

# Oracle8i

## Release Notes

Release 3 (8.1.7) for HP 9000 Series HP-UX

September 2000

**Part No. A86836-01**

These *Release Notes* contain important last minute information that supplements or supersedes corresponding information in the *Oracle8i Installation Guide for HP 9000 Series HP-UX*.

This document contains these topics:

- [Operating System Configuration](#)
- [Documentation](#)
- [Default JDBC Driver Behavior](#)
- [Use of Single-Task Linking for Large Exports/Imports and SQL\\*Loader Jobs](#)
- [Installation Issues](#)
- [System Management Products](#)
- [Products not in the 8.1.7 Release on HP-UX](#)
- [Oracle Parallel Server](#)
- [Legato Storage Manager Deinstallation](#)
- [Heterogeneous Services](#)
- [New features in Oracle8i Release 3 \(8.1.7\)](#)

**ORACLE**

Copyright © 2000, Oracle Corporation.  
All Rights Reserved.

Oracle is a registered trademark, and Net8, Oracle8i, Oracle Database Configuration Assistant, Oracle *interMedia*, Oracle *interMediaText*, Oracle Names, PL/SQL, Pro\*C/C++, Pro\*COBOL, SQL\*Forms, SQL\*Loader, and SQL\*Plus are trademarks or registered trademarks of Oracle Corporation. All other company or product names mentioned are used for identification purposes only and may be trademarks of their respective owners.

# Operating System Configuration

This section contains the following topics:

- [Operating System Requirements](#)
- [Optional Patch](#)
- [Kernel Parameter Setting](#)

## Operating System Requirements

To install Oracle8i products included with this release, your HP 9000 Series HP-UX system must meet the operating system requirements listed in the following table.

OS Software	Requirements
Operating System	HP-UX 11.0
Operating System Patch	DART 49, June 2000
Operating System Packages	PHSS_21947, PHNE_20316, PHKL_21392, PHKL_22145.
Required Executables	The following executables must be present in the <code>/usr/ccs/bin</code> directory: <code>make</code> , <code>ar</code> , <code>ld</code> , <code>nm</code> , <code>cc</code> .

## Optional Patch

For DSS applications running on machines with more than 16 CPUs, we recommend installation of the HP-UX patch PHKL\_22266. This patch addresses performance issues with the HP-UX Operating System.

## Kernel Parameter Setting

The kernel parameter `nfilelocks` defines the maximum number of file locks available on the system. The recommended setting for `nfilelocks` is listed in the following table.

Kernel Parameter	Requirements
<code>nfilelocks</code>	200 + sum of the values of <code>init.ora</code> parameter <code>db_files</code> for all instances of oracle on the machine.
<code>maxdsiz</code> and <code>maxdsiz_64bit</code>	During the relink phase of the installation, you may see an <code>Out of memory</code> error if you do not set a value larger than the default for <code>maxdsiz</code> and <code>maxdsiz_64bit</code> , for example 1GB. This is because the relinking of all the libraries requires additional space for the data storage segment.

## Documentation

This section contains these topics:

- [Oracle Applications InterConnect Installation](#)
- [Important: Additional READMEs](#)
- [Platform-Specific Documentation](#)
- [Online Support](#)
- [Revised, New, and Obsoleted Documentation for Release 8.1.7](#)

### Oracle Applications InterConnect Installation

The *Oracle8i Release 3 (8.1.7) Installation Guide* contains only basic information pertaining to the Oracle Applications InterConnect (OAI) install. OAI is a new feature in Release 3 (8.1.7) that is being packaged as part of the Oracle Integration Server, a suite of products designed to integrate and facilitate communication among various applications comprising an e-business (including CRM, ERP, business-to-business Internet marketplaces, and auction sites). To access more specific information regarding the OAI installation, please refer to the *Oracle Applications InterConnect Release 3.1.3 Installation Guide*, located off the root of the installation media in `doc/oai`.

### Important: Additional READMEs

Additional product README files are located in the product subdirectories under the `$ORACLE_HOME` directory or in the `$ORACLE_HOME/relnotes` directory.

### Platform-Specific Documentation

The *Oracle8i Administrator's Reference HP 9000 Series HP-UX*, and the *Oracle8i Installation Guide HP 9000 Series HP-UX* are available online on the Oracle8i software CD-ROM. To access the documentation in HTML and PDF formats, use a web browser running on a UNIX system to open the `index.htm` file at the top level of the Oracle8i CD-ROM. This file contains links to product- and HP-UX-specific documentation.

### Online Support

The following websites have the most current information about products included with this release:

- <http://www.oracle.com/support>
- <http://technet.oracle.com>

## Revised, New, and Obsoleted Documentation for Release 8.1.7

The Oracle8i Online Documentation CD-ROM contains guides listed as release 8.1.6 and 8.1.7. Only guides listed as release 8.1.7 have been updated since release 8.1.6. Guides listed as release 8.1.6 have not been revised, however, updates to some of these 8.1.6 guides may be included in:

- These *Release Notes*
- *Oracle8i Documentation Addendum*

## Default JDBC Driver Behavior

In Oracle8i Release 3 (8.1.7) the default behavior for the `ResultSet::getXXXStream()` APIs have been modified to comply with the JDBC specification so that they return null values for database null LONG/LONG RAW values. In earlier versions of the 8.1.x JDBC drivers, the default behavior was to return the empty stream for database null values. To restore the earlier JDBC default behavior when using the 8.1.7 drivers, you must use the Java property `jdbc.backward_compatible_to_8.1.6`. For example, if this Java property is set at the virtual machine runtime, the command

```
java -Djdbc.backward_compatible_to_8.1.6 myJavaProgram
```

will cause the 8.1.7 JDBC drivers to return empty streams from calls to `ResultSet::getXXXStream()`.

The `jdbc.backward_compatible_to_8.1.6` Java property applies to 8.1.7 JDBC Thin driver and OCI driver.

## Use of Single-Task Linking for Large Exports/Imports and SQL\*Loader Jobs

If you need to transfer large amounts of data between the user and Oracle8i (for example, using `export/import`), it is efficient to use single-task architecture. To make the single-task import (`impst`), export (`expst`), and SQL\*Loader (`sqlldrst`) executables, use the `ins_rdbms.mk` makefile in the `$ORACLE_HOME/rdbms/lib` directory.

The following example makes the `impst`, `expst`, and `sqlldrst` executables:

```
$ cd $ORACLE_HOME/rdbms/lib
$ make -f ins_rdbms.mk singletask
```

---

---

**Note:** Linking Oracle executables as single-task allows a user process to directly access the entire SGA. In addition, running single-task requires more memory because the `oracle` executable text is no longer shared between the front-end and background processes.

---

---

## Installation Issues

This section contains these topics:

- [Using Hummingbird Exceed](#)
- [Required Support Files Drop-In Compatibility](#)
- [Known Upgrade Issues](#)
- [Multi-CD Issues](#)
- [Oracle8i Management and Integration Custom Installation](#)
- [Oracle Universal Installer: Known Problems, Restrictions, and Workarounds](#)
- [Installing the Pro\\*COBOL v8.1.7 Precompiler](#)
- [Java Development Kit \(JDK\) 1.2.2](#)
- [Deinstallation](#)

### Using Hummingbird Exceed

If you are using Hummingbird's Exceed X windows emulator while installing and using Oracle8i, set the window manager to run in "Native" mode so that Microsoft Windows functions as the window manager. See your Exceed documentation for instructions on configuring the window manager.

While Oracle supports the use of Exceed for installing and configuring products, users should be aware of the following common problems with using this X Windows Emulator for installation:

1. Because of a bug in the way Exceed handles screen coordinates, the installer window and/or related installer dialogs or configuration assistants may encounter display problems when run through the emulator. These display problems may include the sudden truncation of the main window when clicking the [Next] button during the install, rendering the screen unreadable, or the expansion of an installer window such that the dialog buttons are displayed off the screen and are thus not selectable with a mouse. In such cases, users must exit the entire X Windows session and start a new session to fix the problem. Opening a new shell and re-running the installer from the shell does not fix the problem.

2. There are consistent display problems with the AQ Database Information dialog which is part of the Oracle Applications InterConnect installation. The last text field on this dialog which prompts for "Consumer Name:" appears truncated when viewed through Exceed. This dialog displays as expected when viewed through native X Windows on HP-UX.

To correct any problems with hidden dialog fields such as that indicated in (2) above, try the following:

1. From the Windows Start Menu, select the `xconfig` application under the Exceed Program Group from.
2. Select the "Fonts" Applet.
3. In the "Font Settings" dialog box, click the "Font Database" button.
4. In the "Font Database" dialog box, uncheck the "Automatic Font Substitution" option.
5. Select the "Add..." button.
6. In the "Add Font Directory" dialog box that is displayed, select the "Server" radio button.
7. In the "Add Font Server" dialog box, enter the hostname for your machine in the "Host Name" field. Leave all the other entries as they are defaulted.
8. Click "OK" and "Close" on all dialogs to save the settings.

### **Required Support Files Drop-In Compatibility**

In Oracle8i Release 3 (8.1.7), Oracle is supporting drop-in compatibility of the 8.1.7 client-side libraries on top of the 8.1.6 client-side libraries. This means that applications and tools running in the same ORACLE\_HOME as these 8.1.6 client-side libraries will not encounter runtime errors if the libraries are upgraded to 8.1.7 during an install. However, drop-in compatibility is not supported for client-side libraries being used by a database or listener. If an attempt to upgrade the 8.1.6 client-side libraries is made in the same ORACLE\_HOME as an Oracle8i Release 2 (8.1.6) database or listener, and the database or listener is not also upgraded to 8.1.7, the 8.1.6 versions of the database or listener will be broken. If you wish to keep the older versions of the database or listener intact, you must install Oracle8i Release 3 (8.1.7) in a new ORACLE\_HOME.

### **Known Upgrade Issues**

- An attempt to upgrade an Oracle8i Release 2 (8.1.6) database to a Release 3 (8.1.7) database in the same ORACLE\_HOME will produce

ignorable installation runtime errors that occur during the deinstallation of the 8.1.6 software. Refer to Bug 1344446.

Oracle Universal Installer treats a software upgrade as a deinstall of the old software followed by an install of the new software. The errors that occur during upgrade in the same ORACLE\_HOME appear as relinking errors in the RDBMS and Net8 Server. Since these errors are relinking errors which occur during the deinstall of the 8.1.6 software and since the affected files will be replaced and relinked again when the 8.1.7 software is installed, these errors can be safely ignored.

During upgrade of the software, Oracle Universal Installer will display error dialogs with the following messages:

1. "Error in invoking target ioracle of make file <ORACLE\_HOME>/rdbms/lib/ins\_rdbms.mk"
2. "Error in invoking target install of make file <ORACLE\_HOME>/network/lib/ins\_net\_server.mk"

Clicking the [Ignore] button on each of these dialogs will allow the installation to continue.

These errors can be avoided by installing the Release 3 (8.1.7) software into a new ORACLE\_HOME, then performing the data upgrade as usual.

- Before performing either a manual database upgrade or an automated database upgrade using Oracle Data Migration Assistant, ensure that `_SYSTEM_TRIG_ENABLED = FALSE` in the initialization parameter file. After completing the database portion of the upgrade, you must either remove the `_SYSTEM_TRIG_ENABLED` from the initialization parameter file or explicitly set it to `TRUE`, before attempting any other upgrade steps, such as upgrading Oracle JServer. Refer to *Oracle8i Migration* for more information.

### Multi-CD Issues

- An attempt to install Oracle8i Release 3 (8.1.7) directly from the installation media requires customers to switch between CD 1 and CD 2 during the middle of an installation session to complete a full install. To avoid having to switch between CDs, copy the contents of each CD to the hard drive and run the Installer from the new location. Copy the contents of each CD in the directory structure as follows:

Disk1/<Contents of CD #1>

Disk2/<Contents of CD #2>

If the contents of each CD are copied into this structure on the hard drive, Oracle Universal Installer automatically finds the contents of

each CD and does not prompt for the location of either CD during the course of installation.

- If you run the Installer while the current working directory is in the CD-ROM, you should perform the following steps to mount the next CD-ROM:
  1. Go to `root` directory
  2. Unmount and remove the CD-ROM from the CD-ROM drive
  3. Insert and mount the next CD-ROM into the CD-ROM drive
  4. Enter the correct mount point in the installation dialog box
  5. Click OK to continue

### Oracle8i Management and Integration Custom Installation

It is not possible to install and configure Oracle Internet Directory (OiD) and Oracle Workflow in the same installation session during a custom install of Oracle8i Management and Integration. If you perform such an installation and choose to install both OiD and Oracle Workflow, the OiD Configuration Assistant will be launched during post-installation to configure OiD in the database, and Oracle Workflow configuration will not be performed.

To configure Oracle Workflow after completion of the installation session, perform the following steps:

1. Exit the Oracle Universal Installer at the end of the installation.
2. Run the Oracle Workflow configuration script manually. To do this, change directories to `$ORACLE_HOME/wf/install`, and enter the following command:

```
$ inst252 <wf_acct> <wf_pwd> <wf_home> <sys_pwd>  
<system_pwd> INSTALL
```

where:

`wf_acct` = workflow account. Use `OWF_MGR`

`wf_pwd` = *password@db* for workflow account. Use `OWF_MGR`

`wf_home` = workflow top level directory, e.g. `$ORACLE_HOME/wf`

`sys_pwd` = *password@db* for `SYS` account, e.g. `change_on_install@wfdb`

`system_pwd` = *password@db* for `SYSTEM` account, e.g. `manager@wfdb`



## Oracle Universal Installer: Known Problems, Restrictions, and Workarounds

- Ignore the following error when upgrading from release 8.0.x to 8.1.7. Despite the error message, the upgrade has completed successfully. Note that the error does not occur during upgrade from 8.1.x to 8.1.7.  

```
ORA-00604: error occurred at recursive SQL level 1
```
- On slower computers you may notice a "flicker" at the Oracle Universal Installer loading screen. It does not affect the installation in any way.
- The *Help* window invoked from Oracle Universal Installer's *Inventory* window cannot be scrolled or resized the second time it is accessed. A workaround is to close the *Inventory* window. The *Help* window is now accessible. Resize the *Help* window, then close it. The next time you invoke *Help* from the *Inventory* window, it will appear at that size. This is a bug due to Java Development Kit (JDK) 1.1.8.
- Do not install release 8.1.5 after installing release 8.1.6 or 8.1.7. If you do so, release 8.1.6 or 8.1.7 is fully deinstalled and considered not functional because the required Java Runtime Environment (JRE) 1.1.8\_03 is removed. Note that the same issue also applies to all non-ORACLE\_HOME products that are shared between these installations. This problem does not occur if you install release 8.1.6 or 8.1.7 after release 8.1.5.

## Installing the Pro\*COBOL v8.1.7 Precompiler

In Oracle8i Release 3 (8.1.7) you must set the \$COBDIR environment variable to a valid path before Oracle Universal Installer will allow you to select and install the Pro\*COBOL v8.1.7 precompiler.

The *Oracle8i Installation Guide for HP 9000 Series HP-UX* indicates that you must set the \$COBDIR environment variable prior to installing this precompiler to avoid any relinking errors. However, if you do not set this environment variable prior to starting the installation session, the Pro\*COBOL v8.1.7 precompiler will not be available for selection.

## Java Development Kit (JDK) 1.2.2

JDK 1.2.2 is a prerequisite for Oracle HTTP [Apache] component. The JDK install home location will be prompted during 8.1.7 installation. Refer to HP web-sites for JDK 1.2.2-recommended OS patches.

## Deinstallation

You cannot deinstall Oracle JServer separately from other products installed with Oracle8i Release 3 (8.1.7).

Deinstalling Oracle JServer causes Oracle Universal Installer to remove Oracle8i and other products dependent on Oracle JServer from your system.

## System Management Products

This section contains these topics:

- [Oracle Intelligent Agent](#)
- [OEM\\_MONITOR Database Role](#)
- [Re-Installing Oracle8i Server](#)
- [Oracle Internet Directory](#)
- [Oracle Database Configuration Assistant](#)
- [Net8 Configuration Assistant](#)

### Oracle Intelligent Agent

The installation model of Oracle Intelligent Agent has been modified as of release 8.1.7. The Oracle Intelligent Agent extensions (Oracle Applications Extensions, Oracle HTTP Server Extensions, Oracle EBusiness Management Tool Extensions, and so on) that allow management of the corresponding areas, are now separately installable.

This means that during installation, users can select the basic Oracle Intelligent Agent and separately select any of the Oracle Intelligent Agent extensions. Note that Oracle Data Gatherer is installed as part of the basic Oracle Intelligent Agent.

Before starting the Oracle Intelligent Agent `dbsnmp`, set the following environment variables:

```
PATH=$PATH:$ORACLE_HOME/Apache/perl/bin  
PERL5LIB=$ORACLE_HOME/Apache/perl/lib/5.00503
```

### OEM\_MONITOR Database Role

The OEM\_MONITOR role can be granted to any database user being used as a "preferred credential" when registering advanced (database) events available with the Oracle Enterprise Manager Diagnostics Pack.

This role is defined in `$ORACLE_HOME/rdbms/admin/catsnmp.sql` which is called by the catalog scripts at database creation time. In addition to the OEM\_MONITOR role, the database user requires quota on their default tablespace within the monitored database, in order to have some of the advanced events evaluated. Failure to do so will result in an insufficient privilege message.

## Re-Installing Oracle8i Server

If you re-install Oracle8i Server into an ORACLE\_HOME where Oracle8i Server Release 8.1.6 is already installed, you must also re-install any product options, such as Oracle Partitioning, that were enabled before you began the re-installation.

## Oracle Internet Directory

Several products included with Oracle8i Release 3 (8.1.7) are now directory-enabled and can take advantage of an LDAP version 3 directory server such as Oracle Internet Directory. Purchase of Oracle8i Release 3 (8.1.7) includes a restricted-use version of Oracle Internet Directory release 2.1.1 for HP 9000 Series HP-UX that may only be used in conjunction with Oracle's directory-enabled components and products such as Net8, Oracle Advanced Security, Oracle8i, and all future directory-enabled Oracle products.

## Oracle Database Configuration Assistant

When you use Oracle Database Configuration Assistant to create a Custom database that includes Oracle JServer, be aware that it can take over an hour to finish loading Oracle JServer into the database depending on your system's hardware configuration.

## Net8 Configuration Assistant

In a Typical, silent installation of Oracle8i Release 3 (8.1.7), Net8 Configuration Assistant does not configure an IIOP listening end point to provide access to Oracle JServer. After installation, start the Net8 Configuration Assistant from the command line and configure an IIOP end point for the listener called "LISTENER." For more information, see the *Net8 Administrator's Guide*.

## Products not in the 8.1.7 Release on HP-UX

The following products were incorrectly listed in the *Oracle8i Installation Guide Release 3 (8.1.7) for HP 9000 Series HP-UX* as products available for installation with Release 3 (8.1.7). Note that the following products are NOT available for installation with Release 3 (8.1.7) HP 9000 Series HP-UX.

- Oracle Distributed Access Manager
- Oracle *interMedia* Text Manager
- Oracle Parallel Server Manager
- Oracle Spacial Index Advisor

## Oracle Parallel Server

- [Creating Raw Devices and the System tablespace](#)
- [Starting Listeners on Remote Nodes](#)

### Creating Raw Devices and the System tablespace

When creating a database for use with Oracle Parallel Server, you must set the SYSTEM tablespace size to 274MB. If you are creating a custom database with the Oracle Database Configuration Assistant, you will need to change the SYSTEM tablespace size from the default of 260MB to 274MB before creating the database. In addition, the size of the raw device that you create for the SYSTEM tablespace must also be at least 275MB. This requirement supersedes the corresponding file size requirement listed in the *Oracle8i Parallel Server Setup and Configuration Guide*. For more information on creating raw devices on HP 9000 Series HP-UX systems, see the *Oracle8i Administrator's Reference*.

### Starting Listeners on Remote Nodes

When running in Cluster mode and creating new listeners, the Net8 Configuration Assistant sometimes fails to start the newly created listeners on all nodes of the cluster. To work around this problem, log in to each node and enter the command: `lsnrctl start <listenername>`.

## Legato Storage Manager Deinstallation

The deinstallation of Legato Storage Manager (LSM) does not work correctly. In particular, the installation of LSM creates a symbolic link `libobk.sl` that points to the library `liblsm.sl`. During deinstall, the library `liblsm.sl` is removed. However, the symbolic link is not redirected to point to the library `libdsbtsh8.sl`. If `libobk.sl` is not correctly recreated to point to `libdsbtsh8.sl` after the removal of LSM, Oracle will not work properly. To correctly remove LSM, delete and recreate the symbolic link `libobk.sl` to point to `libdsbtsh8.sl` after the completion of the deinstall of LSM.

## Heterogeneous Services

The Heterogeneous Services Agent Control Utility (`agtctl`) incorrectly reports its version as 8.1.0.0.0. The correct version of this utility is 8.1.7.0.0.

Additional requirements on Heterogeneous Services using ODBC connection for HP-UX are as follows:

- Prior to starting the listener, environment variable `SHLIB_PATH` must be set to include any third party ODBC driver library path.
- If third party ODBC driver is built using C++ compiler, Oracle executable `hsodbc` must have the C++ flags  
`-lCsup /opt/aCC/lib/cppprt0.o` in the link line.

## **New features in Oracle8i Release 3 (8.1.7)**

Oracle Enterprise Manager Version 2 includes many upgrades.

The architecture is 3-tier. This improves scalability, and provides automatic load-balancing and failover for critical management services. It also provides support for multiple Enterprise Manager administrators using different consoles to share real-time management information stored in a common repository.

The Oracle Enterprise Manager console is now a Java-based application that can be run as an installed Java application or run from a browser.