6.0 Standalone Installation of FEMIS v1.5.3

The following section contains instructions on the installation of a standalone Oracle database and the configuration of the FEMIS v1.5.3 application on the standalone system. Items that will be required to complete this installation are as follows:

- Oracle8i v8.1.6 or v8.1.7 Server or Personal Oracle Edition
- Exports generated by a FEMIS database
- FEMIS server for installation of Software
- FEMIS v1.5.3 COTS CD.

Note: The Oracle version needs to be at or later than is installed on the FEMIS server. If Oracle was upgraded to version 8.1.7 on the FEMIS server, you must upgrade the Standalone PC Oracle also.

6.1 Disk Space Required

The standalone requires that Oracle8i v8.1.6 database software be installed on the PC. The amount of disk space required for a minimal installation of these products is

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

6.2 Removing FEMIS v1.5 Database

FEMIS v1.5 used Oracle 8.1.6 for the server and standalone database. If the server has been upgraded to Oracle 8.1.7, it is required that the standalone PC also be upgraded to that version. Perform the following to remove a previous Oracle 8.1.6 installation prior to installing the 8.1.7 software. If you have an installation of Oracle 8.1.6 client and need to upgrade to 8.1.7, just complete Section 6.2.3, Removing the Oracle 8.1.6 Software.

6.2.1 Removing Oracle Instance

Complete the following the steps to remove the Oracle instance.

1. Click `Start` → `Programs` → `Oracle Oracle-OraHome81` → `Database Administration` → `Database Configuration Assistant`.

2. Select `Delete a Database`, and click `Next`.

3. Select `OracleServiceFI0` on the Available Instances Window.

4. Click `Finish`, and `OK` to warnings to remove the instance.

6.2.2 Removing the Oracle Listener

Complete the following the steps to remove the Oracle Listener.

1. Click `Start` → `Programs` → `Oracle Oracle-OraHome81` → `Network Administration` → `Net8 Configuration Assistant`.

2. Select `Listener Configuration` on the Net8 Configuration Assistant: Welcome window, and click `Next`.

3. Select `Delete`, and click `Next`.

4. Highlight `LISTENER`, and click `Next`.

5. Click `Yes` to confirm, and click `Next` after confirmation of LISTENER was deleted and LISTENER configuration is complete.

6. Exit Net8 Configuration Assistant.

6.2.3 Removing the Oracle 8.1.6 Software

Complete the following the steps to remove Oracle 8.1.6.

1. Click `Start` → `Programs` → `Oracle Installation Products` → `Universal Installer`.

2. Select `Installed Products`.

3. Expand Independent Products and OraHome81.

4. Check the boxes next to all the products under both sections, and click `Remove`.

5. Restart the PC after the Products have been removed, and delete the Oracle directory to remove files that may have been in use during uninstall.

6.3 Installing Oracle8i Server or Personal Oracle Edition 8.1.6 or 8.1.7 and Patches

Complete the following the steps to Install Oracle8i Server or Personal Oracle Edition 8.1.6 or 8.1.7:

1. Insert the Oracle installation CD into the CD drive.

2. Select `Install/Deinstall Products` on the window that appears.

Note: If window does not start automatically upon inserting the CD, 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 `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.

5. Select Oracle8i or Personal Oracle8i Edition, and 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 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.

Installing Oracle8i Patch Set 8.1.6.3 or 8.1.7.4

The Oracle8i patch set 8.1.7.4 must be installed after Oracle8i Server or Personal Oracle Edition 8.1.7.0.0 has been installed. If you installed Oracle 8.1.6, install the 8.1.6.3 patch.

1. Click `Start`→`Run`, and enter `services.msc /s`

2. Stop all Oracle services that may be running. Oracle services start with `OracleOra`.

3. Insert the FEMIS v1.5.3 COTS CD.

4. Click `Start` → `Programs` → `Oracle Installation Products` → `Universal Installer`.

5. Click `Next` on the Welcome window.

6. Browse to `<COTS drive>:\Oracle8174\Disk1\stage\products.jar` or `<COTS drive>:\Oracle 8163 Patch\Disk1\stage\products.jar` for the `Source… Path`.

   Click `Next`.

7. Click `Install` on the Summary window.

   Note: You may receive the following error message, if you did not stop the Oracle services that were running prior to this step.

   ```
   Certain files which need to be reinstalled by Oracle Universal Installer
   are being used by one or more running services.
   The following running services need to be shutdown:
      OracleOraHome8iAgent
      OracleOraHome8iDataGatherer
      OracleOraHome8ihttp server

      *Press "Help" for more information
       Press "Retry" to try again
       Press "Cancel" to stop this installation
   ```

8. Click `Exit` on the End of Installation window.

6.4 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.

6.4.1 Configuring SQLNet

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.

6.4.2 Setting up Oracle Listener

1. Click Start → Programs → Oracle Oracle-OraHome81 → Network Administration → Net8 Configuration Assistant.

2. Select Listener Configuration in the Net8 Configuration Assistant: Welcome window, and click Next.

3. Select Add, and click Next.

4. Use the default Listener name, LISTENER, and click Next.

5. Verify TCP is the only item in the Selected Protocols field on the Select Protocols window. Use the < and > buttons to add or remove Selected Protocols. Click Next.

6. Use the standard port number of 1521 for the TCP/IP port number. Click Next.

7. Select No for Would you like to configure another listener? Click Next.

   If you receive the following message, you will need to use the Back buttons to delete the listener that you just created and begin again.

   ```
   The TCP Protocol is currently in use by another listener.  You can proceed with
   the configuration, as it is, but it will not be possible to start this listener
   until the conflict is resolved.  Would you like to continue with the
   configuration anyway?
   ```

8. Click Next for Listener configuration complete! You will be returned to the Net8 Configuration Assistant: Welcome window.

9. Click Finish.

6.4.3 Enabling NT Authentication

To enable NT Authentication, complete the following steps.

1. Use a text file editor (like WordPad) to edit the Oracle home/network/ADMIN/sqlnet.ora file.

2. Add the following parameter: SQLNET.AUTHENTICATION_SERVICES = (NTS) to the list of parameters.

3. Save and close the file.

4. Verify the Windows NT/2000 user account(s) you will use to build and administer the database. They are members of the `ORA_DBA` group account (the user who installed Oracle is added to this group automatically.).

   Note: If you are using domain authenticated accounts, the PC will need to be connected to the network for NT authentication to work.

6.5 Building the Oracle Database

If you have Personal Oracle or Oracle Sever 8.1.6 installed, skip this section.

If you are upgrading to Oracle8i Server or Personal Oracle Edition 8.1.7.0.0, then complete the following steps to build the database for v1.5.3.

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, and 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`.

Note: If you are prompted to enter a password for the Internal privileged account, cancel the database creation, and verify Section 6.4.3, Enabling NT Authentication, was completed successfully. Restart this section at Step 1 after changes have been made.

9. 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.

10. 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
    User – 3MB
    Rollback – 50MB
    Index – 3MB
    Temporary – 20MB

    Click Next.

11. 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.

12. Accept the defaults Checkpoint Interval and Checkpoint Timeout. **Do not check** Enable Archive Log. Click Next.

13. Accept the default SGA parameter information, and click Next.

14. Accept the default Trace File Directory locations, and click Next.

15. Check Create database now. Click Finish.

16. Click Yes on the Message box that follows to create the instance.

    Note: The database creation process will take some time.

17. Click OK in the Oracle Database Configuration Assistant Alert window.

6.6 Installing PC COTS and FEMIS v1.5.3

6.6.1 Uninstalling Previous Version of FEMIS

If you are upgrading from a previous version of FEMIS, uninstall the previous version of FEMIS by completing the following steps:

1. Map your `I:\` drive to `\\<femis server>\finstall`.

2. Open the Add/Remove Programs window by selecting `Start` → `Settings` → `Control Panel` → `Add/Remove Programs`.

3. Select `FEMIS`, and click the `Remove` button.

   If you are asked for the path to the `FEMIS.MSI` file, browse to `I:\pc\setup\v15\FEMIS.MSI`, open the `FEMIS.MSI` file.

4. Click `OK` on the message to restart the PC, if you get a message about restarting your PC.

6.6.2 Installing FEMIS v1.5.3

Complete the following the steps to install FEMIS v1.5.3.

1. Follow the instructions in Section 4.1.4, Installing ArcView GIS v3.1 and v3.1.1 Patch, to install ArcView 3.1.1, unless it is already installed from FEMIS v1.5.

2. Map your `I:\` drive to `\\<femis server>\finstall`.

3. Run the `I:\PC\SETUP\SETUP.EXE`.

4. Select the `Modify` option in the Program Maintenance window if you have v1.5.3 already installed.

5. Select your Site and EOC, and click `Next`.

6. Select the `Standalone` option to be installed to your local hard drive on the Custom Setup window.

7. Select `Next` in the Select GIS and Location window, and click `Install` to begin the installation.

8. Click `Cancel` on the message indicating failed to connect to the FEMIS Oracle Database.

6.7 Creating FEMIS Database Tablespaces

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

Complete the following steps to create additional tablespaces and public rollback segments:

1. Use Windows Explorer to browse to the STANDALONE directory under the FEMIS directory created during the install, usually C:\FEMIS\STANDLALONE.

2. Use a text editor, such as WordPad, to open the CR_TABLESPACE.SQL file.

3. Modify, if necessary, the path locations for the FMAIN, FINDEX, FSNAPSHOT, FSNAPLOG, and FLOB 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
FLOB                    D:\ORACLE\ORADATA\FI0\FLOB01.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 300 MB in some installations.

6. Locate the Instance initialization file, INITFI0.ORA, which is located in the <INSTALL DRIVE>:\ORACLE\ADMIN\FI0\PFILE.

7. Edit the INITFI0.ORA with a text editor (such as WordPad). Enable private rollback segments by removing the # from the beginning of the parameter and modify it to match the following.

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

6.8 Putting Data in the Standalone Database

The standalone database uses 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 standalone database has been created, you can use this section to either make the standalone current using the latest exports generated by the server or use older FEMIS v1.5.3 database exports to review older data.

6.8.1 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 `femis` at the login prompt, and press `Enter`.

3. Enter the `femis` 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 FEMIS provided the cron jobs run successfully. These files remain on the system until the femis cron or successful backup 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 uncompress `<export_file.Z>` to uncompress 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 uncompressed.

9. Go back to the PC, and click on `Start` → `Programs` → `Command Prompt`. The Command Prompt window will display.

10. CD to the standalone directory (usually `C:\FEMIS\STANDALONE`).

11. Enter `ftp <femis server>`.

12. Logon using the `femis` user and password.

13. Enter `cd <export path>`. This is the path you observed from the `pwd` command in Step 8.

14. Enter `bin` to establish binary mode.

15. Enter `get system_<fi#_date>.dmp`. This will take a few minutes depending on size of export file and the speed of your network.

16. Enter `quit` to return the command prompt after the ftp has successfully finished.

17. Return to the `telnet <femis server>` window initiated earlier in this section.

18. Enter `compress system_<fi#_date>.dmp`. This will take a few minutes.

19. Enter `exit` to close the telnet window when the prompt returns.

6.8.2 Importing FEMIS Data into the Database

To import the FEMIS data into the database, complete the following steps:

1. Verify you are located in the standalone directory (usually `C:\FEMIS\STANDALONE`) in a command prompt window.

2. Enter the following at the command line:

   ```
   createstandalone.bat system_<fi#_date>.dmp
   ```

   The command will prompt you to press `Return` after each script or command is executed. If you receive unexpected errors from any part of the command, you can use `Ctrl+C` to abort; then correct the problem, and rerun the `createstandalone.bat system_<fi#_date>.dmp`. The step where tables are imported into the database will take some time to complete.

   Note: During the execution of the scripts, ignore the following import messages:

   ```
   IMP-00015:  following statement failed because the object already
   exists:
   IMP-00017: following statement failed with Oracle Error 600: Create
   snapshot.  Refresh force with Rowid as.
   IMP-00003: Oracle 600 encountered
   ORA-00600: internal error code, arguments:
   [kkbchlob1], [ ],  [ ], [ ], [ ], [ ], [ ], [ ]
   ```

   Note: If the batch scripts are unable to connect to Oracle, verify the Oracle services are running and that you have completed Section 6.4.3, Enabling NT Authentication, successfully.

6.8.3 Updating FEMIS Data in the Database

In the future, if you would like to update the database with current data from your FEMIS server, repeat Section 6.8.1, Obtaining FEMIS Database Export, to get a current database export file, and then run the following command:

```
updatetandalone.bat system_<fi#_date>.dmp
```

6.9 Configuring FEMIS Installation for Standalone 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 standalone mode.

6.9.1 Running SETSTANDALONE.BAT and SETNETWORKED.BAT

The `SETSTANDALONE.BAT` and `SETNETWORKED.BAT` files are located in the `FEMIS\STANDALONE` directory on the PC. Shortcuts to these command files are put in `Start` → `Programs` → `FEMIS` when the standalone option is selected. The `SETSTANDALONE.BAT` script file will configure your PC to run FEMIS in standalone mode. The configuration changes made to your PC are

- Changes the Oracle DSNs for your EOCs FEMIS server's database to point to the PCs database listener. Other servers DSNs will remain unchanged but should not be used unless in networked mode.

- Sets the `RunAsStandAlone` entry in the `[Notification Service]` section of `FEMIS.INI` to `TRUE`. This will cause the FEMIS Notification Service to run in standalone mode.

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

- Run the `ADDODBC.BAT` file to set the Oracle DSNs to connect to the networked databases.

- 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 standalone mode, the `TNSNAMES.ORA` file must be configured for the database installed on the local PC and the databases 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#
```

The `tnsnames.ora` you saved in Step 1 of Section 6.3, Installing Oracle8i Server or Personal Oracle Edition 8.1.6 or 8.1.7 and Patches, can be used as a reference.

6.9.2 Testing the Setup

You should test the standalone 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 6.10, Remote Access Service (NT 4.0 Only), for instructions on disabling Auto-Dial.

6.10 Remote Access Service (NT 4.0 Only)

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 standalone 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`.

6.11 Verifying the Standalone Installation

To verify that the standalone installation is complete and that FEMIS is fully operational, see Section 4.6, Validating the FEMIS PC Installation. The FEMIS PC Validation Checklist (at the end of Section 4.6) includes items that need to be checked to ensure that FEMIS is operating properly. Because this is a standalone installation, you will not need to, verify FEMIS/EMIS Data Exchange Interface (DEI) on the server with the depot database.