



Agile® e6.0

Agile e6.0.2

Installation Manual for Agile e6.0.2 on UNIX Server

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Chapter 1

Introduction

This guide describes how to install Agile e6 for Oracle 10gR2 (10.2.0.2) running under UNIX.

The instructions in this guide assume that you will perform the Agile e6 installation followed by the Oracle 10g installation. If you plan to use Agile e6 with an existing Oracle 10g installation, refer to the document *Administration Manual for Agile e6.0.2* (PLM602_Admin.pdf) for instructions on setting up the Agile e6 environment to work with existing Oracle databases.

For complete information on installation prerequisites, including required operating system maintenance-level fixes and system patch levels, refer to the document *Prerequisites Guide includes the Pre-Installation Checklist* (PLM602_Inst_Reqs.pdf).

For information about database preparation and requirements, refer to the Oracle Add On folder delivered with the Oracle installation package (see the document *Installation Manual for Oracle 10g for Agile e6.0.2 on UNIX* (PLM602_10g_UNIX)).

Chapter 2

Preparing the Installation

Before installing Agile e6, do the following:

- ❑ Review the hardware and software requirements for your platform.
- ❑ Set the necessary installation prerequisites.
- ❑ Follow the instructions in the next chapter to set up licensing.

Hardware and Software Requirements

This section describes the minimal hardware and software requirements for performing an initial installation of Agile e6 in a small test environment. For complete information on the requirements for a production environment, refer to the document *Prerequisites Guide includes the Pre-Installation Checklist* (PLM602_Inst_Reqs.pdf). To install and run Agile e6, you will need the following minimum requirements:

- ❑ One of the following UNIX systems:
 - HP UX 11i, 11v2 (PA-RISC 2.0 or higher)
 - Sun Solaris 9,10 (UltraSPARC III or higher)
 - IBM AIX 5L Version 5.2, 5.3 (Power PC 4 or higher)
 - SUSE Linux Enterprise Server 9 (i386)
- ❑ Memory:
 - Agile e6 Server: 50 MB RAM per concurrent user
 - Database server: 6 MB RAM per connected user, plus 400 MB RAM for database services
- ❑ Swap space: twice the amount of RAM
- ❑ Disk space:
 - Agile e6 Server: 400 MB
 - Oracle 10g Server: up to 2 GB
 - Oracle 10g Client: 500 MB
- ❑ One of the following web browsers (to run the Web Client). A web browser is necessary only on the client machine, not on the server:
 - HP-UX, AIX, Solaris and Linux: Mozilla 1.7.x

Note: Operating system versions other than those listed above are currently not supported.

Chapter 3

Setting up Licensing

To allow users to access PLM functionalities, Agile e6 requires valid licenses. This section describes how to install the license software and insert the required license keys prior to installing Agile e6.

Obtaining Licenses

Agile e6 uses FELICS, a license management tool, to handle licenses. To obtain licenses you will need to provide the host ID of the system on which the FELICS license server will run.

1. To determine the host ID, run the `uchostid` program, which is distributed on the Agile e6 DVD in the following directory:

```
/licemgr/unix/<machine_type>/uchostid
```

2. Mail the hostid to: vi@agile.com to get the licenses for your installation.

The FELICS License Software has three components:

- ❑ The FELICS License Server, which hosts the licenses for Agile e6. You can install the FELICS License Server on any system accessible by the Agile e6 Server (also known as the `axalant` Server). It is recommended to install it on the database machine.
- ❑ The FELICS Agent, which communicates with the FELICS and Agile e6 Servers to check the validity of licenses for the Agile e6 clients. The FELICS Agent must be installed on the same machine as the Agile e6 Server and FileServer.
- ❑ The FELICS Tools, which are utilities for importing and managing license keys. The FELICS Tools should typically be installed on the same machine as the FELICS License Server and on the administrators PC.

Preparing the Installation

1. Log in as `root`.
2. Set the environment variable `LANG` to the value “C”:

```
setenv LANG C
```

3. Copy the following file from the installation DVD:

```
cp licemgr/unix/<machine-type>/felics30cb04.tar.Z /tmp/
```

4. Uncompress the FELICS software:

```
uncompress /tmp/felics30cb04.tar.Z
cd /
tar xvf /tmp/felics30cb04.tar
rm /tmp/felics30cb04.tar
```

Installing the FELICS License Server

After following the instructions in the previous section to extract and uncompress the FELICS software, you can use a script to install the FELICS License Server software and add license codes.

1. While logged in as root, execute the following script:

```
/usr/felics/felics.install
```

This runs the program `brandli`, which checks in the licenses and then starts the FELICS License Server (`/usr/felics/felics`).

2. Log out.

Starting the FELICS License Agent

To make the FELICS licenses available for Agile e6, the FELICS License Agent must run on every Agile e6 application server. Start the agent with the hostname of the FELICS License Server host as an argument:

```
/usr/felics/felicscltd -s <felicsrvhostname>
```

Note: You have to do the following step before you can access the FELICS License Server.

Modifying the FELICS port number configuration

The following step is needed if you use only the FELICS License Agent and do not run the `FELICS.install` script:

Change to the directory where the FELICS software is installed, usually `/usr/felics` and copy the example configuration file `felics.ini.v30` to `felics.ini`:

```
cd /usr/felics
```

```
cp felics.ini.v30 felics.ini
```

`felics.ini` contains the following important entries which can be modified:

- `TRANSPORT=udp`

Change the entry to `tcp` instead of `udp` if you use more than 40 clients, which also implies that the Admin-Port (`ADMINPORT`) needs to be different from the Agent-Port. We recommend to use 12346 for the Admin-Port in that case.

- `AGENTPORT=12345`

The port used by the FELICS License Agent to connect to the FELICS License Server.

- `ADMINPORT=12345`

The port used by the FELICS Tools to modify the Licenses on the FELICS License Server.

For complete information on FELICS, refer to the document *Felics Administrator's Guide*.

Chapter 4

Installing Agile e6

Preparing the Installation

Note: Java Runtime Environment 1.4.2, which is required, is **not** installed during the installation process.

1. Login as installation user.

This can be any user; the user does **not** need administrative access.

2. Point the JAVA_HOME environment variable to the installed Java Runtime Environment.

```
echo $JAVA_HOME
```

If *\$JAVA_HOME* is unknown to your shell environment, set it as follows:

- ❑ If you are running in a c shell (csh):

```
setenv JAVA_HOME <Path to the JRE Directory>
```

Example: `setenv JAVA_HOME /usr/j2se`

- ❑ If you are running in a k shell (ksh):

```
set JAVA_HOME=<Path to the JRE Directory>
```

```
export JAVA_HOME
```

Note: This environment variable is always needed to run the Agile e6 software. You should set it in default startup file for the user who runs the Agile e6 software, e.g. in the *\$HOME/.login* file.

Then test the correct setting of *\$JAVA_HOME* with the following command:

```
$JAVA_HOME/bin/java -version
```

which should produce an output like the following one:

```
java version "1.4.2_11"
```

```
Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.2_11-b06)
```

```
Java HotSpot(TM) Client VM (build 1.4.2_11-b06, mixed mode)
```

3. If you are working remote, please set the DISPLAY environment variable.

Check that your environment variable *DISPLAY* is set to your current working display by calling:

```
echo $DISPLAY
```

If *\$DISPLAY* is unknown to your shell environment, set it as follows:

```
csh-Shell
setenv DISPLAY <YourCurrentDisplay>:0.0
```

Example: setenv DISPLAY 192.168.0.2:0.0

```
ksh-Shell
set DISPLAY=<YourCurrentDisplay>:0.0
export DISPLAY
```

4. Create the installation directory.

This is the directory where you will install the Agile e6 software (for example, /app/plm60). Make sure that the installation user is the owner of the directory.

5. Mount the Agile e6 Installation DVD to your file system:

The DVD has an ISO 9660 file system with Rock Ridge extension (rrip). If you get filenames such as “filename;1” (HP-UX), use the mount option rrip to get correct filenames. The mount command needs the name of the device or the special file (/dev/*). See /etc/fstab or use the system tools.

Note: You may need root privileges to mount the DVD.

Mounting the DVD for HP-UX

1. Find the device file name for the DVD drive with the following command:

```
ioscan -fn
```

2. Create the /SD_CDROM directory if it does not exist
3. To mount the UNIX installation DVD, use:

```
mount /dev/dsk/c0t0d0 /SD_CDROM
```

or use:

```
sam
```

Mounting the DVD for Solaris

The operating system should recognize the inserted DVD automatically and mount it to /cdrom/cdrom0

The operating system releases the DVD with the command eject /cdrom.

If the automatic mount does not run, you need to mount the DVD with a command with root privileges.

Mounting the DVD for AIX

To mount the UNIX installation DVD, use:

```
mount -o ro -v cdrfs /dev/cd0 /cdrom
```

or use:

```
smit
```

Mounting the DVD for Linux

The operating system should recognize the inserted DVD automatically and mount it to

```
/media/cdrom
```

or

```
/media/cdrecorder
```

The operating system releases the DVD with the command `eject /cdrom`.

If the automatic mount does not run, you need to mount the DVD with a command with root privileges.

Starting the Installation

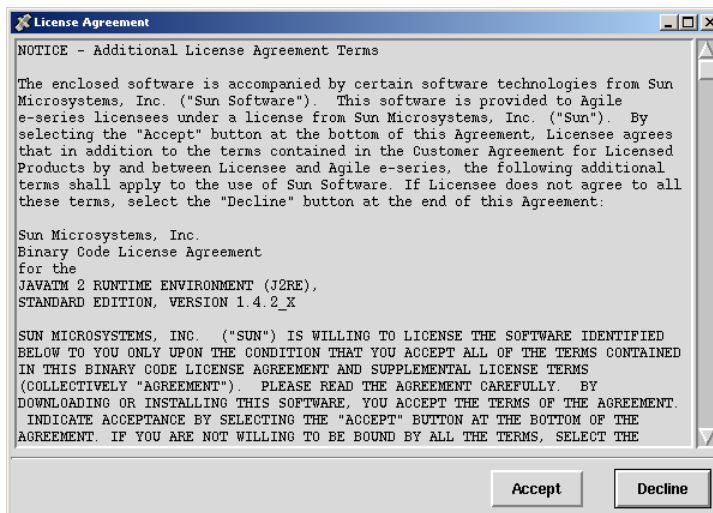
1. Start the installation by changing to the setup directory:

```
cd <dvd-path>/unix/setup
```

2. Enter the following command:

```
/setup
```

This opens the license agreement window shown in the following figure.



3. After reviewing the license agreement, click **Accept**.

This opens a new window where you have to select the installation type.



4. Click **Install** to continue.

Note: For Upgrade refer to *Upgrade Guide from e6.0 to e6.0.2* (PLM602_Upgrade.pdf).

This opens the setup dialog window, which you can use to set the necessary parameters.



5. Set parameters in the setup dialog window.

The setup window allows you to set or change the following parameters:

- **Path to Oracle installation:** Enter the path to your Oracle client installation if it differs from the default entry.
- **Install Agile e-series to:** Enter your Agile e6 target directory if it differs from the default entry.
- **Agile e6 Daemon RPC number:** Contains the RPC number, which is used by the Windows Client to start up the application.
- **Agile e6 Java Daemon Socket number:** Contains the socket number, which is used by the Java Client to start up the application.
- **Agile e6 Admin Service httpd port:** Contains the port number, which is used by the Admin Server. This is necessary to administrate the Agile e6 environments.

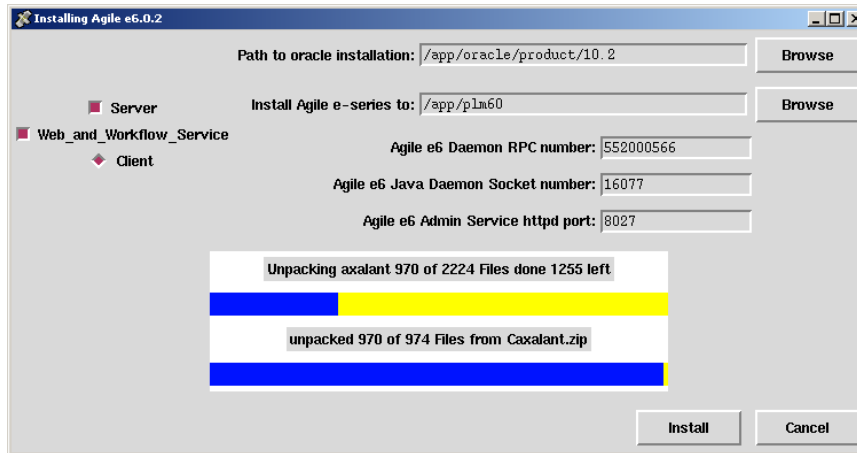
Note: There is a secure httpd running on the next port (8028 if you do not change the default settings).

Please note the following restrictions for the values you can choose:

- The Agile e6 Daemon RPC number must be between 550000000 and 990000000
- The Agile e6 Java Daemon Socket number must be between 1 and 65535. We recommend to use numbers higher than 1024 to avoid conflicts with well known services.
- The Agile e6 Admin Service httpd port must be between 1 and 65535. We recommend to use numbers higher than 1024 to avoid conflicts with well known services.

6. Make sure all parameters have the correct values, and then click **Install** to start the installation.

Depending on how many platforms you install and how fast your storage system is, the installation may take from about five minutes to half an hour.



Setting the Oracle NLS_LANG value

If you have an existing dump containing customer data with non-ASCII characters, you need to modify the NLS_LANG setting. Change the default for NLS_LANG in the file \$ep_root/axalant/scripts/axalant_srv to the value used in the previous installation. When upgrading, the value is modified automatically.

If you have a complete new installation where no dump with existing data will be used, it is recommended to use the default value for NLS_LANG.

Importing the Database Dump

To import the database dump, do the following:

```
imp plm/plm@plm60 file=plm60.dmp buffer=132000 commit=y log=plm60.log analyze=n full=y
commit=y: Rollback segments cannot get too small
analyze=n: No statistics will be created
buffer=132000: Necessary for lobs, better import performance
full=y: Import complete dump even if the dump was exported by a different user
```

After importing the database dump, check the logfile for errors.

Checking the Installation

Checking for running processes

After the Agile e6 installation the processes (daemons) listed below should be running on the server machine.

Note: Check this by typing `ps -ef`

- e6 Daemon:
 - dtv_dmn <RPC number>
- e6 Admin Service httpd:

```
tclsh8.3 htd/bin/httpd.tcl
```

- ❑ e6 Java daemon:

```
<$JAVA_HOME>/bin/java -cp ../axalant/bin/java/jade.jar:[...]
```

Starting required Processes

If any of the processes required by Agile e6 components are not running on the server machine, you can start them manually:

1. Open the folder axalant/scripts.
2. Run the following scripts to start the required processes:
 - To start the Java Client, run: jacc
 - To start the DataView daemon, run: dmn_start
 - To start the Java daemon, run: java_dmn
 - To start the Admin service, run: httpd_start

The DataView daemon starts a process on the server that is used by the Windows Client. The Java daemon starts a process on the server that is used by the Web and Java Client. The Admin service, which is based on a TCL-web server, is needed to configure PLM environments on the server.

3. To start these services at boot time, refer to the following document for information:

```
<InstallDir>/unsup/scripts/init/readme
```

Adapting the Agile e6 Environment

Before testing the installed software, you must adapt your existing environment to your Oracle user.

Note: For information on creating, configuring, and managing Agile e6 environments, including setting attributes for the PLM Business and Presentation Services, refer to the document *Administration Manual for Agile e6.0.2* (PLM602_Admin.pdf).

Testing the Installation

To test the Agile e6 installation, try to run the UNIX Java Client. For information, refer to the document *Installing the Agile e6 UNIX Client*.

Troubleshooting

If Agile e6 fails to connect with the DataView client, check the following:

- ❑ Check running processes (ps -ef) and check whether the dtv_dmn is running. (See the previous section for a description.)

If there is no running *dtv_dmn* process, change directory:

```
cd <InstallDir>/axalant/scripts
```

Then try to start the dtv_dmn process manually using dmn_start.

- ❑ Make sure that the RPC number for the process running on the machine matches the RPC number the client is using to connect to the server.

Chapter 5

Starting the FileServer

This section describes how to install and start the Agile e6 FileServer.

1. Log in as user **edbserv**.

If this user does not already exist, you must create it.

2. Copy the FileServer executable file to the home directory of edbserv.

The executable file is located in:

```
<InstallDir>/axalant/bin/<machine-type>/
```

```
cd <InstallDir>/axalant/bin/<machine-type>
```

```
cp fms* libepshr_cry.* ~edbserv
```

3. Add the directory where you copied the epshr_cry library to your Shared Library Path.

You have to use the following environment variables on these Unix Systems:

- AIX: LIBPATH
- HPUX: SHLIB_PATH
- Linux: LD_LIBRARY_PATH
- Solaris: LD_LIBRARY_PATH

Use this command to add the path:

- If you are running in a c shell (csh) on Solaris:

```
setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:<Path to the edbserv HomeDirectory>
```

Example: setenv LD_LIBRARY_PATH \$LD_LIBRARY_PATH:\$HOME

- If you are running in a k shell (ksh) on Solaris:

```
set LD_LIBRARY_PATH=$LD_LIBRARY_PATH:<Path to the edbserv HomeDirectory>  
export LD_LIBRARY_PATH
```

4. Start the FileServer:

```
cd  
nohup ./fms_srv -verbose &
```

The FileServer creates vaults and starts up in the background.

5. Add startup of FileServer to your boot time start up scripts.

See the example *<InstallDir>/unsup/scripts/init/fmssrv*.