enter the following at the command line:

```
imp system/<password> file=system_<fi#_date>.dmp inctype=system full=y log=system_import.log
```

The database configuration assistant assigns the system password to manager. Use this password for your first import. This first import will overwrite the system and sys passwords with the passwords as they exist in the database on the FEMIS server. You should obtain these passwords from the System or Database Administrator to use in further imports.

2. Enter the following at the command line:

```
imp system/<password> file=system_<fi#_date>.dmp inctype=restore full=y log=restore_import.log
```

This import will take considerably longer than the first import.

The replication jobs imported from the FEMIS database need to be removed to prevent accidental replication of data from the stand-alone system to the CSEPP site operational servers.

3. Enter the following at the command line:

```
sqlplus -s system/<password> @delete_rep_jobs.sql
```

Note: It is essential that the delete_rep_jobs.sql script runs successfully. If not, the database could potentially try to replicate data with the FEMIS servers at other EOCs or depot.

6.5 Configuring FEMIS Installation for Stand-Alone Database

When FEMIS was installed from the server, your system was configured for connecting to the server. The following procedure describes the changes needed for FEMIS to run in a stand-alone mode.

6.5.1 Creating a Local USER Share

To create a local user share, complete the following steps:

1. Open the Windows Explorer as Administrator.
2. Create a directory %FEMISTOPDIR%\USER, if it does not already exist. By default this is C:\FEMIS\USER, but the actual location will depend upon where FEMIS was installed.
3. Right-click on this directory with your mouse, and select Sharing... from the menu that appears.
4. Select the Shared As: radio button. The Share Name field should have a default value of USER.
Do not change the default value.
5. Click the OK button.

6.5.2 Editing SETSTANDALONE.BAT

The SETSTANDALONE.BAT file needs to be edited so that it can redirect the Oracle Data Source Names (DSNs) for each EOC to the stand-alone database residing on the local PC.

1. Open %FEMISTOPDIR%\SETSTANDALONE.BAT using a text editor, such as Notepad, to edit the file.
2. Add calls to ADDODBC.VBS after the line stating "Add calls here:" as documented in the file. You need one such call for each EOC you plan to log into using the stand-alone database. You may want to add a call for each EOC at your site.
3. Save the file and exit.

6.5.3 Running SETSTANDALONE.BAT and SETNETWORKED.BAT

Once it has been configured, the SETSTANDALONE.BAT script file will configure your PC to run FEMIS in stand-alone mode. The configuration changes made to your PC are

- changes the Oracle DSNs to point to the local database listener.
- connects the M:\ drive to the USER share on the local PC.

Note: If you do not have a Network card installed on the PC, you may not be able to map drives even to the local machine. If this occurs, you will need to manually modify your FEMIS.INI and change all references to M:\ to the path of your shared USER directory i.e., C:\FEMIS\USER. You may want to save your old FEMIS.INI to use when a network card is reinstalled.

- sets the RunAsStandAlone entry in the [Notification Service] section of FEMIS.INI to TRUE. This will cause the FEMIS Notification Service to run in stand-alone mode.

Run the SETNETWORKED.BAT script to return a PC to the standard, networked configuration. Running SETNETWORKED.BAT will

- run the FEMIS startup script (%WINDIR%\SYSTEM32\REPL\IMPORT\SCRIPTS\FSTARTUP.EXE) to reconnect the M:\ drive to the USER share on the FEMIS server, and run the FEMIS update tool (FUPDATE.BAT).
- run the M:\ADDODBC.BAT file to set the Oracle DSNs to connect to the networked database.
- set the RunAsStandAlone entry in the [Notification Service] section of FEMIS.INI to FALSE. This will cause the FEMIS Notification Service to run in networked mode.

Note: If you are going to be changing a PC's configuration between networked and stand-alone mode, the TNSNAMES.ORA file must be configured for the listener installed on the local PC and the listeners on the networked FEMIS servers. Use the Net8 Assistant to modify this file by adding Service Names for your local configuration using the following parameters:

Net Service Name – fi#.world
Protocol – TCP/IP
Host Name – FEMIS server
Port Number – 1521
(Oracle8i) Service Name – fi#

6.5.4 Correcting D2PC DOS Environment

When the network cable is disconnected from the PC, D2PC cases may take considerably longer to load. To correct this, the DOS environment needs modified for the D2PC.PIF so it will run correctly.

1. Use Windows Explorer to browse to the WINNT\SYSTEM32 directory.

2. Edit the AUTOEXEC.NT file using text editor, such as Notepad, and change the line.

```
lh %SystemRoot%\system32\dosx
```

to

```
REM lh %SystemRoot%\system32\dosx
```

3. Click on File → Save As, and enter AUTOEXD2.NT for File Name. Click Save, and then close the text editor (Notepad).
4. Browse to the directory where FEMIS is installed. Right click on the D2PC.pif and click Properties (D2PC.pif will have a DOS shortcut icon and may not show the .pif extension).
5. Click on the Windows NT PIF Settings button in the Program folder.
6. Modify the Autoexec filename to point to %SystemRoot%\SYSTEM32\AUTOEXD2.NT. Click OK, and close the D2PC.pif Properties window.

6.5.5 Testing the Setup

You should test the stand-alone system by shutting the PC down and removing the system from your network. After restarting the PC, check to see if you can start FEMIS. Data on this PC is completely separate and different from a PC running FEMIS that connects to the operational database at your EOC.

If your system is not connected to the network, and you have Remote Access Service (RAS) installed, you might receive a Dial-Up Networking prompt if Auto-Dial is enabled (It is enabled by default.). See Section 6.6, Remote Access Service, for instructions on disabling Auto-Dial.

6.6 Remote Access Service

If you have Remote Access Service (RAS) installed on the PC (used with Remote Evacuee Registration [RER]), you may be prompted to use Dial-Up Networking whenever you attempt to connect to the local database. If you receive this prompt, you can disable this Auto-Dial feature by choosing the following options:

1. Select Yes, Dial when the Dial-Up Networking window displays.
2. Click OK to add an entry, and in the Phonebook entry wizard, click Cancel if you received a prompt that your Phonebook is empty.
3. Close the Dial-Up Networking window.

4. Select Yes to disable the Auto-Dial feature when you receive the following message:
Auto-Dial attempt failed. Do you want to disable auto-dial from this location?

You can turn this feature off before attempting to install the stand-alone database by doing the following:

1. Select an entry to dial from the Phonebook list in Dial-Up Networking.
2. Click on More, and select User Preferences.
3. Clear each location listed in the Enable Auto-Dial by location list on the Dialing tab.
4. Turn on Auto-Dial by reselecting a location in the Enable Auto-Dial by location list.

6.7 Verifying the Stand-Alone Installation

To verify that the stand-alone installation is complete and that FEMIS is fully operational, see Section 4.7, Validating the FEMIS PC Installation. The FEMIS PC Validation Checklist (at the end of Section 4.7) includes items that need to be checked to ensure that FEMIS is operating properly.

Because this is a stand-alone installation, the following items on the checklist **do not need to be verified**:

One Time at Each EOC:	
2	Verify the Evacuation Command Server
3	Only on the server with the depot database, verify FEMIS/EMIS Data Exchange Interface (DEI)
6	Verify E-mail
7	Verify SEPR Icon Addressee
Perform on Every PC:	
13	Verify Evacuation
14	Verify Electronic Planning (Planning Mode)
17	Verify E-mail
18	Verify SEPR Icon Addressee
20	Verify FEMIS Tools on Appropriate PC(s)

If you have a display problem with the D2PC window (cannot see the Edit/View and Close buttons at the bottom of the D2PC window), you will need to change your system display fonts. Click Start → Settings → Control Panel → Display → Settings tab, and change the Font Size field to Small Fonts. Reboot the PC to activate this change.