



# Eigner PLM 5.1

Installation Manual for Eigner PLM 5.1 on UNIX Server

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# Chapter 1

## Introduction

This guide describes how to install Eigner PLM 5.1 for Oracle 9iR2 (9.2.0.4) running under UNIX.

The instructions in this guide assume that you will perform the Eigner PLM installation followed by the Oracle 9i installation. If you plan to use Eigner PLM with an existing Oracle 9iR2 installation, refer to the document *Eigner PLM 5.1 Administration Guide* 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 5.1 Prerequisites Guide*.

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 9.2 for Eigner PLM 5.1 on UNIX*).

**Note:** 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](http://www.adobe.com).

# Chapter 2

## Preparing the Installation

Before installing Eigner PLM 5.1, 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.

### 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 5.1 Prerequisites Guide*. To install and run Eigner PLM 5.1, you'll need, at a minimum:

- ❑ One of the following UNIX systems:
  - HP UX 11.11 (PA-RISC)
  - Sun Solaris 7, 8 (SPARC)
  - SGI IRIX 6.5 (MIPS)
  - IBM AIX 4.3.3, 5.2
  - SuSE 8 Enterprise (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: twice times the amount of RAM
- ❑ Disk space:
  - Eigner PLM Server: 400 MB
  - Eigner PLM File Server: 100 MB
  - Oracle 9i Server: 2 GB
  - Oracle 9i 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

*Note* Operating system versions other than those listed above are not supported at this time.

# Chapter 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.

### Obtaining Licenses

Eigner PLM 5.1 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.

1. To determine the host ID, run the `uchostid` program, which is distributed on the Eigner PLM 5.1 CD under the following directory:

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

2. Mail the hostid to: [vi@agile.com](mailto: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 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 PLM 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 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 CD:

```
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 Eigner PLM 5.1, 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 <felicsrvhostname>
```



# Chapter 4

## Installing Eigner PLM 5.1

### Preparing the Installation

1. Log in as installation user.

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

2. 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
```

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 5.1 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.

### 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/ct2d0 /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.
6. 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`.

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.

**Note:** Do not kill the process with mounted file system.

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

## 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.

## 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
```

## 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
```

## 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
```

## Starting the Installation

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

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

2. Enter:

```
./setup
```

if you perform a new installation. If you make an update please start:

```
./update
```

Before update the installation please make an backup of the software and shutdown all Eigner PLM processes.

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 5.1 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 5.1 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:

HPUX11 – HP UNIX 11i

Irix65 – SGI IRIX 6.5

Aix43 – IBM AIX 4.3.3

Solaris7 – Sun Solaris 7

4. 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.



## Importing the Database Dump

To import the database dump, do the following:

```
imp plm/plm@plm 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.

## Checking the Installation

### Checking for running processes

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

**Note:** 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:[...]`

### 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`

## Adapting the Eigner PLM Environment

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

**Note:** 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 5.1 Administration Manual*.

## Testing the Installation

To test the Eigner PLM 5.1 installation, try to run the UNIX Client. For information, refer to the document *Installing the Eigner PLM 5.1 UNIX Client*.

## Troubleshooting

If Eigner PLM 5.1 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 Eigner PLM 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* -edbserv
```

3. Start the FileServer:

```
cd
```

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

The FileServer creates vaults and starts up in the background.

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

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