

# Oracle® Application Server

Quick Installation and Upgrade Guide

10g Release 2 (10.1.2) for HP-UX PA-RISC (64-bit)

**Part No. B14412-01**

January 2005

**ORACLE®**

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# 1 Introduction

This guide describes how to install the following Oracle Application Server installation types:

- J2EE and Web Cache middle tier
- OracleAS Infrastructure
- Portal and Wireless middle tier

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### 3 Installation Types Covered in this Guide

This guide is intended for users who want to install Oracle Application Server in these configurations:

- **Java Developer topology:** Intended for Java developers. This topology installs a **J2EE and Web Cache** middle tier, on which you can deploy your applications.
- **Portal and Wireless Developer topology:** Intended for Java developers who want to use OracleAS Portal, OracleAS Wireless, Oracle Internet Directory, or OracleAS Single Sign-On features, in addition to J2EE and Web Cache features. This topology installs a **Portal and Wireless** middle tier and the **OracleAS Infrastructure**.

If you want more complex topologies, read the *Oracle Application Server Installation Guide* for complete installation instructions.

Before installing Oracle Application Server, you should read the *Oracle Application Server Release Notes* for the latest information.

## 4 Requirements

Check that your computer meets the minimum requirements:

- [Section 4.1, "Check Hardware Requirements"](#)
- [Section 4.2, "Check Software Requirements"](#)
- [Section 4.3, "Check Kernel Parameters Required by OracleAS Web Cache"](#)
- [Section 4.4, "Check Kernel Parameters Required by OracleAS Metadata Repository"](#)
- [Section 4.5, "Create an Operating System Group for the Inventory Directory"](#)
- [Section 4.6, "Create an Operating System Group for Database Administration"](#)
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- [Section 4.8, "Check Environment Variables"](#)
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## 4.1 Check Hardware Requirements

Check that your computer has a 64-bit HP-UX PA-RISC processor (Oracle recommends a 400 MHz or better processor) and meets the following disk space and memory requirements.

**Table 1** *Minimum System Requirements*

	<b>J2EE and Web Cache</b>	<b>Portal and Wireless</b>	<b>OracleAS Infrastructure</b>
Memory (see (1) below)	512 MB	1 GB	1 GB
Disk space	1.4 GB	3.3 GB	5.1 GB (see (2) below)
Space in TEMP directory	400 MB	400 MB	400 MB
Swap space	1.5 GB	1.5 GB	1.5 GB

Notes:

(1) If you plan to install Portal and Wireless and OracleAS Infrastructure on the same computer, you need to have at least 1.5 GB of memory.

(2) You can install the data files for the OracleAS Metadata Repository database on a disk that is different from the disk where you are installing OracleAS Infrastructure. If you do this, make sure the disk for the data files has at least 1.3 GB of free space.

Complete the following steps to check these requirements:

1. To check that the processor is a 64 bit processor, enter the following command:

```
# /bin/getconf KERNEL_BITS
```

2. To determine the amount of memory, enter the following command:

```
# /usr/sbin/dmmsg | grep "Physical:"
```

3. To determine the amount of free disk space, enter the following command:

```
prompt> bdf dir.
```

Replace *dir* with the Oracle home directory or with the parent directory if the Oracle home directory does not exist yet. For example, if you plan to install Oracle Application Server in `/opt/oracle/infra`, you can replace *dir* with `/opt/oracle` or `/opt/oracle/infra`.



4. To determine the amount of available swap space, enter the following command:

```
# /usr/sbin/swapinfo -a
```

If necessary, see your operating system documentation for information on how to configure additional swap space.

## 4.2 Check Software Requirements

Oracle Application Server is certified with the following Operating System specific software. For the most current list of supported Operating System specific software, for example Operating System version, check *OracleMetaLink*.

1. Make sure that HP-UX 11i (11.11 or 11.23) PA-RISC or higher is installed. To determine which version of HP-UX is installed, enter the following command:

```
# uname -a  
HP-UX hostname B.11.11 U 9000/800 109444686  
unlimited-user license
```

In this example, the version of HP-UX 11i is 11.11.

2. If HP-UX 11.11 is installed, make sure that June 2003 Quality Pack GoldQPK11i is installed. To determine whether the Quality Pack is installed, enter the following command:

```
# /usr/sbin/swlist | grep QPK
```

If the quality pack is not installed, download it from the following web site and install it:

[http://www.software.hp.com/SUPPORT\\_PLUS/qpk.html](http://www.software.hp.com/SUPPORT_PLUS/qpk.html)

3. If HP-UX 11.11 is installed, make sure that the following patches are installed:
  - PHKL\_29198 s700\_800 11.11 Psets Enablement Patch; top(1)
  - PHSS\_28871 s700\_800 11.11 ld(1) and linker tools cumulative patch
  - PHSS\_28880 s700\_800 11.11 HP aC++ -AA runtime libraries (aCC A.03.50)
  - PHCO\_29960 s700\_800 11.11 Pthread enhancement and fixes

The following patches are required by JDK 1.4.2.05 or higher. JDK 1.4.2.05 is installed with this release. Refer to the HP Support site for a list of all JDK patches.

- PHKL\_25842 s700\_800 11.11 Thread Abort syscall
- PHKL\_25993 s700\_800 11.11 thread nostop for NFS, rlimit, Ufalloc fix
- PHKL\_25994 s700\_800 11.11 detach;NOSTOP,Abrt,Psets;slpq1;FSS;getlwp
- PHKL\_25995 s700\_800 11.11 ufalloc;VxFS3.5;SPP fragmentation;AIO;EVP
- PHKL\_26468 s700\_800 11.11 vPar, callout, abstime, shared sync perf
- PHKL\_28489 s700\_800 11.11 copyin EFAULT, LDCD access type
- PHNE\_29887 s700\_800 11.11 cumulative ARPA Transport patch

The following patches are required if ANSI C is installed on the system:

- PHSS\_26792 s700\_800 11.X ANSI C compiler B.11.11.04 cumulative patch

- **PHSS\_26793 s700\_800 11.X +O4/PBO Compiler B.11.11.04 cumulative patch**

To determine whether a patch is installed, enter a command similar to the following:

```
# /usr/sbin/swlist -l patch | grep PHKL_29198
```

Alternatively, to list all installed patches, enter the following command:

```
# /usr/sbin/swlist -l patch | more
```

If a required patch is not installed, download it from the following URL and install it:

<http://itresourcecenter.hp.com>

4. **Make sure that Motif 2.1 Development Environment (X11MotifDevKit.MOTIF21-PRG) B.11.11.01 is installed**

To determine whether a bundle or product is installed, enter the following command:

```
# /usr/sbin/swlist -l product | more
```

Either install the package or create the following symbolic links:

- a. Log in as `root`.
- b. Change to the `/usr/lib` directory:

```
# cd /usr/lib
```

- c. Create the required links:

```
# ln -s libX11.3 libX11.sl
# ln -s libXIE.2 libXIE.sl
# ln -s libXext.3 libXext.sl
# ln -s libXhp11.3 libXhp11.sl
# ln -s libXi.3 libXi.sl
# ln -s libXm.4 libXm.sl
# ln -s libXp.2 libXp.sl
# ln -s libXt.3 libXt.sl
# ln -s libXtst.2 libXtst.sl
```

### 4.3 Check Kernel Parameters Required by OracleAS Web Cache

This section applies if you are installing OracleAS Web Cache:

- If you are installing the J2EE and Web Cache middle tier, the OracleAS Web Cache component is optional.
  - If you are installing the Portal and Wireless middle tier, the OracleAS Web Cache component is always installed.
1. Start System Administration Manager (SAM) as the root user:

```
# /usr/sbin/sam
```

2. Choose the Kernel Configuration area, then choose the Configurable Parameters area.
3. Check the value for `maxfiles_lim` is at least 65536. If necessary, modify that value. See the SAM online help for more information on completing this step.
4. Exit from SAM.
5. If you modified the value, reboot the system:

```
# /sbin/shutdown -r now
```

## 4.4 Check Kernel Parameters Required by OracleAS Metadata Repository

Verify that the kernel parameters shown in the following table are set either to the formula shown, or to values greater than or equal to the recommended value shown. The procedure following the table describes how to verify and set the values.

<b>Parameter</b>	<b>Recommended Formula or Value</b>
ksi_alloc_max	$(nproc*8)$
max_thread_proc	3000
maxdsiz	2063835136
maxdsiz_64bit	2147483648
maxfiles	2048
maxfiles_lim	2048
maxssiz	134217728
maxssiz_64bit	1073741824
maxswapchunks	16384
maxuprc	$((nproc*9)/10)$
maxusers	512

<b>Parameter</b>	<b>Recommended Formula or Value</b>
msgmap	$(2 + \text{msgmni})$
msgmni	4096
msgseg	32767
msgtql	4096
ncallout	6000
ncsize	$((8 * \text{nproc} + 2048) + \text{vx\_ncsize})$
nfile	3000
nflocks	4096
ninode	$(8 * \text{nproc} + 2048)$
nkthread	6000
nproc	2048
semmap	$(\text{semmni} + 2)$
semmni	4096
semmns	$(\text{semmni} * 2)$
semmnu	$(\text{nproc} - 4)$
semvmx	32767



Parameter	Recommended Formula or Value
shmmax	The size of physical memory or 0X40000000 (1073741824), whichever is greater. <b>Note:</b> To avoid performance degradation, the value should be greater than or equal to the size of the SGA.
shmmni	512
shmseg	32
tcp_conn_request_max	2048
vps_ceiling	64

---

---

**Note:** If the current value for any parameter is higher than the value listed in this table, do not change the value of that parameter.

---

---

To view the current value or formula specified for these kernel parameters, and to change them if necessary, follow these steps:

1. Optionally, set the DISPLAY environment variable to specify the display of the local system:

- Bourne, Bash, or Korn shell:

```
$ DISPLAY=localhost:0.0 ; export DISPLAY
```

- C shell:

```
$ setenv DISPLAY localhost:0.0
```

**2. Start System Administration Manager (SAM):**

```
# /usr/sbin/sam
```

**3. Choose the Kernel Configuration area, then choose the Configurable Parameters area.**

**4. Check the value or formula specified for each of these parameters and, if necessary, modify that value or formula.**

If necessary, see the SAM online help for more information on completing this step.

**5. Exit from SAM.**

**6. If you modified the value specified for any parameter, reboot the system:**

```
# /sbin/shutdown -r now
```

7. If necessary, when the system restarts, log in and switch user to `root`.

#### 4.5 Create an Operating System Group for the Inventory Directory

If this is the first Oracle product to be installed on the computer, create an operating system group for the "inventory" directory. The installer creates files in the inventory directory to keep track of the Oracle products that are installed on the computer.

This guide uses the name `oinstall` for this group.

In [Section 4.7, "Create an Operating System User"](#), you will create an operating system user, and set this group to be the user's primary group.

By having a separate group for the inventory directory, you allow different users to install Oracle products on the computer. Users need write permission for the inventory directory. They can achieve this by belonging to the `oinstall` group.

The default name of the inventory directory is `oraInventory`.

If you are unsure if there is already an inventory directory on the computer, look in the `/etc/oraInst.loc` file. This file lists the location of the inventory directory and the group who owns it. If

the file does not exist, the computer does not have Oracle products installed on it.

#### How to Create a Group

To create the `oinstall` group, enter the following as the root user:

```
# /usr/sbin/groupadd oinstall
```

### 4.6 Create an Operating System Group for Database Administration

Using the same steps in the previous section, create an operating system group called "dba". When you create an operating system user in the next step, you will set this `dba` group to be the user's secondary group.

### 4.7 Create an Operating System User

Create an operating system user to install and upgrade Oracle products. This guide refers to this user as the `oracle` user.

#### How to Create a User

To create the `oracle` operating system user as part of the `oinstall` group, enter the following command as the root user:

```
# /usr/sbin/useradd -g oinstall oracle
```

For more information about operating system users and groups, see your operating system documentation or contact your system administrator.

Set the password for the oracle user by entering the following command and follow the instructions on screen:

```
# passwd oracle
```

## 4.8 Check Environment Variables

The operating system user who will be installing Oracle Application Server needs to set (or unset) the following environment variables.

**Table 2** *Environment Variables*

<b>Environment Variable</b>	<b>Set or Unset</b>
DISPLAY	Set it to the monitor where you want to the installer window to appear.
ORACLE_HOME	Must not be set.
ORACLE_SID	Must not be set.

**Table 2 (Cont.) Environment Variables**

<b>Environment Variable</b>	<b>Set or Unset</b>
TNS_ADMIN	Must not be set.
PATH, CLASSPATH, SHLIB_PATH and LD_ LIBRARY_PATH	Must not contain references to directories in any Oracle home directories.
TMP	Optional. If unset, defaults to /tmp.

**4.8.1 How to Set Environment Variables** This section describes how to set environment variables:

Using the C shell:

```
% setenv variable_name value
```

Example (C shell):

```
% setenv DISPLAY test.mycompany.com:0.0
```

Using the Bourne or Korn shell:

```
$ variable_name=value; export variable_name
```

Example (Bourne or Korn shell):

```
$ DISPLAY=test.mydomain.com:0.0; export DISPLAY
```

**4.8.2 Environment Variable Tips** This section describes some things to look out for when setting environment variables:

- If you set environment variables in the `.profile` file, they might not be read. To ensure environment variables are set to the correct values, check their values in the shell where you will be running the installer.
- To check the value of environment variables, use the `env` command. This displays all the currently defined environment variables and their values.

```
% env
```

- If you use the `su` command to switch users (for example, switching from the root user to the `oracle` user), check the environment variables when you are the new user because the environment variables might not be passed to the new user. This can happen even if you run `su` with the `-` parameter (`su - user`).

```
# /* root user */
```

```
# su - oracle
% env
```

## 4.9 Check If Port 1521 Is in Use

This section is applicable only if you are installing the OracleAS Infrastructure.

The OracleAS Infrastructure installs an Oracle database, which uses port 1521 by default.

To check if port 1521 is in use:

```
prompt> netstat -an | grep 1521
```

If port 1521 is in use by a third-party application, you need to configure the application to use a different port.

If port 1521 is in use by an existing Oracle database listener, you need to stop the listener before installing the OracleAS Infrastructure.

See the *Oracle Application Server Installation Guide* for details.



## 5 Starting up the Installer

To start the installer:

1. Log in to the computer as a user who is a member of the Administrators group.

2. Insert the disk:

CD-ROM: Insert Oracle Application Server Disk 1.

DVD-ROM: Insert the Oracle Application Server DVD-ROM.

3. If your computer does not have automount, see [Section 5.1, "Mounting the CD-ROM or DVD-ROM"](#) for steps on mounting the CD-ROM or DVD-ROM manually.
4. Start up the installer:

---

---

**Note:** Do not run the installer from the mount point directory. Note the "cd" command below; it changes your current directory to your home directory so that you do not start up the installer from the mount point.

---

---

CD-ROM:

```
prompt> cd
prompt> mountpoint/1012disk1/runInstaller
```

DVD-ROM:

```
prompt> cd
prompt> mountpoint/application_server/runInstaller
```

This launches Oracle Universal Installer, through which you can install Oracle Application Server.

## 5.1 Mounting the CD-ROM or DVD-ROM

Follow these steps if your computer does not automount the CD-ROM or DVD-ROM:

1. Insert the CD-ROM or DVD-ROM.
2. Log in as the root user.

```
prompt> su
Password:
```

3. Create the /SD\_CDROM directory if it does not already exist:

```
# /usr/bin/mkdir /SD_CDROM
```

4. Mount the CD-ROM or DVD-ROM drive on the mount point directory:

```
# /usr/sbin/mount -F cdfs -o rr /dev/dsk/cxdydz /SD_
CDROM
```

In the preceding example, `/SD_CDROM` is the disk mount point directory and `/dev/dsk/cxdydz` is the device name for the disk device, for example `/dev/dsk/c0d2t0`.

5. Log out from the root user.

```
# exit
```

## 6 Installing J2EE and Web Cache (Java Developer Topology)

This topology installs the J2EE and Web Cache middle tier, which provides the following components:

- Oracle HTTP Server - this is the Web server.
- Oracle Application Server Containers for J2EE ("OC4J") - this is a J2EE container that you can use for deploying and testing your J2EE applications.
- OracleAS Web Cache - this component caches objects to reduce the load on Oracle HTTP Server and improve performance.

To install a J2EE and Web Cache middle tier:

1. Start up the installer. See [Section 5, "Starting up the Installer"](#) for details.
2. Welcome screen  
Click **Next**.
3. If this is the first Oracle product to be installed on this computer, the installer displays these additional screens:
  - a. Specify Inventory Directory and Credentials screen

**Enter the full path of the inventory directory:** Enter a full path to the inventory directory. Enter a directory that is different from the Oracle home directory for the product files.

Example: `/opt/oracle/oraInventory`

**Specify operating system group name:** Select the operating system group that will have write permission for the inventory directory.

Example: `oinstall`

Click **Next**.

**b. Run oraInstRoot.sh dialog**

When prompted, run the `oraInstRoot.sh` script in a different shell as the root user. The script is located in the inventory directory.

After running the script, click **Continue**.

**4. Specify File Locations screen**

**Name:** Enter a name to identify this Oracle home.

Example: `OH_J2EE`

**Destination Path:** Enter the full path to the destination directory. This is the Oracle home. If the destination directory does not exist, the installer creates it.

Example: `/opt/ora_j2ee`

Click **Next**.

5. Select a Product to Install screen

Select **Oracle Application Server** and click **Next**.

6. Select Installation Type screen

Select **J2EE and Web Cache** and click **Next**.

7. Confirm Pre-Installation Requirements screen

Check that you meet the requirements listed on this screen, select all the checkboxes, and click **Next**.

8. Select Configuration Options screen

Select **OracleAS Web Cache** if you want to use caching capabilities with this Oracle Application Server instance.

Do not select **Identity Management Access**.

Do not select **OracleAS Farm Repository**.

Click **Next**.

9. Specify Port Configuration Options screen

Select **Automatic** and click **Next**.

10. Specify OracleAS Instance Name and ias\_admin Password screen

**Instance Name:** Enter a name for this instance. Instance names can contain alphanumeric and \_ (underscore) characters. If you have more than one Oracle Application Server instance on a computer, the instance names must be unique.

Example: J2EE

**ias\_admin Password and Confirm Password:** Enter and confirm the password for the ias\_admin user. This is the administrative user for this instance.

Passwords must consist of at least five characters, and one of the characters must be a number.

Click **Next**.

11. Summary screen

Verify your selections and click **Install**.

The installer now installs the files.

## 12. Run root.sh dialog

Note: do not run this script until you see the dialog.

In a different window, log in as the root user and run the `root.sh` script. The script is located in this instance's Oracle home directory.

After you have run the `root.sh` script, click **OK**.

## 13. Configuration Assistants screen

This screen displays the progress of configuration assistants. Configuration assistants configure Oracle Application Server components.

## 14. End of Installation screen

Click **Exit** to quit the installer.



## 7 Installing Portal and Wireless Developer Topology (includes OracleAS Infrastructure and Portal and Wireless Middle Tier)

This topology enables you to deploy applications that use components such as OracleAS Portal and OracleAS Wireless.

To set up the Portal and Wireless Developer Topology, you need to install:

1. OracleAS Infrastructure
2. Portal and Wireless middle tier

The Portal and Wireless middle tier uses services from the OracleAS Infrastructure, so you have to install the OracleAS Infrastructure first.

**Tip:** You can install the OracleAS Infrastructure and the Portal and Wireless middle tier on different computers.

### 7.1 Install OracleAS Infrastructure

To install OracleAS Infrastructure with a new database and a new Oracle Internet Directory:

1. Start up the installer. See [Section 5, "Starting up the Installer"](#) for details.

2. Welcome screen

Click **Next**.

3. If this is the first Oracle product to be installed on this computer, the installer displays these additional screens:

a. Specify Inventory Directory and Credentials screen

**Enter the full path of the inventory directory:** Enter a full path to the inventory directory. Enter a directory that is different from the Oracle home directory for the product files.

Example: `/opt/oracle/oraInventory`

**Specify operating system group name:** Select the operating system group that will have write permission for the inventory directory.

Example: `oinstall`

Click **Next**.

b. Run oraInstRoot.sh dialog

When prompted, run the `oraInstRoot.sh` script in a different shell as the root user. The script is located in the inventory directory.

After running the script, click **Continue**.

4. Specify File Locations screen

**Name:** Enter a name to identify this Oracle home.

Example: OH\_INFRA

**Destination Path:** Enter the full path to the destination directory. This is the Oracle home. If the destination directory does not exist, Oracle Universal Installer creates it.

Example: /opt/oracle/oraInfra

Click **Next**.

5. Select a Product to Install screen

Select **OracleAS Infrastructure** and click **Next**.

6. Select Installation Type screen

Select **Identity Management and OracleAS Metadata Repository** and click **Next**.

7. Confirm Pre-Installation Requirements screen

Check that you meet the requirements listed on this screen, select all the checkboxes, and click **Next**.

8. Select Configuration Options screen  
Select **Oracle Internet Directory**.  
Select **OracleAS Single Sign-On**.  
Select **Delegated Administration Service**.  
Select **Oracle Directory Integration and Provisioning**.  
Do not select **OracleAS Certificate Authority**.  
Do not select **High Availability and Replication**.  
Click **Next**.
9. Specify Port Configuration Options screen  
Select **Automatic** and click **Next**.
10. Specify Namespace in Internet Directory screen  
Select **Suggested Namespace** and click **Next**.
11. Specify Database Configuration Options screen  
**Global Database Name:** Enter a name for the OracleAS Metadata Repository database, and append your domain name to the database name.

The database name portion of the global database name:

- can contain only alphanumeric characters
- must not be longer than eight characters
- must not contain the word "PORT" or "HOST" in uppercase characters. If you need to use these words, use lowercase characters.

The domain name portion of the global database name:

- can contain alphanumeric, underscore (\_), and pound (#) characters
- must not be longer than 128 characters

Example: `asdb.yourcompany.com`

**SID:** Enter the system identifier for the OracleAS Metadata Repository database. Typically this is the global database name, but without the domain name. The SID must be unique across all databases.

The SID name has the same naming restrictions as the database name portion of the global database name (listed above).

Example: `asdb`

**Select Database Character Set:** Select the character set that you want to use for the database.

**Database File Location:** Specify the full path to the parent directory for the data files directory. The directory you specify must exist, and you must have write permissions in it.

The installer installs the data files in a subdirectory of the path you specify. The installer uses the database name for the name of the subdirectory. For example, if you specify `asdb.yourcompany.com` for the global database name and `/data/dbfiles` for the database file location, the installer places database files in the following directory:  
`/data/dbfiles/asdb.`

The file system that contains the directory must have at least 1.3 GB of free disk space. Additional disk space is required for production databases, depending on the amount of data that you plan to store.

Click **Next**.

## 12. Specify Database Schema Passwords screen

Set the passwords for the administrative database users, which are privileged accounts used for database adminis-

tration. You can use the same password for all users, or specify different passwords for each user.

Click **Next**.

13. Specify OracleAS Instance Name and ias\_admin Password screen

**Instance Name:** Enter a name for this instance. Instance names can contain alphanumeric and \_ (underscore) characters. If you have more than one Oracle Application Server instance on a computer, the instance names must be unique.

Example: `infra`

**ias\_admin Password and Confirm Password:** Enter and confirm the password for the ias\_admin user. This is the administrative user for this instance.

Passwords must consist of at least five characters, and one of the characters must be a number.

For example: `welcome99`

Click **Next**.

#### 14. Summary screen

Verify your selections and click **Install**.

The installer now installs the files.

#### 15. Run root.sh dialog

Note: do not run this script until you see the dialog.

In a different window, log in as the root user and run the `root.sh` script. The script is located in this instance's Oracle home directory.

After you have run the `root.sh` script, click **OK**.

#### 16. Configuration Assistants screen

This screen displays the progress of configuration assistants. Configuration assistants configure Oracle Application Server components.

#### 17. End of Installation screen

Click **Exit** to quit the installer.



## 7.2 Install Portal and Wireless Middle Tier

The following procedure installs a Portal and Wireless middle tier and configures it to use the OracleAS Infrastructure installed in [Section 7.1, "Install OracleAS Infrastructure"](#).

1. Start up the installer. See [Section 5, "Starting up the Installer"](#) for details.
2. Welcome screen

Click **Next**.

3. If this is the first Oracle product to be installed on this computer, the installer displays these additional screens:
  - a. Specify Inventory Directory and Credentials screen

**Enter the full path of the inventory directory:** Enter a full path to the inventory directory. Enter a directory that is different from the Oracle home directory for the product files.

Example: `/opt/oracle/oraInventory`

**Specify operating system group name:** Select the operating system group that will have write permission for the inventory directory.

Example: `oinstall`

Click **Next**.

b. Run `orainstRoot.sh` dialog

When prompted, run the `orainstRoot.sh` script in a different shell as the root user. The script is located in the inventory directory.

After running the script, click **Continue**.

4. Specify File Locations screen

**Name:** Enter a name to identify this Oracle home.

Example: `OH_PORTAL`

**Destination Path:** Enter the full path to the destination directory. This is the Oracle home. If the destination directory does not exist, Oracle Universal Installer creates it.

Example: `/opt/oracle/oraPortal`

Click **Next**.

5. Select a Product to Install screen

Select **Oracle Application Server** and click **Next**.

6. Select Installation Type screen  
Select **Portal and Wireless** and click **Next**.
7. Confirm Pre-Installation Requirements screen  
Check that you meet the requirements listed on this screen, select all the checkboxes, and click **Next**.
8. Select Configuration Options screen  
Select **OracleAS Portal**.  
Select **OracleAS Wireless**.  
Click **Next**.
9. Specify Port Configuration Options screen  
Select **Automatic** and click **Next**.
10. Enter connect information for Oracle Internet Directory, which you installed when you installed the OracleAS Infrastructure:
  - a. Register with Oracle Internet Directory screen  
**Hostname:** Enter the name of the computer where Oracle Internet Directory is running.  
**Port:** Enter the port number at which Oracle Internet Directory is listening. To determine Oracle Internet

Directory's port number, look in the `ORACLE_HOME/install/portlist.ini` file, where `ORACLE_HOME` is where you installed the OracleAS Infrastructure.

If you select **Use only SSL connections with this Oracle Internet Directory**, then you must obtain the port number from "Oracle Internet Directory (SSL)" parameter in the `portlist.ini` file.

Click **Next**.

b. Specify Login for Oracle Internet Directory screen

**Username:** Enter `orcladmin`. This is the name of the Oracle Internet Directory administrator.

**Password:** The password for the `orcladmin` user is the same as the password for the `ias_admin` user in the infrastructure. You entered this password when you installed the infrastructure (see step 13 in [Section 7.1, "Install OracleAS Infrastructure"](#)).

Click **Next**.

11. Select Metadata Repository screen

**Repository:** Select the OracleAS Metadata Repository that you want to use for this middle-tier instance and click **Next**.

12. Specify OracleAS Instance Name and ias\_admin Password screen

**Instance Name:** Enter a name for this instance. Instance names can contain alphanumeric and \_ (underscore) characters. If you have more than one Oracle Application Server instance on a computer, the instance names must be unique.

Example: PORTAL

**ias\_admin Password and Confirm Password:** Enter and confirm the password for the ias\_admin user. This is the administrative user for this instance.

Passwords must consist of at least five characters, and one of the characters must be a number.

For example: welcome99

Click **Next**.

13. Summary screen

Verify your selections and click **Install**.

The installer now installs the files.

#### 14. Run root.sh dialog

Note: do not run this script until you see the dialog.

In a different window, log in as the root user and run the `root.sh` script. The script is located in this instance's Oracle home directory.

After you have run the `root.sh` script, click **OK**.

#### 15. Configuration Assistants screen

This screen displays the progress of configuration assistants. Configuration assistants configure Oracle Application Server components.

#### 16. End of Installation screen

Click **Exit** to quit the installer.

## 8 Accessing the Welcome Page

After installation, access the Oracle Application Server Welcome page to verify that the installation was successful. The URL for the Welcome page is:

```
http://hostname.domainname:http_port
```

Determine the *http\_port* by looking in the `ORACLE_HOME/install/portlist.ini` file. The port is listed on the "Oracle HTTP Server listen port" line.

---

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**Note:** If you have multiple instances of Oracle Application Server installed on a computer, each instance has its own set of port numbers. Check the `portlist.ini` file in the correct Oracle home directory to be sure you are using the correct port numbers.

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The Welcome page provides links to these useful pages:

- New features in Oracle Application Server 10g Release 2 (10.1.2)
- Oracle Enterprise Manager Application Server Control ("Application Server Control"), which is a browser-based administrative tool
- Release Notes
- What's Next
- Demos

## 9 Installing OracleAS Metadata Repository in an Existing Oracle Database

If you want to install OracleAS Metadata Repository in an existing Oracle database, you run a tool called the Oracle Application Server Metadata Repository Creation Assistant.

You can find OracleAS Metadata Repository Creation Assistant on the "OracleAS Metadata Repository Creation Assistant" CD-ROM.

See the *Oracle Application Server Metadata Repository Creation Assistant User's Guide* for details on how to use this tool.

## 10 Upgrade and Compatibility

This section contains the following information:

- [Section 10.1, "Upgrading an Oracle Application Server Middle Tier to 10g \(10.1.2\)"](#)
- [Section 10.2, "Compatibility with Previous Versions"](#)

### 10.1 Upgrading an Oracle Application Server Middle Tier to 10g (10.1.2)

This section describes how to upgrade your middle-tier installations. Specifically, this section describes how to upgrade the J2EE and Web Cache installation type and the Portal and Wireless



installation type from Release 2 (9.0.2), Release 2 (9.0.3), or 10g (9.0.4) to 10g (10.1.2).

For information about upgrading the OracleAS Infrastructure, as well as more detailed information about upgrading all components of your application server environment, see the *Oracle Application Server Upgrade and Compatibility Guide*.

To upgrade a J2EE and Web Cache or a Portal and Wireless Oracle home to 10g (10.1.2):

1. If the middle tier you are upgrading uses a Release 2 (9.0.2) Infrastructure, use the `imconfig.sh` script to update an entry in the Release 2 (9.0.2) Oracle Internet Directory.

You must make this configuration change; otherwise the upgraded 10g (10.1.2) middle tier will not be able to use the Release 2 (9.0.2) Infrastructure.

The `imconfig.sh` script is located in the `utilities` directory on the "OracleAS Metadata Repository Upgrade Assistant and Utilities" CD-ROM. For more information, see the section "Updating an Entry in the Release 2 (9.0.2) Oracle Internet Directory Before Installing the 10g (10.1.2) Middle Tier" in the *Oracle Application Server Upgrade and Compatibility Guide*.

2. If you are upgrading a Release 2 (9.0.2) Portal and Wireless installation and you have configured OracleAS Wireless Release 2 (9.0.2), then you should back up the Release 2 (9.0.2) OracleAS Metadata Repository, or at least back up the Wireless schema.

This step is recommended because when you install the OracleAS Wireless 10g (10.1.2) middle tier (in the next step), the Wireless Configuration Assistant upgrades the WIRELESS schema in the Release 2 (9.0.2) OracleAS Metadata Repository to 10g (9.0.4).

**See Also:** "Special Considerations When Upgrading OracleAS Clusters, OracleAS Wireless, or Oracle Workflow" in the *Oracle Application Server Upgrade and Compatibility Guide*

3. Install Oracle Application Server 10g Release 2 (10.1.2) into a new Oracle home on the same host as the instance you are upgrading.

This new 10g (10.1.2) Oracle home is referred to as the **destination Oracle home**. The Oracle home for the previous version of Oracle Application Server is referred to as the **source Oracle home**.

The installation type you select during the installation must be compatible with the installation type of the original, source instance that you are upgrading. The source and destination Oracle homes must exist on the same computer and use the same Oracle Internet Directory and Metadata Repository.

4. If you are upgrading a Release 2 (9.0.2) or Release 2 (9.0.3) middle tier, stop the Enterprise Manager Web site in the source Oracle home.

When you run the OracleAS Upgrade Assistant, it will stop all the processes in the source Oracle home and the destination Oracle home, except for the Enterprise Manager Web site in a Release 2 (9.0.2) or Release 2 (9.0.3) source Oracle home.

If the instance you want to upgrade is the only Release 2 (9.0.2) or Release 2 (9.0.3) instance on the host, stop the Enterprise Manager Web site as follows:

```
SOURCE_ORACLE_HOME/bin/emctl stop
```

If you have multiple Release 2 (9.0.2) or Release 2 (9.0.3) instances on the same host, do the following:

- a. Determine which instance hosts the active Enterprise Manager Web site.

The active Enterprise Manager Web site is defined as an entry in the following configuration file:

```
/var/opt/oracle/emtab (Solaris)  
/etc/emtab (on other UNIX platforms)
```

- b.** Stop the active Enterprise Manager Web site as follows:

```
ACTIVE_EM_ORACLE_HOME/bin/emctl stop
```

Enterprise Manager prompts you for the `ias_admin` management password.

- c.** If the instance you want to upgrade contains the active Enterprise Manager Web site, switch the active Oracle Enterprise Manager to another Release 2 (9.0.2) or Release 2 (9.0.3) instance using the following command:

```
ACTIVE_EM_ORACLE_HOME/bin/emctl switch home
```

This command displays a dialog where you can select another Oracle*9i*AS instance that contains the active Oracle Enterprise Manager.

- 5.** Start the OracleAS Upgrade Assistant with the following command:

`DESTINATION_ORACLE_HOME/upgrade/iasua.sh`

6. Welcome screen

Click **Next**.

7. Oracle Homes screen

Select the source Oracle home from the drop-down list and click **Next**.

8. Examining Components dialog screen

Click **OK**.

9. Summary screen

Click **Finish** to start the upgrade processing.

10. Upgrade Succeeded dialog screen

Click **OK**.

11. Refer to the *Oracle Application Server Upgrade and Compatibility Guide* for a summary of the middle-tier post-upgrade tasks required for each component.

## 10.2 Compatibility with Previous Versions

As you begin upgrading your Oracle Application Server environment to 10g (10.1.2), you will encounter various scenarios where you will be running multiple versions of Oracle Application Server.

**Table 3** provides a brief summary of the supported compatibility scenarios for 10g (10.1.2). The shaded rows in the table represent the scenarios that are not supported.

For complete information about compatibility with previous versions, including details about the issues or workarounds mentioned in the compatibility matrix, see the *Oracle Application Server Upgrade and Compatibility Guide*.

**Table 3 Oracle Application Server Compatibility Matrix**

	<b>10.1.2 Middle Tier</b>	<b>10.1.2 OracleAS Identity Management</b>	<b>10.1.2 OracleAS Metadata Repository</b>
<b>9.0.2 and 9.0.3 Middle Tiers</b>	Supported, with workarounds	Supported, with workarounds	Not Supported
<b>9.0.2 OracleAS Identity Management</b>	Supported, with workarounds	Not supported.	Supported, with workarounds
<b>9.0.2 OracleAS Metadata Repository</b>	Supported	Supported, with workarounds.	Supported
<b>9.0.4 Middle Tiers</b>	Supported	Supported	Not Supported
<b>9.0.4 OracleAS Identity Management</b>	Supported	Not supported	Supported
<b>9.0.4 OracleAS Metadata Repository</b>	Supported	Supported, with workarounds	Supported

## 11 Additional Resources

For more information, see these Oracle resources:

- Oracle Application Server Documentation Library CD-ROM
- Oracle Application Server platform-specific documentation on Oracle Application Server Disk 1 CD-ROM

Printed documentation is available for sale in the Oracle Store at <http://oraclestore.oracle.com>.

You can also contact your Oracle representative to purchase printed documentation.

To download free release notes, installation documentation, white papers, or other collateral, visit Oracle Technology Network (OTN). You must register online before using OTN; registration is free and can be done at

<http://www.oracle.com/technology/membership/>.

If you already have a username and password for OTN, then you can go directly to the documentation section of OTN at

<http://www.oracle.com/technology/documentation>.



## 11.1 Oracle Support Services

If you purchased Oracle Product Support, you can call Oracle Support Services for assistance. Oracle Support Services include phone assistance, version updates and access to our service offerings. You have access to phone support 24 hours a day, 7 days a week. In the U.S.A., you can call Product Support at **1-800-223-1711**.

Make sure you have your CSI (CPU Support Identifier) number ready when you call. Keep the CSI number for your records, because it is your key to Oracle Support Services. The Oracle Store sends the CSI number to you in an e-mail alert when it processes your order. If you do not have your CSI number and you are in the U.S.A., you can look up your CSI number by accessing our online Order Tracker which provides detailed order information. Go to the Oracle Store and click on Order Tracker located above the top navigation bar.

For Oracle Support Services locations outside the U.S.A., call your local support center for information on how to access support. To find the local support center in your country, visit the Support Web Center at <http://www.oracle.com/support>.

At the Support Web Center you will find information on Oracle Support Services, such as:

- contact information
- instructions on how to access electronic services
- helpful Web sites
- Support Resources
- Oracle Support Portfolio
- Oracle Support Services news

With Oracle Product Support, you have round-the-clock access to Oracle *MetaLink*, Oracle Support Services premier Web support offering. Oracle *MetaLink* offers you access to installation assistance, product documentation, and a technical solution knowledge base.

It has technical forums, where you can post questions about your Oracle products and receive answers from Oracle Technical Support Analysts and other Oracle users. The questions and answers remain posted for the benefit of all users.

Oracle *MetaLink* options include:

- Technical Assistance Request (TAR) access
- patch downloads
- bug database query access

- product life-cycle information

You can access Oracle*MetaLink* at <http://metalink.oracle.com>.

## 11.2 Version Updates

If you do not have a currently supported license, you can purchase the most recent version of an Oracle product from the Oracle Store at:

<http://oraclestore.oracle.com>

If you do have a currently supported license, you can place non-urgent requests for version update shipments through the iTAR feature on Oracle*MetaLink*. You will need to log the iTAR type as a U.S. Client Relations/Non-Technical Request.

You can also request Version Update shipments in the U.S.A. by calling Client Relations. When requesting a Version Update, provide the following information to the Client Relations Analyst:

- CSI number
- contact information
- platform

- product name
- shipping address
- version number of the product

Outside the U.S.A., call your local Oracle Support Center.

### 11.3 Premium Services

For information on our Premium Services, including onsite support, Oracle*GOLD*, remote services, and upgrade packages, visit the Support Web Center at

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

or call your Support Sales Representative in the U.S.A at **1-800-833-3536**.

### 11.4 Quick Reference

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Resource	Contact Information or Web Site
Purchase additional products, full-use licenses, version updates, and documentation in the U.S.A.	<a href="http://oraclestore.oracle.com">http://oraclestore.oracle.com</a>

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<b>Resource</b>	<b>Contact Information or Web Site</b>
Access technical resources for developers	<a href="http://www.oracle.com/technology">http://www.oracle.com/technology</a>
Access installation documentation	<a href="http://www.oracle.com/technology/documentation">http://www.oracle.com/technology/documentation</a>
Access information about technical support	<a href="http://www.oracle.com/support">http://www.oracle.com/support</a>
Locate local Oracle Support Centers outside the U.S.A.	<a href="http://www.oracle.com/support">http://www.oracle.com/support</a>
Locate local Oracle offices outside the U.S.A	<a href="http://www.oracle.com/global">http://www.oracle.com/global</a>
Call Client Relations in the U.S.A	1-800-223-1711
Speak with your sales representative in the U.S.A.	1-800-ORACLE-1
TTY Access to technical support in the U.S.A.	1-800-446-2398

