EIGNER
Precision Lifecycle Management

Installing the Eigner PLM 5.0 UNIX Server

© 2002 Eigner

Important Notice

This document contains information protected by copyright.

All rights are reserved, including the translation. No part of this documentation may be reproduced in any way (print, photocopy, microfilm or any other form) or processed, duplicated or distributed by use of electronic system without written permission of the company. The information contained in this online documentation does not constitute any obligation on the part of the seller. The software described in this online documentation is delivered under licensing contract which governs its use.

Eigner is not liable for errors in this documentation.

All trademarks are the property of their respective owners.

Contents

1   Introduction

This guide describes how to install Eigner PLM 5.0 for Oracle 8*i* (8.1.7) running under UNIX.

1.1   Where to Go for More Information

The instructions in this guide assume that you will perform the Eigner PLM installation followed by the Oracle 8*i* installation. If you plan to use Eigner PLM with an existing Oracle 8*i* installation, refer to the document *Eigner PLM 5.0 Administration Guide* (PLM50_ADMIN.pdf) for instructions on setting up the Eigner PLM 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 *Eigner PLM 5.0 Prerequisites Guide* (PLM50_INST_REQS.pdf).

For information about database preparation and requirements, refer to the EP-DATA CD delivered with the Oracle installation package (see the document inunora8i.pdf).

> **!** *The Eigner PLM installation guides are available in the* `doc` *directory on the product CD. To view Adobe® Portable Document Format (PDF) files, use Adobe Acrobat Reader® software, which is available at no charge at www.adobe.com.*

2   Preparing the Installation

Before installing Eigner PLM 5.0, do all of 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.

2.1 Hardware and Software Requirements

This section describes the minimal hardware and software requirements for performing an initial installation of Eigner PLM in a small test environment. For complete information on the requirements for a production environment, refer to the document *Eigner PLM 5.0 Prerequisites Guide* (PLM50_INST_REQS.pdf).

To install and run Eigner PLM 5.0, you'll need, at a minimum:

- One of the following UNIX systems:
    - HP UX 11.11 (PA-RISC)
    - Sun Solaris 8 (SPARC)
    - SGI IRIX 6.5 (MIPS)
    - IBM AIX 4.3.3
    - SuSE Linux 7.3, Kernel 2.4.10 (i386)
- Memory:
    - Eigner PLM Server: 20 MB RAM per concurrent user
    - Database server: 6 MB RAM per connected user, plus 100 MB RAM for database services
- Swap space: Three times the amount of RAM
- Disk space:
    - Eigner PLM Server: 400 MB
    - Eigner PLM File Server: 100 MB

- ○ Oracle 8*i* Server: 2 GB

  ○ Oracle 8*i* 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, and Solaris: Netscape 7.0

  ○ IRIX: Mozilla 1.0

  ○ Linux: no browser support

Operating system versions other than those listed above are not supported at this time and will not work.

3   Setting up Licensing

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

3.1 Obtaining Licenses

Eigner PLM 5.0 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 be run.

To determine the host ID, run the `uchostid.exe` program, which is distributed on the Eigner PLM 5.0 CD under the following directory:

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

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

The FELICS License Software has three components:

- The FELICS License Server, which hosts the licenses for Eigner PLM. You can install the FELICS License Server on any system accessible by the Eigner PLM Server (also known as the axalant Server). It is advantageous to install it on the database machine.

- The FELICS Agent, which communicates with the FELICS and Eigner PLM Servers to check the validity of licenses for the Eigner clients. The FELICS Agent must be installed on the same machine as the Eigner PLM 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.

3.2 Preparing the Installation

1. **Set the environment variable LANG to the value "C":**

```
setenv LANG C
```

2. **Log in as *root*.**

3. **Copy the following file from the installation CD:**

```
cp licemgr/unix/<machine-type>/felics271.tar.Z /tmp/
```

4. **Uncompress the FELICS software:**

```
uncompress /tmp/felics271.tar.Z
cd /

tar xvf /tmp/felics271.tar
rm /tmp/felics271.tar
```

3.3 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.**

3.4 Starting the FELICS License Agent

To make the FELICS licenses available for Eigner PLM 5.0, the FELICS License Agent must run on every Eigner PLM application server. Start the agent with the hostname of the FELICS License Server host as an argument:

/usr/felics/felicscltd –s *<felicssrvhostname>*

4 Installing Eigner PLM 5.0

4.1 Preparing the Installation

1. **Log in as installation user.**

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

2. **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
```

3. **Create the installation directory.**

This is the directory where you will install the Eigner PLM 5.0 software (for example, `/app/plm50`). Make sure that the installation user is the owner of the directory.

4. **Mount the Eigner PLM 5.0 Installation CD to your file system:**

The CD 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.

4.1.1 Mounting the CD for HP-UX

1. **Establish the file** `/etc/pfs_fstab`**:**

```
<device_file> <mount_point> <file_type>
<translation_method>
/dev/dsk/c5t2d0 /SD_CDROM pfs-rrip xlat=unix 0 0
```

The file contains only one line (for example, `/dev/dsk/clt2d0 /SD_CDROM pfd-rrip xlat=unix 0 0`).

2. **Create the mount point:**

```
mkdir /SD_CDROM
```

3. **Insert the CD.**

4. **Enter the following commands:**

```
nohup /usr/sbin/pfs_mountd &

nohup /usr/sbin/pfsd &

/usr/sbin/pfs_mount /SD_CDROM
```

5. **Use the CD.**

Release the CD by entering:

```
/usr/sbin/pfs_umount /SD_CDROM
```

If you are using the command `df,` the CDROM file system is not attached. Check the existence of the CDROM file system *with cd* `/SD_CDROM` and *ls.*

13

The command *pfs_mount* inserts an entry in */etc/mnttab*. If you do not create a file `/etc/pfs_fstab`, you can add the options to the *pfs_mount* command.

```
pfs_mount -t rrip -x /dev/dsk/... /SD_CDROM

pfs_mount -t rrip -x /dev/dsk/clt2d0 /SD_CDROM
```

If the processes `pfs_mountd` and `pfsd` are terminated with kill, the child processes `pfs_mountd.rpc` and `pfsd.rpc` are stopped by the father process. **Important:** Do not kill the process with mounted file system.

> ⚠ *If you make a mistake during the mount procedure, you may need to reboot the machine.*

4.1.2 Mounting the CD for Solaris 8

The Solaris 8 operating system should recognize the inserted CD automatically and mount it to `/cdrom or /CDROM`. The operating system releases the CD with the command: `eject /cdrom`.

If the automatic mount does not run, you'll need to mount the CD by command with root privileges.

4.1.3 Mounting the CD for AIX

To mount the AIX installation CD, do the following:

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

or use

```
smit
```

4.1.4 Mounting the CD for IRIX

To mount the SGI IRIX installation CD, use:

- mount –t iso9660 /dev/rdsk/....   /cdrom

- mount –t iso9660 /dev/rdsk/dsk0d7vol /cdrom

or use:

- mount_iso9660 /dev/scsi/...   /CDROM iso9660   ro

- mount_iso9660 /dev/scsi/sc1d610   /CDROM iso9660   ro

4.1.5 Mounting the CD for Linux

If you are using auto mounting software, the CD-ROM should be mounted automatically. If it is not, use the following command:

```
mount -t iso9660 /dev/cdrom /cdrom
```

4.2 Starting the Installation

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

```
cd /cdrom/unix/setup
```

2. **Enter:**

```
./setup
```

This opens the setup window shown in the following figure.


3. **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 Eigner PLM to:** Enter your Eigner PLM 5.0 target directory if it differs from the default entry.

- **DataView Daemon RPC number:** Contains the RPC number, which is used by the UNIX Client to start up the application.

- **Java Daemon Socket number:** Contains the socket number the PLM Presentation Services uses to start up the application.

- **Eigner PLM admin httpd port:** Contains the port number the http daemon uses to connect to the http port to administrate the Eigner PLM 5.0 environments.

- **Install clients for additional platforms:** To install clients for additional platforms, select their boxes on the left side of the setup window. This is useful if, for example, a Linux machine was used as an NSF server containing the binaries for other UNIX platforms. Depending on the UNIX platform where you started the installation process, you can select any of the following Eigner PLM clients:

  - HU11 – HP UNIX
  - Mi65 – SGI IRIX
  - AI43 – IBM AIX
  - SP27 – Sun Solaris

4. **Make sure all parameters have the correct values, and then click** `install` **to start the installation.**

Depending on how many platforms you install, the installation may take from about ten minutes to one hour.
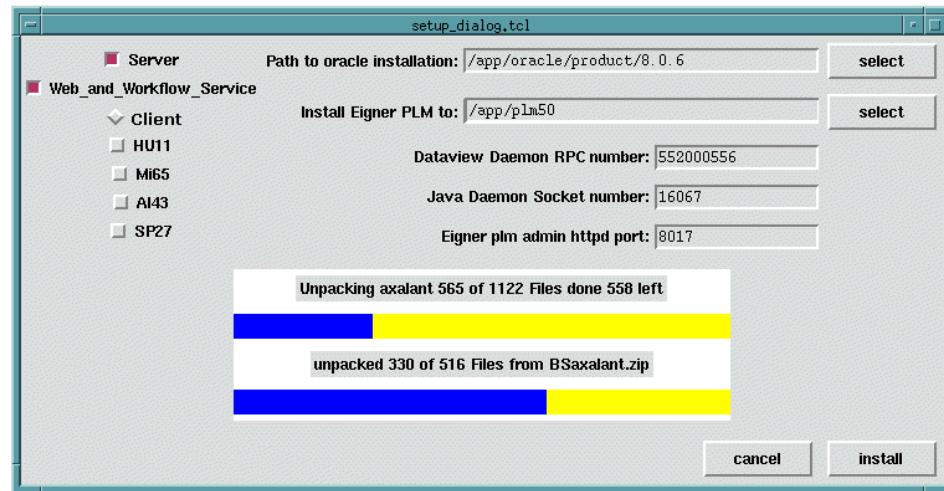
4.3 Importing the Database Dump

To import the database dump, do the following:

```
imp axa/axa@AXA file=plm50.dmp buffer=132000 commit=y
log=plm50.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.

4.4 Checking the Installation

4.4.1 Checking for running processes

After the Eigner PLM installation, the processes (daemons) listed below should be running on the server machine.

> **!** *Check this by typing* `ps -ef`

- DataView daemon:
  `<installation-path>/ axalant/bin/<platform>/dtv_dmn <RPC number>`

- http-daemon-port *<Port number>:*
  `<installation-path>/axalant/htd/bin/httpd.tcl`

- Java daemon:
  `java cp bin/java/jade.jar:[...]`

4.4.2 Starting required processes

If any of the processes required by Eigner PLM 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 UNIX Client, run: `axalant`

- 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 UNIX Client and the Windows Client. The Java daemon starts a process on the server that is used by the Web Client. The Admin service, which is based on a TCL-web server, is needed to configure PLM environments on the server. It also provides access to the UNIX F1 help and the context-sensitive help in the Web Client.

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

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

4.5 Adapting the Eigner PLM Environment

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

!

For information on creating, configuring, and managing Eigner PLM environments, including setting attributes for the PLM Business and Presentation Services, refer to the document Eigner PLM 5.0 Administration Manual (PLM50_ADMIN.pdf).

4.6 Testing the Installation

To test the Eigner PLM 5.0 installation, try to run the UNIX Client. For information, refer to the document *Installing the Eigner PLM 5.0 UNIX Client* (PLM50_UNIX_CLI.pdf).

4.6.1 Troubleshooting

If Eigner PLM 5.0 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.

5   Starting the FileServer

This section describes how to install and start the Eigner PLM 5.0
FileServer v5.0.

Log in as user `edbserv`**.**

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

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

The executable file is located in:
`<InstallDir>/axalant/bin/<machine-type>/fms_srv`

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

`cp fms* ~edbserv`

Start the FileServer:

```
cd
nohup ./fms_srv –verbose &
```

The FileServer creates vaults and starts up in the background.

Add startup of FileServer V5.0.0 to your boot time start up scripts.

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