

Oracle[®]-for-OpenView

Quick Installation Guide

Version: 9.2.0

This Installation Guide uses the
Oracle-for-OpenView 9.2.0 Product CDs
on SunSPARC Solaris Systems.



Manufacturing Part Number: ORA43-90040

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1 Oracle Online Documentation

Accessing the Oracle Online Documentation

This document for Oracle-for-OpenView version 9.2.0 describes the steps required to install Oracle so that it fits the needs of HP OpenView products. If you need more information, the Oracle documentation is available online on CD-ROM. The following platforms are covered:

❑ **Orientation**

An introduction to the Oracle9i Database CD Pack is contained on the *Start Here Oracle9i Database Release 2 (9.2.0.1.0) CD-ROM*. You can use a PC to read it. Open the <CD-ROM_drive>:\Welcome.htm file with your web browser.

❑ **Platform-independent**

The platform-independent documentation is contained on the *Oracle9i Database Documentation CD-ROM Release 2 (9.2.0.1.0)*. You can use a PC to read it. Open the <CD-ROM_drive>:\Index.htm file with your web browser.

❑ **Platform-specific (including HP-UX and Sun Solaris)**

The Platform-specific documentation is on the *Oracle9i™ Database (64-bit) Release 2 (9.2.0.1.0)* CD 1 of 4.

This documentation CD-ROM is divided into the following sections:

- ❑ *Release Notes*
- ❑ *Product ReadMes*
- ❑ *Documentation*

Open the <CD-ROM_drive>:/Index.htm file with your web browser and click the **Documentation** button to access the platform-specific manuals:

- ❑ *Oracle9i Installation Guide*
- ❑ *Oracle9i Administrator's Reference*

See “To Access the Oracle Platform-Specific Documentation” on page 9 for more information.

❑ Windows

The Windows-specific documentation is contained on the CD labelled *Oracle9i Client Release 2 (9.2.0.1.0) for Microsoft Windows 98/NT/2000/XP*. When you insert the CD into the CD-ROM drive of your PC, the Oracle9i Client Autorun window appears. Click on Browse Documentation to read the online documentation.

Alternatively, you can open the <CD-ROM_drive>:\WELCOME.html file using a web browser.

The documentation is HTML-based and can be viewed with any web browser. If your web browser supports Java, the platform-independent documentation can alternatively be viewed and searched with the Oracle Information Navigator, a Java-based application.

To Access the Oracle Platform-Specific Documentation

To access the Sun-specific documentation, carry out the following steps:

1. Insert the corresponding CD-ROM into the drive. The CD-ROM is automatically mounted on Solaris.
2. Change to the CD-ROM directory:

```
cd /cdrom/cdrom0
```

3. Start your web browser and open the HTML file

```
/cdrom/cdrom0/doc/unixdoc/solaris.920/index.htm
```

2 **Installation, De-installation, and Upgrade**

Preparing for an Oracle Database Installation

This section describes how to prepare your system for an Oracle database installation.

Oracle Databases

For OVO on Sun Solaris 7 or 8, Oracle 9i Enterprise Edition is required, including the additional products shown in Table 2-1.

If you have an existing Oracle database and want to verify which Oracle products are installed use the Oracle Universal Installer to view the installed Oracle products:

1. Switch to user oracle:

```
su - oracle
```

2. Run the Oracle Universal Installer:

```
$ORACLE_HOME/bin/runInstaller
```

3. In the Oracle Universal Installer Welcome window, click Installed Products . . . to view the installed Oracle products.

Table 2-1 Required Oracle Products for OVO

Solaris Version...	Oracle Version...	Oracle Products...
Solaris 7 Solaris 8	Oracle Enterprise Edition 9.2.0 (32 bit and 64 bit)	<ul style="list-style-type: none">• Oracle9i 9.2.0.1.0• Oracle Net Services 9.2.0.1.0

To Prepare an Oracle Database for Installation

Before installing an Oracle database on the management server, follow these steps:

1. Make sure that your system meets the hardware and software requirements listed in Chapter 1 of the *HP OpenView Operations Installation Guide for the Management Server*, “Installation Requirements for the Management Server”.

Oracle 9.2.0 requires Sun Solaris version: 7 or 8.

If you are running Oracle 9.2.0 with HP OpenView Operations for Solaris (OVO), you *must* also install the OVO server patch ITOSOL_00183. This patch updates the OVO version from A.07.10 to A.07.12.

Oracle 9.2.0 requires 2000 MB of disk space if only the required components are installed. Additional disk space is needed for the data in the Oracle database. Refer to the product requirements of the OpenView products that you are preparing to install.

In particular, make sure that the kernel parameters match those in Table 2-1 on page 12.

2. Make sure to load the `semsys` as well as `shmsys` parameters before checking the current values of the kernel parameters. Otherwise, you may lower the `semsys` and `shmsys` current values without even knowing it. See “To Load the Semaphores and Shared Memory Modules” in the *HP OpenView Operations Installation Guide for the Management Server* for more information about loading these modules.

CAUTION

The values of some kernel parameters on your system may already be higher than the ones shown in Table 2-2. If so, do *not* decrease them in the `/etc/system` file.

The values in Table 2-2 are minimal values that are needed for a successful installation and operation of OVO. Any additional software installed on the management server may require increasing some of the values.

- a. To check the kernel parameters value, run the following command:

```
/usr/sbin/sysdef | more
```

For a description of kernel parameters, see Table 2-2 on page 15.

- b. Adjust the values in your `/etc/system` file to the values suggested in Table 2-2 on page 15.
- c. After modifying the kernel parameters you will have to reboot your system to make the new values active.

Following is an example of kernel parameters in the `/etc/system` file:

```
forceload: sys/shmsys  
forceload: sys/semsys  
set shmsys:shminfo_shmmax=4294967295  
set shmsys:shminfo_shmmin=1  
set shmsys:shminfo_shmseg=20  
set shmsys:shminfo_shmmni=100  
set semsys:seminfo_semmni=100  
set semsys:seminfo_semaem=16384  
set semsys:seminfo_semap=66  
set semsys:seminfo_semmns=200  
set semsys:seminfo_semmnu=30  
set semsys:seminfo_semume=10  
set semsys:seminfo_semvmx=32767  
set semsys:seminfo_semmsl=100  
set semsys:seminfo_semopm=100  
set rlim_fd_cur=256
```

Table 2-2 Important Configurable Kernel Parameters for the Management Server

Parameter	Description	Minimum Value
shminfo_shmmax	Maximum shared memory segment size in bytes	4294967295
shminfo_shmmin	Minimum shared memory segment size in bytes	1
shminfo_shmseg	Maximum number of shared memory segments per process	20 or greater
shminfo_shmmni	Number of shared memory identifiers to pre-allocate	100 or greater
seminfo_semmni	Number of semaphore identifiers	100 or greater
seminfo_semaem	Adjust on exit maximum value	16384
seminfo_semmap ^a	Number of entries in semaphore map	66
seminfo_semmns	Number of semaphores in system	200 or greater
seminfo_semmnu	Number of undo structures in system	30
seminfo_semume	Maximum number of undo entries per process	10
seminfo_semvmx	Semaphore maximum value	32767
seminfo_semmsl	Maximum number of semaphores per ID	100
seminfo_semopm	Maximum number of operations per semop call	100
rlim_fd_cur	Maximum number of file descriptors per process (sysdef displays the parameter as Process Resource Limit Tunables (file descriptors))	256 ^b

a. On Solaris 7 only.

b. If your installation includes more than 35 nodes that use DCE/TCP communication, increase the setting of `rlim_fd_cur` by:
 $3 * \text{Number_of_DCE/TCP_nodes} + 15$

If your installation includes more than six users accessing the Java-based UI at the same time, increase the setting of `rlim_fd_cur` by: $14 * \text{Number_of_Users} + 28$. If both of the above cases apply, use the greater of the two values.

Note that the maximum value of `rlim_fd_cur` is limited as follows:

$\text{rlim_fd_cur} \leq \text{rlim_fd_max} \leq 1024$

Therefore, in some cases you will need to increase the value of `rlim_fd_max` as well.

3. Run `admintool` as user `root`:

```
admintool &
```

4. Create the user `oracle` with the following attributes:

a. Create a UNIX group named `dba`.

The group ID should be greater than 100.

b. Create a UNIX user named `oracle`.

The user ID should be greater than 100.

c. Make the user `oracle` a member of the group `dba`.

d. As the home directory of the `oracle` user, use:

```
/export/home/oracle
```

NOTE

On Sun Solaris, the directory on which you can create user home directories is: `/export/home/`. The directory: `/home/` is a mount point for remote user home directories.

e. Recommended shell for the `oracle` user is **Korn shell (ksh)**.

5. Set `umask` to allow users to access the Oracle binaries:

```
umask 022
```

6. Create directories required by the Oracle installation:

a. Create the Oracle home directory `ORACLE_HOME`:

```
mkdir -p /opt/oracle/product/<version>
```

In this instance, `<version>` is the supported version of the Oracle database: 9.2.0.

`/opt/oracle/product/<version>` is the value recommended by OVO. This value meets the Optimal Flexible Architecture (OFA) directory structure recommended by Oracle.

You can also choose a different directory for `ORACLE_HOME` but you must use it consistently in all subsequent steps.

b. Create a base directory for the Oracle installation files:

```
mkdir -p /opt/oracle/oraInventory
```


You can also choose a different directory. If you do so, use the new directory consistently in all subsequent steps.

7. Change the ownership/permissions of the directories to `oracle:dba` by entering:

```
chown -R Oracle:dba /opt/oracle
```

8. Set the following Oracle environment variables in the `/export/home/oracle/.profile` of user `oracle`:

- **export ORACLE_BASE=/opt/oracle**

This variable determines the location and the version of the Oracle installation. The subdirectory prefix `/opt` is the recommended default; you can use other appropriate prefixes if needed.

- **export ORACLE_HOME=\$ORACLE_BASE/product/<version>**

In this instance, `<version>` is the supported version of the Oracle database: 9.2.0.

This variable determines the location and the version of the Oracle installation. This is the recommended setting. You can choose a different setting if needed.

- **export ORACLE_SID=openview**

This variable defines the name of the database you will create. The default setting is `openview`. You can use a different setting if needed.

When using an existing database, use the name of this database for the setting of `ORACLE_SID`. When configuring the database, the script `opconfig` detects that a database of this name exists and asks whether you also want to use it for the OVO database objects. If you choose this approach, the OVO database objects are created within the existing database, instead of creating a new database.

If you use a short filename file system on the management server, `ORACLE_SID` may *not* be longer than four characters.

- **export ORACLE_TERM=xterm**

This variable specifies the terminal definition resource file for an `xterm` terminal setting to be used with the Oracle installer and other Oracle tools.

- **export NLS_LANG=american_america.WE8ISO8859P15**

This variable determines the character set to be used for the database. For English and Spanish installations, use `american_america.WE8ISO8859P15`.

Refer to the appropriate OpenView product documentation for a list of supported languages and corresponding `NLS_LANG` values.

- **export PATH=\$PATH:\$ORACLE_HOME/bin**

This variable sets the directories through which the system searches to find and execute commands.

9. Install the Oracle database as described in section “Installing an Oracle Database” on page 19.

Installing an Oracle Database

This section describes how to install an Oracle database for use with OVO. For more detailed information, or for non-standard installations, see the *Oracle9i Installation Guide* supplied with the Oracle database.

The following procedures install Oracle without creating the `openview` database. After installing the database and the OVO software, you run the `opconfig` command to create the `openview` database, as described in the *HP OpenView Operations Installation Guide for the Management Server*.

NOTE

Browse through this section before starting the installation. The order of the system prompts may differ slightly from the example described below. These slight variations are normal and do not indicate anything has gone wrong during the installation.

To Install an Oracle Version 9.2.0 Database

To install Oracle 9.2.0, follow these steps:

1. During the Oracle installation, you will need to perform some steps as user `root` and some as user `oracle`. Open two terminal windows and perform the following steps in each window:

- a. Log in as user `root` in the first terminal window, and as user `oracle` in the second.
- b. Make sure that the Oracle environment variable `ORACLE_TERM` is set correctly. To check the setting, enter:

```
echo $ORACLE_TERM
```

- c. Verify, and if necessary, set the variables `ORACLE_HOME` and `ORACLE_SID`, for example:

```
ORACLE_HOME=/opt/oracle/product/9.2.0
```

```
export ORACLE_HOME
```

```
export ORACLE_SID=openview
```

- d. Set your `DISPLAY` environment variable, enter:

```
export DISPLAY=<nodename>:0.0
```

2. Insert the *Oracle9i* CD-ROM 1 of 4 into the drive. The CD-ROM is automatically mounted on Sun Solaris system.
3. As user `oracle`, start the Oracle Universal Installer by entering:

```
/cdrom/cdrom0/runInstaller &
```

Once the Oracle Universal Installer is started, the Welcome window appears.

- a. In the Oracle Universal Installer Welcome window, click Next.

The Inventory Location window appears.

In the Inventory Location window, make sure that the path `/opt/oracle/oraInventory` is given.

- b. In the Inventory Location window, click Next.

The UNIX Group Name window appears.

- c. In the UNIX Group Name window, leave the field empty and click Next.

You are prompted to run the script `orainstRoot.sh`.

- d. As user `root`, run the script `orainstRoot.sh` by entering:

```
/tmp/orainstRoot.sh
```

When the script has completed, return to the Oracle Universal Installer and click Continue.

The File Locations window appears.

- e. In the File Locations window, do not change the text in the Source field. This is the location of the installation files.

The Destination field displays the value of the `ORACLE_HOME` variable.

In the File Locations window, click Next.

The Available Products window opens.

- f. In the Available Products window, select:

```
Oracle9i Database 9.2.0.0.0
```

Click Next. The Installation Types window appears.

- g. In the Installation Types window, select the Custom installation type. Click Next.

The Available Product Components window appears.

- h. In the Available Product Components window, click on Product Languages.

The Language Selection window appears.

- i. In the Language Selection window, verify that Japanese and English as the languages Oracle can run in are selected. If you have not set `LANG=ja_JP.SJIS`, you may have to select Japanese manually.

- j. In the Available Product Components window, choose the required Oracle products from the list of available products on the CD-ROM.

See Table 2-1 on page 12 for a list of *required* Oracle products for OVO.

When the list is complete, click Next. The Component Locations window appears.

- k. In the Component Locations window, click Next.

You are asked to enter the destination location for the Oracle Universal Installer. Accept the default value `$ORACLE_BASE/oui` and click Next. The Privileged Operating System Groups window appears.

- l. In the Privileged Operating System Groups window, ensure that the default dba is set for the Database Administrator (OSDBA) Group and the Database Operator (OSOPER) Group.

Click Next. The Create Database window appears.

- m. In the Create Database window, you are asked whether you want to create a new database. Choose No and click Next.

The Summary window appears.

- n. In the Summary window, review the information to ensure that you have enough disk space. You cannot make any product or space allocation changes once the installation begins.

In the Summary window, click Install.

- o. Eventually the Disk Location window appears, asking you to insert the Oracle9i disk 2, and later the Oracle9i disk 3 into your disk drive:

- A. Change the CD-ROM.

- B. In the Disk Location window, click OK.

- p. The Setup Privileges window appears, prompting you to run the `root.sh` script as described in the following steps.

4. As user `root`, run the `root.sh` script as follows:
 - a. Change to `ORACLE_HOME` by entering:
`cd $ORACLE_HOME`
 - b. Start the `root.sh` script by entering:
`./root.sh`
 - c. The following information is displayed:
The following environment variables are set as:
`ORACLE_OWNER= oracle`
`ORACLE_HOME= /opt/oracle/product/9.2.0`
Enter the full pathname of the local bin directory
[/usr/local/bin]:
Enter: `/opt/bin`
 - d. When the `root.sh` script has finished, click OK in the Setup Privileges window.
5. The Configuration Tools window appears at the end of the installation and starts the Net8 Configuration Assistant.

CAUTION

Cancel this assistant with **Ctrl-C** or with the Cancel button as soon as it is started. You can ignore any resulting error messages.

In the Configuration Tools window, click Next.

6. The End of Installation window appears. Click Exit to exit the Oracle Universal Installer.
7. Unmount the CD-ROM drive by entering:
`cd /; eject`

Installing the Oracle 9.2.0.2.0 Patchset

To install the Oracle 9.2.0.2.0 Patchset, complete the following steps:

1. Mount the patch CD with the label:

```
ORACLE 9i Rel.2  
DATABASE SERVER PATCH SET 1 for SOLARIS (32 & 64 Bit)  
PATCH SET VERSION 9.2.0.2.0
```

2. If you are using the 32Bit version of Oracle 9.2.0, please follow the patch installation instructions in:

```
/cdrom/SOLARIS/README.html
```

The zip file is already unzipped and untared into the stage directory:

```
/cdrom/SOLARIS/stage
```

In the installer, specify the product file:

```
/cdrom/SOLARIS/stage/products.jar
```

3. If you are using the 64Bit version of Oracle 9.2.0, please follow the patch installation instructions in:

```
cdrom/SOLARIS64/README.html
```

The zip file is already unzipped and untared into the stage directory:

```
/cdrom/SOLARIS64/stage
```

In the installer, specify the product file:

```
/cdrom/SOLARIS64/stage/products.jar
```

4. Unmount the patch CD.

De-installing Oracle

This section describes how to remove an Oracle installation and the Oracle database. For more detailed information, or for non-standard procedures, see the *Oracle9i Installation Guide*.

To De-install Oracle 9.2.0

De-installing Oracle completely involves deleting the database files and de-installing the Oracle Software:

1. Stop any application that accesses the database.
2. Shut down and drop the database. Use one of the following two alternatives:

- If you are using HP OpenView Operations, you can use following command:

```
/opt/OV/bin/OpC/opcdbsetup -d
```

- Otherwise perform the following steps:

- a. Switch to user `oracle` or log in as user `oracle`:

```
su - oracle
```

- b. Verify, and if necessary, set the variables `ORACLE_HOME` and `ORACLE_SID`, for example:

```
ORACLE_HOME=/opt/oracle/product/9.2.0
```

```
export ORACLE_HOME
```

```
export ORACLE_SID=openview
```

- c. Call the Oracle SQL*Plus tool and shut down the database:

```
ORACLE_HOME/bin/sqlplus /nolog
```

```
SQL> connect /as SYSDBA
```

```
SQL> shutdown
```

```
SQL> exit
```

- d. If you use SQL*Net, stop the SQL*Net listener:

```
ORACLE_HOME/bin/lsnrctl stop
```

De-installing Oracle

- e. Switch back to user `root` or log in as user `root`:

```
exit
```

- f. Remove the database files in the data directory or, if you use more than one data directory, in all data directories, for example:

```
rm -rf /opt/oradata/openview
```

- g. Remove the administrative directory tree with create scripts, dump directories, and so on under `ORACLE_BASE/admin/ORACLE_SID`, for example:

```
rm -rf /opt/oracle/admin/openview
```

- h. Remove the `init${ORACLE_SID}.ora` file, for example:

```
rm -f $ORACLE_HOME/dbs/initopenview.ora
```

- i. Remove the OpenView database configuration file:

```
rm -f /etc/opt/OV/share/conf/ovdbconf
```

- j. Remove the entry for this database in `/etc/oratab`. If this is the only database on the system, remove the file:

```
rm -f /etc/oratab
```

- 3. Remove the Oracle software:

```
rm -rf $ORACLE_HOME
```

```
rm -rf $ORACLE_BASE/oraInventory
```

- 4. Remove the user `oracle` and the group `dba`, for example using `admintool`.

Upgrading from OfO Version 8.1.7

This section describes how to upgrade from Oracle 8™-for-OpenView version 8.1.7. For more detailed information see the Oracle 9i Database Migration Guide.

CAUTION

Once you start up your database with *ORACLE_HOME* containing the new Oracle software do not attempt to go back to the old version, as this could result in database files being corrupted.

To upgrade OfO from version 8.1.7 to version 9.2.0, follow these steps:

1. Check the prerequisites for the new Oracle version.
See “Check the Prerequisites” on page 28 for details.
2. Prepare the database for the upgrade.
See “Prepare the Database for the Upgrade” on page 28 for details.
3. Back up the current database.
See “Perform a Backup” on page 29 for details.
4. Install the Oracle 8.1.7 software.
See “Install Oracle 9.2.0” on page 29 for details.
5. Call a migration script to convert the database.
See “Convert the Database to Oracle 9.2.0” on page 30 for details.
6. Make changes for the OpenView products to use the new version.
See “Change the OpenView Products to Use the New Version” on page 32 for details.

To Upgrade from OfO Version 8.1.7

Follow these steps to upgrade from OfO version 8.1.7. It is recommended that you first browse through the necessary steps.

Check the Prerequisites

Check the system requirements described in Chapter, “Preparing for an Oracle Database Installation” on page 12.

If you are running Oracle 9.2.0 with HP OpenView Operations for Solaris (OVO), you *must* also install the OVO server patch ITOSQL_00183 or a superceding patch. This patch updates the OVO version from A.07.10 to A.07.12.

Prepare the Database for the Upgrade

1. Stop all processes that access the Oracle database.

Exit the GUIs of the OpenView products and stop the daemon processes with `ovstop`.

2. Shut down the database and, if necessary, the SQL*Net listener, as follows:

- a. Log in as user `oracle` or switch to user `oracle`:

```
su - oracle
```

- b. Verify, and if necessary, set the variables `ORACLE_HOME` (still the Oracle 8.1.7 value) and `ORACLE_SID`, for example:

```
ORACLE_HOME=/opt/oracle/product/8.1.7
export ORACLE_HOME
export ORACLE_SID=openview
```

- c. Shut down the SQL*Net listener if you are using SQL*Net:

```
ORACLE_HOME/bin/lsnrctl stop
```

- d. Call the Oracle SQL*Plus tool and shut down the database as follows:

```
ORACLE_HOME/bin/sqlplus /nolog
SQL> connect / as SYSDBA
SQL> shutdown
SQL> exit
```

Perform a Backup

Perform a full offline backup of the Oracle database or the complete system before you perform the upgrade. A full backup ensures that you can recover from errors encountered during the upgrade process.

Install Oracle 9.2.0

1. Change the `.profile` of the user `oracle`:
 - a. Set the `ORACLE_HOME` variable to the new value, for example:

```
export ORACLE_HOME=$ORACLE_BASE/product/9.2.0
```
 - b. If the `PATH` variable contains the old `ORACLE_HOME` value, change the `PATH` variable to use the new `ORACLE_HOME`:

```
export PATH=$PATH:$ORACLE_HOME/bin
```
 - c. Set the `ORA_NLS33` variable:

```
export ORA_NLS33=$ORACLE_HOME/ocommon/nls/admin/data
```
2. Switch back to user `root`:

```
exit
```
3. Set `ORACLE_HOME` to the new value in the current shell by entering:

```
export ORACLE_HOME=/opt/oracle/product/9.2.0
```
4. As user `root`, create the directory for the Oracle 9.2.0 software and set the correct ownerships and permissions:

```
umask 022
mkdir -p $ORACLE_HOME
chown oracle:dba $ORACLE_HOME
chmod 755 $ORACLE_HOME
```
5. Install Oracle 9.2.0 software as described in section “Installing an Oracle Database” on page 19.

Convert the Database to Oracle 9.2.0

As user oracle:

1. Ensure that the following environment variables point to the new 9.2.0 directories:

```
ORACLE_HOME = /opt/oracle/product/9.2.0
PATH         = ${PATH}:/opt/oracle/product/9.2.0/bin
ORA_NLS33    = /opt/oracle/product/9.2.0/ocommon/nls/\
              admin/data
```

2. Move the parameter file of the openview database to the new location. This is usually a symbolic link to:

```
/opt/oracle/admin/openview/pFile
mv /opt/oracle/product/8.1.7/dbs/initopenview.ora \
/opt/oracle/product/9.2.0/dbs/initopenview.ora
```

3. Change to the directory \$ORACLE_HOME/rdbms/admin:

```
cd $ORACLE_HOME/rdbms/admin
```

4. Start the Oracle SQL*Plus tool and convert the database:

- a. Startup the database in restricted mode:

```
$ORACLE_HOME/bin/sqlplus /nolog
SQL> connect / as SYSDBA
SQL> startup MIGRATE
```

NOTE

You may see error messages listing obsolete initialization parameters. If so, make a note of the obsolete initialization parameters and continue with the upgrade. Remove the obsolete initialization parameters the next time you shut down the database.

- b. Set the system to spool results to a logfile for later verification of success:

```
SQL> spool catoutu.log
```

- c. If you want to see output of the script you will run on your system, issue a `SET ECHO ON` statement:

```
SQL> set echo on
```

- d. Run the script `u0801070.sql` to upgrade from Oracle version 8.1.7 to 9.2.0:

```
SQL> @u0801070.sql
```

The script creates and alters certain dictionary tables. It also runs the `catalog.sql` and `catproc.sql` scripts that come with the 9.2.0 release. These scripts create the system catalog views and all necessary packages for using PL/SQL.

If you encounter any problems when you run the script, correct the causes of the problems and rerun the script. You can rerun the script as many times as necessary.

- e. Turn off the spooling of script results to the logfile:

```
SQL> spool off
```

Check the spool file `catoutu.log` and verify that the packages and procedures compiled successfully. Correct any problems you find in this file.

- f. If you have specified `SET ECHO ON`, you may want to `SET ECHO OFF` now:

```
SQL> set echo off
```

- g. Shutdown the database and exit the Oracle Server Manager tool:

```
SQL> shutdown
```

```
SQL> exit
```

Your database is now upgraded to the 9.2.0 release.

CAUTION

If you retain the old Oracle software, never start the upgraded database with the old software. Only start the database with the executables in the 9.2.0 installation directory.

Change the OpenView Products to Use the New Version

1. As user `root`, replace all occurrences of the old `ORACLE_HOME` value with the new value in the following files; for example, replace all occurrences of `/opt/oracle/product/8.1.7` with `/opt/oracle/product/9.2.0`. You need to change variable assignments as well as directory names containing this value.

- `/etc/oratab`
- `/var/opt/oracle/oratab`
- `/etc/profile`
- `/etc/csh.login`
- `/etc/rc.config.d/ovoracle`
- `/etc/opt/OV/share/conf/ovdbconf`
- The user `.profile` and `.cshrc` of users that have set the Oracle variables in their environment (`root`, `ovdb`, `opc_op`, and so on)

NOTE

You may find some files that require no change.

2. If you use HP OpenView Operations, change the symbolic link `libclntsh.so.1.0`. It points to the Oracle shared library. Change it to point to the Oracle shared library in the new `ORACLE_HOME`:

```
rm -f /opt/OV/lib/libclntsh.so
rm -f /opt/OV/lib/libclntsh.so.1.0
ln -s $ORACLE_HOME/lib/libclntsh.so \
/opt/OV/lib/libclntsh.so.1.0
ln -s $ORACLE_HOME/lib/libclntsh.so \
/opt/OV/lib/libclntsh.so
```

3. Check the documentation of the installed OpenView products to find out whether you need to perform any additional steps.

4. To find missing files and to avoid starting the database with the wrong `ORACLE_HOME` value, it is recommended you rename the old `ORACLE_HOME` directory, for example:

```
mv /opt/oracle/product/8.1.7 \  
/opt/oracle/product/old8.1.7
```

5. Start the database as follows:

- a. Log in as user `oracle` or switch to user `oracle`:

```
su - oracle
```

- b. Call the Oracle SQL*Plus tool and start the database, for example:

```
$ORACLE_HOME/bin/sqlplus /nolog  
SQL> connect / as SYSDBA  
SQL> startup  
SQL> exit
```

- c. Switch back to user `root`:

```
exit
```

- d. Reconfigure and start the SQL*Net listener by running:

```
opcsqlnetconf
```

- e. If you no longer need the old Oracle version and after you verified that the new Oracle version works, you can remove the old Oracle version to gain disk space, for example:

```
rm -rf /opt/oracle/product/old8.1.7
```

Oracle Client for Windows

OfO includes a CD with client software for Windows NT/2000. You need this client software, if you want to access the UNIX database from a PC over the network, for example to use HP OpenView Reporter.

OfO includes a license for the following products on the Client CD:

Oracle9i Client - Application User Product

This product contains the Networking components to connect to the database on the UNIX system over SQL*Net, some utilities and SQL*Plus.

Oracle9i Client - Database Administrator Product

This product contains additional to the Application User Products the Oracle Enterprise Manager. This is a set of graphical tools that allow to administer Oracle databases over the network.

To Install the Oracle Client for Windows

To install the client software, insert the *Oracle9i Client Release 2 (9.2.0.1.0) for Microsoft Windows 98/NT/2000/XP* CD-ROM into the CD-ROM drive of your computer. The Oracle9i Client Autorun window appears. Alternatively, you can open the `<CD-ROM_drive>:\WELCOME.html` file using a web browser.

Click on `Install Client` to start the installation process and follow the on-screen prompts.

If you would like to access the related online Oracle documentation, choose the `Browse Documentation` item to read the online documentation. The *Installation Guide* describes the system requirements and the installation procedure.

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