

# **Oracle® Application Server**

## Quick Installation Guide

10g Release 2 (10.1.2) for hp Tru64 UNIX

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**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
- Forms and Reports 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, Oracle Application Server Wireless, Oracle Internet Directory, or Oracle Application Server 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**.
- Forms and Reports Developer topology: Intended for developers who want to use OracleAS Personalization, OracleAS Reports Services, or OracleAS Forms Services features, in addition to J2EE and Web Cache and Portal and Wireless features. This topology installs a **Forms and Reports** 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 System Requirements"](#)
- [Section 4.2, "Check Software Requirements"](#)
- [Section 4.3, "Check Kernel Parameters Required by OracleAS Web Cache"](#)
- [Section 4.4, "Check Kernel Parameter Settings Required by OracleAS Metadata Repository"](#)
- [Section 4.5, "Create an Operating System Group for the Inventory Directory"](#)
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- [Section 4.7, "Create an Operating System User"](#)
- [Section 4.8, "Check Environment Variables"](#)
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### 4.1 Check System Requirements

Your computer must meet the following requirements.

## **Operating Systems Supported**

HP Tru64 UNIX V5.1B with Patch Kit 2 or later

## **Other System Requirements**

The following table shows other system requirements.

**Table 1 Minimum System Requirements**

	<b>J2EE and Web Cache</b>	<b>Portal and Wireless</b>	<b>Forms and Reports</b>	<b>OracleAS Infrastructure</b>
Memory (see (1) below)	512 MB	1 GB	1 GB	1 GB
Disk space	1.5 GB	1.2 GB	2.5 GB	3.7 GB (see (2) below)
Space in TEMP directory	400 MB	400 MB	400 MB	400 MB
Swap space	1.5 GB	1.5 GB	1.5 GB	1.5 GB

### Notes:

- (1) If you plan to install OracleAS Infrastructure plus either Forms and Reports or Portal and Wireless on the same computer, you need to have at least 1 GB to 1.3 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 GB of free space.

Complete the following steps to check these requirements:

1. To determine the physical RAM size, enter the following command:

```
# /bin/vmstat -P | grep "Total Physical Memory"
```

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

```
prompt> df -k 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*.

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

```
# /sbin/swapon -s
```

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

## 4.2 Check Software Requirements

Refer to the following section for information on checking the software requirements on hp Tru64 UNIX:

- [Section 4.2.1, "Software Requirements for hp Tru64 UNIX"](#)

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**Note:** Oracle Application Server 10g Release 2 (10.1.2) is certified to run as a 32-bit application.

For the most current list of supported Operating System specific software, for example JDK version, Operating System version, check OracleMetaLink (<http://metalink.oracle.com>)

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**4.2.1 Software Requirements for hp Tru64 UNIX** Complete the following steps before installing Oracle Application Server on hp Tru64 UNIX system:

1. Log in as the `root` user.

2. Check that hp Tru64 UNIX is installed:

```
# /usr/sbin/sizer -v
```

```
Compaq Tru64 UNIX V5.1B (Rev. 2650); Mon Nov 3  
10:13:28 PST 200
```

3. Check that the following Patch Kit is installed:

Tru64 UNIX V5.1B Patch Kit 2 or later

T64V51BB22AS0002-20030415

The following patch kits are also required:

- HP Tru64 UNIX 5.1B PK2 BL22 Fixes for AdvFS Panic in \_OtsMove; and Possible Memory Corruption:

T64KIT0020879-V51BB22-E-20031125

- HP Tru64 UNIX - Problem with IP Multicast Packets:

T64KIT0019662-V51BB22-E-20030818

- HP Tru64 UNIX V5.1B PK2 (BL22) ERP Kit - Fix for Multiple applications may be granted an exclusive lock on the same file:

T64KIT0021665-V51BB22-E-20040220

- Tru64 UNIX V5.1B PK2/BL22 Early Release Patch - Fix for Potential Application Core Dump:

T64KIT0021681-V51BB22-E-20040223

Note: There may be more recent versions of the patches listed installed on the system. If a listed patch is not installed, then determine whether a more recent version is installed before installing the version listed.

4. Check that the following operating system subsets are present:

- OSFCMPLRS
- OSFLIBA
- OSFPGMR
- OSFSER
- OSFX11

5. Check that the following motif package is present:

A special version of Motif 2.1 is required to run Oracle Application Server 10g (10.1.2.0.2). For information on downloading the required version of Motif, refer to:

<http://h18012.www1.hp.com/java/download/unix/1.4.2/index.html>

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**Note:** The location of this download is subject to change. Refer to the Installation, Migration, and Upgrade Issues chapter of the *Oracle Application Server 10g Release Notes for hp Tru64 UNIX* on OTN for the most recent download location.

---

### 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 or Forms and Reports middle tier, the OracleAS Web Cache component is always installed.
- Run the following command to check that the `rlim_fd_max` kernel parameter is set to at least 65536:

```
prompt> ulimit -Hn
```

## 4.4 Check Kernel Parameter Settings Required by OracleAS Metadata Repository

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

Subsystem	Attribute	Recommended Value
ipc	shm_max	4278190080 (4 GB minus 16 MB)
	shm_min	1
	shm_mni	1
	shm_seg	256

Subsystem	Attribute	Recommended Value
	ssm_threshold	Set this attribute to 0 only if the rad_gh_regions[n] or gh_chunks attributes are set in the vm subsystem. Otherwise, do not change the value.
proc	exec_disable_arg_limit	1
	per_proc_stack_size	8388608 (8 MB) <sup>1</sup>
	max_per_proc_stack_size	33554432 (32 MB) <sup>1</sup>
	per_proc_data_size	335544320 (320MB)
	max_per_proc_data_size	335544320 (320MB)

Subsystem	Attribute	Recommended Value
rdg	max_per_proc_address_space	Equal to the size of RAM or 1073741824 (1 GB), whichever is larger.
	per_proc_address_space	Equal to the size of RAM or 1073741824 (1 GB), whichever is larger.
rdg	msg_size	32768
	max_objs	5120
	max_async_req	256

Subsystem	Attribute	Recommended Value
	max_sessions	500 (or at least 20 plus the value of the PROCESSES initialization parameter for all databases on the system, if this value is higher.)
	rdg_max_auto_msg_wires	0
	rdg_auto_msg_wires	0
rt	aio_task_max_num	8193
vfs	fifo_do_adaptive	0
vm	new_wire_method	0

<sup>1</sup> The maximum value supported by Oracle for this parameter is 512 MB.

---

**Note:** If the current value for any kernel subsystem attribute is higher than the value listed in this table, *except* for the attributes with a recommended value of 0, do not change the value of that attribute.

---

To view the current value specified for these kernel subsystem attributes, and to change them if necessary, follow these steps:

1. To view the current values of the subsystem attributes, enter commands similar to the following:

```
# /sbin/sysconfig -q subsystem
```

For example, to view attribute values for the ipc subsystem, enter the following command:

```
# /sbin/sysconfig -q ipc
```

2. If you must change any of the current values, follow these steps:
  - a. Create a backup copy of the /etc/sysconfigtab file, for example:

```
# cp /etc/sysconfigtab /etc/sysconfigtab.orig
```

**b.** Using any text editor, create a file similar to the following, specifying the subsystems and attributes that you want to modify:

```
ipc:
    shm_max = 4278190080
    shm_min = 1
    shm_mni = 256
    shm_seg = 128

proc:
    exec_disable_arg_limit = 1
    per_proc_stack_size = 8388608
    max_per_proc_stack_size = 33554432
    per_proc_data_size = 335544320
    max_per_proc_data_size = 335544320
    max_per_proc_address_space = 4294967296
    per_proc_address_space = 4294967296
```

**c.** Enter a command similar to the following to add the subsystem attributes to the /etc/sysconfigtab file:

```
# /sbin/sysconfigdb -m -f filename
```

In this example, *filename* is the name of the file you created in step b.

- d. Enter the following command to reboot the system:

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

- e. 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
```

The group id of the parent directory of the `ORACLE_HOME` should match the primary group id of the `oracle` user

## 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**

Environment Variable	Set or Unset
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.
TNS_ADMIN	Must not be set.
PATH, CLASSPATH, and LD_LIBRARY_PATH	Must not contain references to directories in any Oracle home directories.
TMP	Optional. If unset, defaults to /tmp.
ORA_NLS33	Must not be set.
LD_BIND_NOW	Must not be set.

**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.

To check whether the disc mounted automatically on hp Tru64 UNIX systems, enter the following command:

```
# ls /mnt/cdrom
```

To check whether the disc mounted automatically on hp Tru64 UNIX systems, enter the following command:

```
# ls /media/cdrom
```

4. Start up the installer where *mountpoint* is `/mnt/cdrom` on hp Tru64 UNIX and `/media/cdrom` on hp Tru64 UNIX Enterprise Server:

---

**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 starts 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. Place the CD-ROM or DVD-ROM in the disc drive.
2. Log in as the `root` user and create a disc mount point directory accessible by all users:

```
% su  
Password:  
# mkdir /cdrom  
# chmod 777 /cdrom
```

3. Mount the disc drive on the disc mount point directory.

For hp Tru64 UNIX systems, enter:

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

4. Exit the root account.

```
# 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. This directory 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 as the root user in a different shell. 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

**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 10g** and click **Next**.

**6. Select Installation Type screen**

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

**7. Product-specific Prerequisite Checks screen**

Check that the system meets the requirements listed on this screen, and click **Next**. A warning is displayed if the system does not meet the requirements. If you need to change a kernel parameter, clicking **Retry** does not allow you to continue. Instead, exit the installer and start the installation again.

**8. Confirm Pre-Installation Requirements screen**

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

**9. Select Configuration Options screen**

Select **Oracle Application Server 10g Web Cache** if you want to use caching capabilities with this Oracle Application Server instance.

Do not select **Oracle Application Server 10g Farm Repository**.

Do not select **Identity Management Access**.

Click **Next**.

**10. Specify Port Configuration Options screen**

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

**11. Specify 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**.

## **12. Summary screen**

Verify your selections and click **Install**. The installer now installs the files.

## **13. 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**.

## **14. Configuration Assistants screen**

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

## **15. End of Installation screen**

Click **Exit** to quit the installer.

## 7 Installing Portal and Wireless or Forms and Reports Developer Topology (includes OracleAS Infrastructure)

These topologies enable you to deploy applications that use components such as OracleAS Portal, Oracle Application Server Wireless, and OracleBI Discoverer.

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

1. OracleAS Infrastructure
2. Portal and Wireless middle tier

To set up the Forms and Reports Developer Topology, you need to install:

1. OracleAS Infrastructure
2. Forms and Reports middle tier

The Portal and Wireless and Forms and Reports middle tiers use 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 or Forms and Reports 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. This directory 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 as the root user in a different shell. 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

**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. Product-specific Prerequisite Checks screen**

Check that the system meets the requirements listed on this screen, and click **Next**. A warning is displayed if the system does not meet the requirements. If you need to change a kernel parameter, clicking **Retry** does not allow you to continue. Instead, exit the installer and start the installation again.

**8. Confirm Pre-Installation Requirements screen**

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

**9. Select Configuration Options screen**

Select **Oracle Internet Directory**.

Select **OracleAS Single Sign-On**.

Select **OracleAS Delegated Administration Service**.

Select **OracleAS Directory Integration and Provisioning**.

Do not select **OracleAS Certificate Authority**.

Do not select **High Availability and Replication**.

Click **Next**.

**10. Specify Port Configuration Options screen**

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

**11. Specify Namespace in Internet Directory screen**

Select **Suggested Namespace** and click **Next**.

**12. 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 (\_), minus (-), and pound (#) characters
- must not be longer than 128 characters

Example: `orcl.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: `orcl`

**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 `orcl.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/orcl`.

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**.

#### **13. Specify Database Schema Passwords screen**

Set the passwords for the administrative database users, which are privileged accounts used for database administration. You can use the same password for all users, or specify different passwords for each user.

Click **Next**.

#### **14. Specify 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.

Example: `welcome99`

Click **Next**.

## **15. Summary screen**

Verify your selections and click **Install**. The installer now installs the files.

## **16. 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**.

**17. Configuration Assistants screen**

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

**18. End of Installation screen**

Click **Exit** to quit the installer.

## **7.2 Install Portal and Wireless or Forms and Reports Middle tier**

The following procedure installs a Portal and Wireless or Forms and Reports 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. This directory 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 as the root user in a different shell. 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

**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 10g** and click **Next**.

**6. Select Installation Type screen**

Select **Portal and Wireless** or **Forms and Reports** and click **Next**.

**7. Product-specific Prerequisite Checks screen**

Check that the system meets the requirements listed on this screen, and click **Next**. A warning is displayed if the system does not meet the requirements. If you need to change a kernel parameter, clicking **Retry** does not allow you to continue. Instead, exit the installer and start the installation again.

**8. Confirm Pre-Installation Requirements screen**

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

**9. Select Configuration Options screen**

For Portal and Wireless, select:

- **Oracle Application Server Portal**
- **Oracle Application Server Wireless**

For Forms and Reports, select:

- **Oracle Application Server Portal**
- **Oracle Application Server Wireless**
- **Oracle Application Server Personalization**
- **Oracle Application Server Reports Services**
- **Oracle Application Server Forms Services**

Click **Next**.

**10. Specify Port Configuration Options screen**

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

**11. 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 OID Login**

**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 14 in [Section 7.1, "Install OracleAS Infrastructure"](#)).

Click **Next**.

**12. Select Oracle Application Server 10g Metadata Repository screen**

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

**13. Provide Outgoing Mail Server Information**

This screen appears only if you selected a Forms and Reports installation.

Enter the name of the outgoing mail (SMTP) server for use by OracleAS Reports Services. You can leave it blank and configure it later. Click **Next**.

**14. Specify 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.

Example: welcome99

Click **Next**.

#### **15. Summary screen**

Verify your selections and click **Install**. The installer now installs the files.

#### **16. 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**.

#### **17. Configuration Assistants screen**

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

## **18. 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 Oracle Application Server 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 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>.

## 10.1 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 *OracleMetaLink*, Oracle Support Services premier Web support offering. *OracleMetaLink* 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.

*OracleMetaLink* 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>.

## 10.2 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.

### 10.3 Premium Services

For information on our Premium Services, including onsite support, OracleGOLD, 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.**

### 10.4 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

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