Oracle® Application Server

Installation Guide

10*g* Release 2 (10.1.2) for Microsoft Windows (64-Bit) on Intel Itanium

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Oracle Application Server Installation Guide 10*g* Release 2 (10.1.2) for Microsoft Windows (64-Bit) on Intel Itanium

Part No. B15847-01

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Preface

The Oracle Application Server Installation Guide covers requirements, new features in the Oracle Universal Installer, Oracle Application Server concepts that affect installation, installation procedures, and troubleshooting tips. In addition, this guide also provides some sample topologies for installing and running Oracle Application Server.

Intended Audience

This book is intended for users who are comfortable running some system administration operations, such as creating users and groups and adding users to groups.

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Structure

This guide contains the following chapters and appendixes:

Chapter 1, "Summary of Installation Steps"
This chapter provides an overview of the installation steps.

Chapter 2, "Requirements"
This chapter lists the requirements for installing and running Oracle Application Server.

Chapter 3, "Things You Should Know Before Starting the Installation"
This chapter provides an overview of Oracle Application Server and its components. Understanding how the components fit together can help you make some installation decisions.

Chapter 4, "Installing Middle Tier"
This chapter describes the Middle Tier installation, which includes the core, and J2EE and Web Cache components.

Chapter 5, "Post-Installation Tasks"
This chapter describes additional setup steps that you should do after installation.

Appendix A, "Silent and Non-Interactive Installation"
This appendix describes how to install Oracle Application Server using response files.

Appendix B, "Default Port Numbers"
This appendix lists the port numbers assigned to components by the installer.

Appendix C, "Ports to Open in Firewalls"
This appendix shows the ports that you have to open in a firewall if you are installing and running Oracle Application Server in such environments.

Appendix D, "Deinstallation and Reinstallation"
This appendix describes how to remove Oracle Application Server from your computer.

Appendix E, "Configuration Assistants"
This appendix describes the configuration assistants run by the installer.

Appendix F, "Troubleshooting"
This appendix describes how to solve problems that might arise during installation and deinstallation.

Related Documents

For additional information, see the following manuals:

- *Oracle Application Server Administrator's Guide*
- *Oracle Application Server Concepts*

Conventions

This guide uses the following conventions:

Convention	Meaning
boldface text	Boldface type in text indicates objects (such as buttons and fields) on screens.
`code`	Text in the code font indicates filenames, commands, or contents of configuration files.
`italicized code`	Italicized code font indicates placeholder text that you need to replace with an appropriate value.
[ ]	Brackets enclose optional clauses from which you can choose one or none.
. . .	Ellipses indicate that extraneous information have been omitted.

1

Summary of Installation Steps

Oracle Application Server is a completely standards-based application server that provides a comprehensive and fully integrated platform for running web sites, J2EE applications, and Web services. This chapter provides an overview of the different installation processes to install Oracle Application Server.

This chapter provides an overview of the steps to install Oracle Application Server. The other chapters in this guide describe the steps in detail.

To install Oracle Application Server:

1. Read Oracle Application Server Release Notes for the most current information.

   You can find the latest version of the release notes on Oracle Technology Network (`http://www.oracle.com/technology/documentation`).

2. Check that the computer where you want to install and run Oracle Application Server meets the requirements. This includes:

   - Section 2.1, "System Requirements"
   - Section 2.2, "Microsoft Windows System Files (wsf.exe)"
   - Section 2.3, "Ports"
   - Section 2.4, "Operating System User"
   - Section 2.5, "Environment Variables"
   - Section 2.6, "Network Topics"
   - Section 2.7, "Prerequisite Checks Performed by the Installer"

3. Read Chapter 3, "Things You Should Know Before Starting the Installation" to understand how the different components of Oracle Application Server work together. This chapter describes what the Oracle Application Server Middle Tier components are, where you can install them, and what values the installer expects on some of the installation screens.

4. Install Oracle Application Server Middle Tier. Follow the procedures in Chapter 4, "Installing Middle Tier".

5. After you install Oracle Application Server, access the Welcome page and perform some basic tasks to ensure that the installation was successful.

2

Requirements

Before installing Oracle Application Server, ensure that your computer meets the requirements described in this chapter. This chapter contains the following sections:

2.1 System Requirements

Table 2–1 lists the system requirements for installing and running Oracle Application Server. The installer checks many of these requirements at the start of the installation process and warns you if any of them is not met. To save time, you can manually check only the ones that are not checked by the installer. Refer to Table 2–1 to see what requirements are not checked by the installer.

You can also run the system checks performed by the installer without doing an installation, by running the `setup.exe` command as shown. The `setup.exe` command is on the Oracle Application Server CD-ROM (Disk 1), or in the `application_server` directory of the DVD-ROM.

CD-ROM (assumes E: is the CD-ROM drive):

```
E:\> setup.exe -executeSysPrereqs
```

DVD-ROM (assumes E: is the DVD-ROM drive):

```
E:\> cd application_server
E:\application_server> setup.exe -executeSysPrereqs
```

The results are displayed on the screen and written to a log file. For more information on the types of checks performed, refer to Section 2.7, "Prerequisite Checks Performed by the Installer".

Table 2–1 System Requirements

Item	Requirement
Operating System	Microsoft Windows Server 2003 Enterprise Edition for 64-bit Intel Itanium 2 systems Microsoft Windows XP 64-bit Edition Version 2003 Microsoft Windows Server 2003 Datacenter Edition for 64-bit Intel Itanium 2 systems Checked by Installer: Yes
Network	You can install Oracle Application Server on a computer that is connected to a network, or on a standalone computer (not connected to the network). If you are installing Oracle Application Server on a standalone computer, then you can connect the computer to a network after installation. To connect it to the network, you have to perform some configuration tasks. For details, refer to *Oracle Application Server Administrator's Guide*. Checked by Installer: No
IP	You can install Oracle Application Server on a computer that uses static IP or DHCP-based IP. Notes: ■ If you are installing on DHCP computers, then refer to Section 2.6.1, "Installing on DHCP Computers" for additional requirements. ■ If you are installing on static IP computers *and* you want to be able to run Oracle Application Server on or off the network, then refer to Section 2.6.5, "Installing on Static IP Computers that You Want to Disconnect from the Network Later" for additional requirements. Checked by Installer: No
Hostname	Ensure that your hostnames are not longer than 255 characters.
Memory	Oracle Application Server Middle Tier: ■ J2EE and Web Cache: 400 MB Notes: ■ The installer checks the amount of memory on your computer and will not let you proceed if the computer does not meet the minimum memory requirement. ■ 400 MB is the minimum memory requirement to install and run Oracle Application Server. For most production sites, you should configure at least 1 GB of physical memory. For sites with substantial traffic, increasing the amount of memory further may improve performance. For Java applications, you should either increase the maximum heap allocated to the OC4J processes or configure additional OC4J processes to utilize this memory. For further details, refer to *Oracle Application Server Performance Guide*. ■ To determine the optimal amount of memory for your installation, the best practice is to load test your site. Resource requirements can vary substantially for different applications and different usage patterns. In addition, some operating system utilities for monitoring memory can overstate memory usage, partially due to the representation of shared memory. The preferred method for determining the memory requirement is to monitor the improvement in performance resulting from the addition of physical memory in your load test. Refer to your platform vendor documentation for information on how to configure memory and processor resources for testing purposes. Checked by Installer: Yes
File system type	NTFS is recommended over FAT32 or FAT file system types because NTFS includes security features such as enforcing permission restrictions on files. Checked by Installer: No
Disk space	Oracle Application Server Middle Tier: ■ J2EE and Web Cache:400 MB Checked by Installer: No

Table 2–1 (Cont.) System Requirements

Item	Requirement
Space in TEMP directory	140 MB. If the TEMP directory does not have enough free space, then you can specify a different directory by setting the TEMP environment variable. For details, refer to Section 2.5.5, "TEMP". Checked by Installer: Yes
Total Pagefile size (Virtual Memory)	The following values are estimates. You should use the values recommended by Microsoft Windows corresponding to the memory on your computer. Oracle Application Server Middle Tier: ■ J2EE and Web Cache: 512 MB In a production environment, Oracle recommends a minimum of 1 GB. To view and change the total pagefile size (virtual memory): 1. Display the System control panel. On Microsoft Windows XP, select **Start**, **Control Panel**, then double-click **System**. On Microsoft Windows 2003, select **Start**, **Control Panel**, and **System**. 2. Click the **Advanced** tab. 3. Click the **Performance Options** button. 4. Click **Change** to review and change the virtual memory setting. Checked by Installer: Yes
Monitor	256 color display Checked by Installer: Yes
Supported browsers	Oracle Enterprise Manager is supported on the following browsers: ■ Microsoft Internet Explorer 5.5, 6.0 (supported on Microsoft Windows only). ■ Microsoft Internet Explorer 6.0.2900.2180.xpsp_sp2_rtm.040803-2158 (supported on Microsoft Windows XP with SP2). This is the version packaged with SP2. ■ Netscape 7.1, 7.2. ■ Mozilla 1.5. You can download Mozilla from `http://www.mozilla.org` Note that Firefox, the standalone Mozilla browser, is currently not certified. ■ Safari 1.2 (supported on Apple Macintosh computers). Checked by Installer: No. However, if you access Oracle Enterprise Manager using a non-supported browser, then you will get a warning message.

2.1.1 Tips for Reducing Memory Usage

To reduce memory consumption:

- Configure only the components that you need.
- After installation, start up only the components that you need. For further details, refer to *Oracle Application Server Administrator's Guide*.
- Run Application Server Control only when you need to administer an instance. In most cases, you do not need Application Server Control running all the time.

2.2 Microsoft Windows System Files (wsf.exe)

Note: Perform this procedure only if prompted by the installer.

Oracle Application Server requires minimum versions of some system files in the Microsoft Windows system directory (typically `C:\Windows\system32`). When you run the installer for Oracle Application Server, the installer checks the Microsoft Windows system files on your computer. If it finds old versions of these files, and the files are in use by other processes, then it prompts you to exit the installer and run `wsf.exe` to install the latest Microsoft Windows system files. (If it finds old versions of the files, but the files are not in use by other processes, then it just replaces the files and you do not have to run `wsf.exe`.)

You can find `wsf.exe` in the same directory as the installer.

To run `wsf.exe`, which you need to do only if prompted by the installer, perform the following steps:

1. Start `wsf.exe`, which starts up Oracle Universal Installer to install the Microsoft Windows system files.

   CD-ROM (assumes E: is the CD-ROM drive):

   ```
   E:\> wsf.exe
   ```

   DVD-ROM (assumes E: is the DVD-ROM drive):

   ```
   E:\> cd application_server
   E:\> wsf.exe
   ```

2. Follow the screens in the installer in the order mentioned in Table 2–2.

Table 2–2 Screens for Installing Microsoft Windows System Files

	Screen	Action
1.	Welcome	Click **Next**.
2.	Specify File Locations	Destination Name: Enter a name for the Oracle home for `wsf.exe`. Destination Path: Enter any full path. The installer installs the files in the respective system directories, regardless of the value you enter in this field. Click **Next**.
3.	Warning: System Reboot Required	If you see this screen, then the installer will restart your computer automatically at the end of this installation to complete the Microsoft Windows system files installation. Save and close applications (other than this installer) that are running on computer. Click **Next**.
4.	Summary	Click **Next** to start installing the Microsoft Windows system files.
5.	End of Installation	Click **Exit** to exit the installer.

3. If the installer displayed the Warning: System Reboot Required screen during installation, then the installer now restarts your computer. If not, then please restart your computer before continuing.

2.3 Ports

Many Oracle Application Server components, such as Oracle HTTP Server, OracleAS Web Cache, and Oracle Enterprise Manager, use ports. You can have the installer assign default port numbers, or specify the port numbers yourself. Further details are discussed in the following topics.

- Section 2.3.1, "About Ephemeral Ports"

2.3.1 About Ephemeral Ports

Problem: Components Cannot Start Up Because of Conflicts with Ephemeral Ports

On rare occasions, Oracle Application Server processes are unable to start up because required ports are not available. Processes may either fail to start up or report that they are unable to bind to ports. The behavior may be transient in that if you try to restart the affected process later, it does start successfully.

The cause of this problem is that by default, Oracle Application Server uses a number of ports that fall into the range of ephemeral ports. Ephemeral ports are usually used on the client ends of client/server TCP/IP connections. Client processes, usually, are unconcerned with the port value being used on the client side. So all TCP/IP implementations allow clients to defer to the operating system the choice of which port value to use for the client side. The operating system selects a port from the ephemeral port range for each client connection of this type.

On the other hand, server processes (for example, Oracle Application Server processes) cannot use ephemeral ports. They must use fixed port values so that clients can always connect to the same server port to communicate with the server.

Port conflicts with ephemeral ports arise when an Oracle Application Server process is configured to use a port in the ephemeral port range. The Oracle Application Server process tries to start up, but discovers that the port that it needs is already in use by a client process (the client received the ephemeral port assignment from the operating system). This client can be any process on the computer capable of communicating through TCP/IP. The Oracle Application Server process fails to start up when the port that it needs is unavailable.

This problem occurs relatively more frequently on Microsoft Windows than on other operating systems because by default Microsoft Windows uses a small range of ports for ephemeral client connections.

Ephemeral Port Range

The ephemeral port range on Microsoft Windows is ports 1024 through 5000, inclusive.

Only the upper end of this range is adjustable in Microsoft Windows. In most other operating systems, the ephemeral range by default is much larger, and the lower and upper bounds of the range are adjustable.

Several of the Application Server processes, including Oracle HTTP Server, OracleAS Web Cache, Oracle Enterprise Manager Application Server Control, and Oracle Application Server Containers for J2EE, use ports in the ephemeral port range. These processes cannot start up if the ports that they need are already in use by clients.

How to Avoid Conflicts with Ephemeral Ports

To avoid conflicts with ephemeral ports, you have the following options:

- Install Oracle Application Server using staticports.ini so that Oracle Application Server components do not use ports within the ephemeral range. In the staticports.ini file, use port numbers less than 1024 or higher than 5000.

For details, refer to Section 2.3.4, "Using Custom Port Numbers (the Static Ports Feature)".

- If you have already installed Oracle Application Server, then you can reconfigure the components to use ports less than 1024 or higher than 5000. Refer to Oracle Application Server Administrator's Guide to learn how to change the current ports used by Application Server processes.
- (This option can be done post-installation.) Modify the ephemeral port range on your computer. Use this option only if you cannot use any of the alternatives mentioned earlier. This option is the least preferred because it makes changes to the Microsoft Windows registry, and it affects all products that you run on the computer.

  This option moves the ephemeral port range to a new location. Before making the change, you must verify that none of the products you are using (Oracle or non-Oracle) on your computer use non-ephemeral ports within the ephemeral port range. In this case, you must relocate them to the new ReservedPorts range (refer to the following paragraph), higher than the new ephemeral range, or less than port 1024.

  To implement this option, perform the following steps:

  – Raise the upper limit of the ephemeral port range to expand the size of the range.

    Set the MaxUserPort value in the registry to at least 13000, but not higher than 65534. MaxUserPort is the upper bound of the ephemeral port range.

    For the detailed procedure, refer to Microsoft Knowledge Base article 196271: http://support.microsoft.com/default.aspx?scid=kb;[LN];196271

  – Reserve a portion of the newly expanded ephemeral port range for use by Oracle Application Server.

    Set the ReservedPorts value in the registry so that ports 1024 through 8000 are reserved for Oracle Application Server. The reserved range incorporates the range of ports normally used by Oracle Application Server.

    For the detailed procedure, refer to Microsoft Knowledge Base article 812873: http://support.microsoft.com/default.aspx?scid=kb;[LN];812873

  – Restart your computer for the changes to take effect.

  After performing the steps, you have the following ranges: ports from 1024 through 8000 are reserved for Oracle Application Server, and ports 8001 through 13000 are the new ephemeral port range (assuming you set the MaxUserPort to 13000). The reserved range incorporates the range of ports normally used by Oracle Application Server, and the ephemeral range has the same size as the original.

2.3.2 Checking If a Port Is in Use

To check if a port is being used, you can run the `netstat` command as follows:

```
C:\> netstat -an | find "portnum"
```

Note that you need double-quotes around the port number.

2.3.3 Using Default Port Numbers

If you want to use default port numbers for components, then you do not have to do anything. Refer to Appendix B, "Default Port Numbers" for a list of default port numbers and ranges. Make sure that at least one port is available in the port range for each component. If the installer is unable to find a free port in the range, then the installation will fail.

Note the following points:

- The installer assigns default ports to components only if the ports are not in use by other applications. If the default port is in use, then the installer tries other ports in the port number range for the component. For example, the default non-SSL port for Oracle HTTP Server for the Middle Tier is port 80. If this port is in use by another application, then the installer assigns a port in the range 7777 through 7877.
- Default ports for Oracle HTTP Server depend on the installation type (Table 2–3). The Middle Tier gets ports 80 and 443 because it is where you would deploy your applications. Requests would be sent to the Middle Tier Oracle HTTP Server or OracleAS Web Cache to access the applications.

  In Table 2–3, the values in parenthesis indicate the ports that the installer will try to assign to Oracle HTTP Server if the default port is already in use.

Table 2–3 Default Ports for Oracle HTTP Server

Installation Type	Default Non-SSL Port	Default SSL Port
OracleAS Infrastructure	7777 (7777 - 7877)	4443 (4443 - 4543)
Middle Tier	80 (7777 - 7877)	443 (4443 - 4543)

- The installer does not check the `services` file to determine if a port is in use.

  The `services` file is located in the `C:\%SystemRoot%\system32\drivers\etc` directory, where *`%SystemRoot%`* is `windows` on Microsoft Windows XP and Microsoft Windows 2003.

2.3.4 Using Custom Port Numbers (the Static Ports Feature)

To instruct the installer to assign custom port numbers for components:

1. Create a file containing the component names and port numbers. Section 2.3.4.1, "Format of the staticports.ini File" describes the file format. This file is typically called the `staticports.ini` file, but you can name it anything you want.
2. In the installer, on the Specify Port Configuration Options screen, select **Manual** and enter the full path to the file.

   If you do not specify the full path to the file, then the installer will not be able to find the file. The installer will then assign default ports for all the components without displaying any warning.

2.3.4.1 Format of the staticports.ini File

The `staticports.ini` file has the following format. Replace *port_num* with the port number that you want to use for the component.

```
# J2EE and Web Cache
Oracle HTTP Server port = port_num
Oracle HTTP Server Listen port = port_num
```

```
Oracle HTTP Server SSL port = port_num
Oracle HTTP Server Listen (SSL) port = port_num
Oracle HTTP Server Diagnostic port = port_num
Java Object Cache port = port_num
Oracle Notification Server Request port = port_num
Oracle Notification Server Local port = port_num
Oracle Notification Server Remote port = port_num
Application Server Control port = port_num
Application Server Control RMI port = port_num
Enterprise Manager Agent port = port_num
Web Cache HTTP Listen port = port_num
Web Cache HTTP Listen (SSL) port = port_num
Web Cache Administration port = port_num
Web Cache Invalidation port = port_num
Web Cache Statistics port = port_num
Log Loader port = port_num
```

The easiest way to create the file is to use the `staticports.ini` file on the CD-ROM (Disk 1) or DVD-ROM as a template:

1. Copy the `staticports.ini` file from the CD-ROM or DVD-ROM to the computer.
2. Edit the local copy (the file on the hard disk) to include the desired port numbers.

   You do not need to specify port numbers for all components in the `staticports.ini` file. If a component is not listed in the file, then the installer uses the default port number for that component.

   The following example sets the Application Server Control port and some OracleAS Web Cache ports. For components not specified, the installer will assign default port numbers.

   ```
   Application Server Control port = 2000
   Web Cache Administration port = 2001
   Web Cache Invalidation port = 2002
   Web Cache Statistics port = 2003
   ```

   When installation is complete, you can check the *ORACLE_HOME*`\install\portlist.ini` file to see the assigned ports.

The installer verifies that the ports specified in the file are available by checking memory. Only ports that are being used by running processes are detected. The configuration files are not checked to determine which ports an application is using.

The installer will not assign a port that is not available. If the installer detects that a specified port is not available, then it displays an alert. To fix this:

1. Edit the `staticports.ini` file to specify a different port, or shut down the application that is using the port.
2. Click **Retry**. The installer re-reads the `staticports.ini` file and verifies the entries in the file again.

Using portlist.ini as the staticports.ini File

The `staticports.ini` file uses the same format as the *ORACLE_HOME*`\install\portlist.ini` file, which is created after an Oracle Application Server installation. If you have installed Oracle Application Server and you want to use the same port numbers in another installation, then you can use the `portlist.ini` file from the first installation as the `staticports.ini` file for subsequent installations.

2.3.4.2 Error Conditions that Will Cause the Installer to Use Default Ports Instead of Specified Ports

Check your `staticports.ini` file carefully because a mistake can cause the installer to use default ports without displaying any warning. Following are some things that you should check:

- If you specify the same port for more than one component, then the installer will use the specified port for the first component only. For the other components, it will use default ports. The installer does not display a warning if you have specified the same port for multiple components.
- If you have syntax errors in the `staticports.ini` file (for example, if you omitted the = character for a line), then the installer ignores the line. For the components specified on such lines, the installer assigns default ports. The installer does not display a warning for lines with syntax errors.
- If you misspell a component name, then the installer assigns the default port for the component. Names of components in the file are case sensitive. The installer does not display a warning for lines with unrecognized names.
- If you specify a non-numeric value for the port number, then the installer ignores the line and assigns the default port number for the component. The installer does not display a warning for lines with non-numeric values.
- If you specify a relative path to the `staticports.ini` file, then the installer will not find the file. The installer continues without displaying a warning and it will assign default ports to all components. You must specify a full path to the `staticports.ini` file.

2.3.4.3 Ports for Oracle HTTP Server and OracleAS Web Cache

Be sure you understand the following when setting ports for these components.

In the `httpd.conf` file for Oracle HTTP Server, the `Port` and `Listen` directives specify the ports used by OracleAS Web Cache and Oracle HTTP Server respectively. The correct lines in the `staticports.ini` file for setting these ports depend on which components you are configuring.

To Configure OracleAS Web Cache and Oracle HTTP Server

1. Set the port for OracleAS Web Cache.

   OracleAS Web Cache uses the port specified by the `Port` directive (Figure 2–1). To set this port, use the following line in the `staticports.ini` file:

   ```
   Web Cache HTTP Listen port = port_number
   ```

   To configure the SSL port for OracleAS Web Cache, use the following line:

   ```
   Web Cache HTTP Listen (SSL) port = port_number
   ```

   You cannot set the port number using the `Oracle HTTP Server port` line in this case. If your `staticports.ini` file contains both `Oracle HTTP Server port` and `Web Cache HTTP Listen port`, then the `Oracle HTTP Server port` line is ignored. For example, if you have the following lines in the `staticports.ini` file:

   ```
   Web Cache HTTP Listen port = 7979
   Oracle HTTP Server port = 8080
   ```

   then the `Port` directive would be set to 7979.

2. Set the port for Oracle HTTP Server.

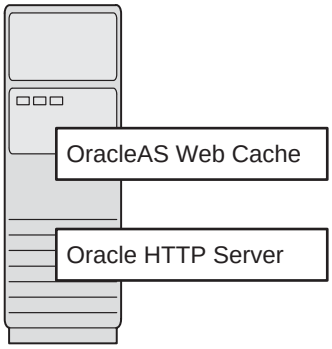
   Oracle HTTP Server uses the port specified by the `Listen` directive. To set this port, use the following line in the `staticports.ini` file:

   ```
   Oracle HTTP Server Listen port = port_number
   ```

   To configure the SSL Listen port, use the following line:

   ```
   Oracle HTTP Server Listen (SSL) port = port_number
   ```

Figure 2–1 Configuring Both OracleAS Web Cache and Oracle HTTP Server



Uses this directive in the httpd.conf file	Line in staticports.ini to set the value for the directive
`Port`	`Web Cache HTTP Listen port`
`Listen`	`Oracle HTTP Server Listen port`

To Configure Oracle HTTP Server Without OracleAS Web Cache

If you are configuring Oracle HTTP Server only, then Oracle HTTP Server uses both `Port` and `Listen` directives (Figure 2–2). In this case, you must set both directives to use the same port number.

To set these ports, use the `Oracle HTTP Server port` and `Oracle HTTP Server Listen port` lines in the `staticports.ini` file. For example:

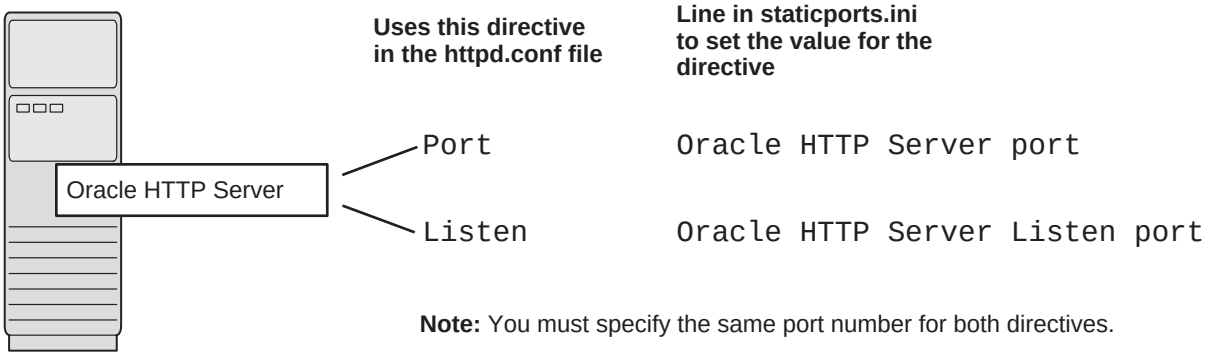
```
Oracle HTTP Server port = 8080
Oracle HTTP Server Listen port = 8080
```

To set the SSL version of these ports, use the following lines. As in the non-SSL version, the port numbers must be the same.

```
Oracle HTTP Server SSL port = 443
Oracle HTTP Server Listen (SSL) port = 443
```

If you also specify the Web Cache lines in `staticports.ini`, then they will be ignored because you are not configuring OracleAS Web Cache.

Figure 2–2 Configuring Only Oracle HTTP Server



2.4 Operating System User

The operating system user performing the installation must belong to the Administrators group.

> **Note:** The user must be listed directly in the Administrators group. The user cannot belong to the Administrators group indirectly (for example, by being a member of a group that is part of the Administrators group).

Perform the following steps to check if you belong to the Administrators group:

1. Display the Computer Management dialog box.

   On Microsoft Windows XP: Right-click **My Computer** on the desktop, and select **Manage**.

   On Microsoft Windows 2003: Right-click the local computer icon on the desktop, and select **Manage**.

2. On the left pane, expand **Local Users and Groups**, and select **Users**.
3. On the right pane, right-click the user and select **Properties**. This displays the Properties dialog box.
4. In the Properties dialog box, click the **Member Of** tab.

If you are not a member of the Administrators group, then get an administrator to add you to the group or log in as a user who is a member of the Administrators group.

2.5 Environment Variables

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

Table 2–4 summarizes whether you set or unset an environment variable.

Table 2–4 Environment Variable Summary

Environment variable	Set or Unset
ORACLE_HOME and ORACLE_SID	Must not be set.
PATH	Must not be longer than 1023 characters.

Table 2–4 (Cont.) Environment Variable Summary

Environment variable	Set or Unset
TNS_ADMIN	Must not be set.
TNS_ADMIN	Optional. If not set, then defaults to `C:\temp`

2.5.1 How to Set Environment Variables

This section describes how to set environment variables in Microsoft Windows:

1. Display the System control panel.

   On Microsoft Windows 2003: Select **Start**, **Control Panel**, **System**.

   On Microsoft Windows XP: Select **Start**, **Control Panel**, then double-click **System**.
2. Click the **Advanced** tab.
3. Click **Environment Variables**.
4. To change the value of a variable, select the variable and click **Edit**.

2.5.2 ORACLE_HOME and ORACLE_SID

These environment variables must not be set.

2.5.3 PATH

The PATH environment variable cannot be longer than 1023 characters. Otherwise, the installation may fail.

2.5.4 TNS_ADMIN

Ensure that the TNS_ADMIN environment variable is not set when you run the installer. If set, then it can cause errors during installation.

2.5.5 TEMP

During installation, the installer needs to write temporary files to a temporary directory. By default, `C:\temp` is the temporary directory.

If you want the installer to use a directory other than `/tmpC:\temp`, then set the `TEMP` environment variable to the full path of an alternate directory. This directory must meet the requirements listed in Table 2–1.

If you do not set this environment variable, and the default directory does not have enough space, then the installer displays an error message that says the environment variable is not set. You can either set the environment variable to point to a different directory or free up enough space in the default directory. In either case, you have to restart the installation.

2.6 Network Topics

Typically, the computer on which you want to install Oracle Application Server is connected to the network, has local storage to contain the Oracle Application Server installation, has a display monitor, and has a CD-ROM or DVD-ROM drive.

This section describes how to install Oracle Application Server on computers that do not meet the typical scenario. It covers the following cases:

2.6.1 Installing on DHCP Computers

Note the following limitation when running Oracle Application Server on DHCP computers: Oracle Application Server instances on DHCP computers cannot communicate with other instances running on other computers. All the instances that need to communicate with each other need to run on the same computer. There are no limitations on clients. Clients from other computers can access the instances running on the DHCP computer, as long as the client computer can resolve the DHCP computer on the network.

Before installing Oracle Application Server on a DHCP computer, perform the following steps:

1. Install a loopback adapter on the DHCP computer.

   When you install a loopback adapter, it assigns a local IP for your computer. Having a loopback adapter and a local IP address means that you do not have to run the `chgiphost` script after installation each time the IP address changes (due to DHCP).

   Which Is the Primary Network Adapter?

   Microsoft Windows considers loopback adapters as a type of network adapter. After installing a loopback adapter on your computer, your computer has at least two network adapters: the primary network adapter and the loopback adapter.

   To install a loopback adapter on a different Microsoft Windows platforms, refer to Section 2.6.6, "Installing a Loopback Adapter".

2. Ping each computer where you plan to install Oracle Application Server.

   - Ping the computer from itself, using only the hostname and using the fully qualified name.

     For example, if you installed a loopback adapter on a computer called `mycomputer`, then check the following:

```
prompt> ping mycomputer                 Ping itself using just the hostname.
Reply from 10.10.10.10                     Returns loopback adapter IP.
prompt> ping mycomputer.mydomain.com    Ping using a fully qualified name.
Reply from 10.10.10.10                     Returns loopback adapter IP.
```

Note: When you ping a computer from itself, the `ping` command should return the IP of the loopback adapter. It should not return the network IP of the computer.

- Ping the computer from other computers on the network, using only the hostname and using the fully qualified name.

  In this case, the `ping` command returns the network IP of the computer.

```
prompt> ping mycomputer                 Ping using the hostname.
Reply from 139.185.140.166                 Returns network IP.
prompt> ping mycomputer.mydomain.com    Ping using a fully qualified name.
Reply from 139.185.140.166                 Returns network IP.
```

If `ping` fails, then consult your network administrator.

2.6.2 Installing on Multihomed (Multi-IP) Computers

A multihomed computer is associated with multiple IP addresses. This is typically achieved by multiple network cards on the computer. Each IP address is associated with a hostname, and in addition, you can set up aliases for the hostname.

When you install Oracle Application Server on a multihomed computer, the installer configures Oracle Application Server to use the hostname/IP address on the primary network adapter.

Clients must be able to access the computer using this hostname (or aliases for this hostname). To check, ping the hostname from the client computers using the short name (hostname only) and the full name (hostname.domainname). Both must work.

For details on how Microsoft Windows determines the primary network adapter, refer to "Which Is the Primary Network Adapter?".

If you want to use a network adapter that is not the primary adapter, then start up the installer with the `OUI_HOSTNAME` command-line parameter. Specify the hostname that you want to use in the parameter. For example:

CD-ROM (assumes E: is the CD-ROM drive):

```
E:\> setup.exe OUI_HOSTNAME=myserver.mydomain.com
```

2.6.3 Installing on Computers with Multiple Aliases

A computer with multiple aliases refers to a computer registered with the naming service under a single IP but with multiple aliases. The naming service resolves any of those aliases to the same computer.

Before installing Oracle Application Server on such computers, you must do the following:

- Install a loopback adapter on the computer
- Ensure the loopback adapter is the primary network adapter

The loopback adapter ensures that when Oracle Application Server queries for the hostname, it always gets the same name (because the queries are done locally). Without the loopback adapter, the queries can return any of the aliases for the computer (because the queries get the response from the naming service).

To learn how Microsoft Windows determines which adapter is the primary adapter, refer to "Which Is the Primary Network Adapter?" on page 2-13.

For steps on how to install a loopback adapter, refer to Section 2.6.6, "Installing a Loopback Adapter".

2.6.4 Installing on Non-Networked Computers

You can install Oracle Application Server on a non-networked computer, such as a laptop. Because a non-networked computer has no access to other computers, you have to install all the components that you need on the computer.

Note that to install Oracle Application Server on a non-networked computer, the computer must, however, have networking capabilities. Non-networked means that the computer is not connected to a network.

If you want to install Oracle Application Server on a non-networked computer, and you never want to connect the computer to a network after installation, then you can install Oracle Application Server on your non-networked computer.

However, if you plan to connect the computer to a network after installation, then perform the following steps before you install Oracle Application Server on the non-networked computer:

1. Install a loopback adapter on the computer. Refer to Section 2.6.6, "Installing a Loopback Adapter".

   The loopback adapter and local IP address simulate a networked computer. If you connect the computer to the network, then Oracle Application Server still uses the local IP and hostname.

2. Ping the computer from itself, using only the hostname and using the fully qualified name.

   For example, if you installed a loopback adapter on a computer called `mycomputer`, then check the following:

```
prompt> ping mycomputer                 Ping itself using just the hostname.
Reply from 10.10.10.10                     Returns loopback adapter IP.
prompt> ping mycomputer.mydomain.com    Ping using a fully qualified name.
Reply from 10.10.10.10                     Returns loopback adapter IP.
```

   Note: When you ping a computer from itself, the `ping` command should return the IP of the loopback adapter.

   If `ping` fails, then you need to consult your network administrator.

Connecting the Computer to a Network After Installation

If you connect the computer to a network after installation, then your Oracle Application Server instance on your computer can work with other instances on the network. Recall that you must have installed a loopback adapter on your computer. Your computer can use a static IP or DHCP, depending on the network to which you are connected.

For details, refer to Oracle Application Server Administrator's Guide.

2.6.5 Installing on Static IP Computers that You Want to Disconnect from the Network Later

If you plan to install Oracle Application Server on a networked computer with static IP and you want to be able to run Oracle Application Server when you disconnect the computer from the network, then you need to do the following steps before installing Oracle Application Server:

1. Install a loopback adapter on your computer. For details, refer to Section 2.6.6, "Installing a Loopback Adapter".

   Without a loopback adapter, Oracle Application Server cannot function correctly when you disconnect the computer from the network because the static IP is no longer available.

2. Ensure the loopback adapter is the primary network adapter. Refer to "Which Is the Primary Network Adapter?" on page 2-13. To check, `ping` the computer from itself using only the hostname, and only the fully qualified name.

   For example, if you installed a loopback adapter on a computer called `mycomputer`, then you can run the following commands:

   ```
   prompt> ping mycomputer                 Ping itself using just the hostname.
   Reply from 10.10.10.10                     Returns loopback adapter IP.
   prompt> ping mycomputer.mydomain.com    Ping using a fully qualified name.
   Reply from 10.10.10.10                     Returns loopback adapter IP.
   ```

   When you ping a computer from itself, the `ping` command should return the IP of the loopback adapter. It should not return the network IP of the computer.

These steps are required regardless of whether the computer is using static IP or DHCP. If this is a DHCP computer, refer to Section 2.6.1, "Installing on DHCP Computers".

2.6.6 Installing a Loopback Adapter

A loopback adapter is required in any of the following scenarios:

- Installing on a DHCP computer (refer to Section 2.6.1, "Installing on DHCP Computers").
- Installing on a non-networked computer and plan to connect the computer to a network after installation (refer to Section 2.6.4, "Installing on Non-Networked Computers").
- Installing on a computer with multiple aliases (refer to Section 2.6.3, "Installing on Computers with Multiple Aliases").
- Installing on a networked computer (with static IP or DHCP), but you want to be able to run Oracle Application Server when you take the computer off the network.

The procedure for installing a loopback adapter depends on the version of Microsoft Windows. The following sections explain the requirements:

- Section 2.6.6.1, "Checking If a Loopback Adapter Is Installed on Your Computer"
- Section 2.6.6.2, "Installing a Loopback Adapter on Microsoft Windows 2003 or Microsoft Windows XP"
- Section 2.6.6.3, "Checking the Hostname"

- Section 2.6.6.4, "Removing a Loopback Adapter on Microsoft Windows 2003 or Microsoft Windows XP"

2.6.6.1 Checking If a Loopback Adapter Is Installed on Your Computer

To check if a loopback adapter is installed on your computer, run the `ipconfig /all` command:

```
prompt> ipconfig /all
```

If there is a loopback adapter installed, you would see a section that lists the values for the loopback adapter. For example:

```
Ethernet adapter Local Area Connection 2:
  Connection-specific DNS Suffix  . :
  Description . . . . . . . . . . . : Microsoft Loopback Adapter
  Physical Address. . . . . . . . . : 02-00-4C-4F-4F-50
  DHCP Enabled. . . . . . . . . . . : Yes
  Autoconfiguration Enabled . . . . : Yes
  Autoconfiguration IP Address. . . : 169.254.25.129
  Subnet Mask . . . . . . . . . . . : 255.255.0.0
```

2.6.6.2 Installing a Loopback Adapter on Microsoft Windows 2003 or Microsoft Windows XP

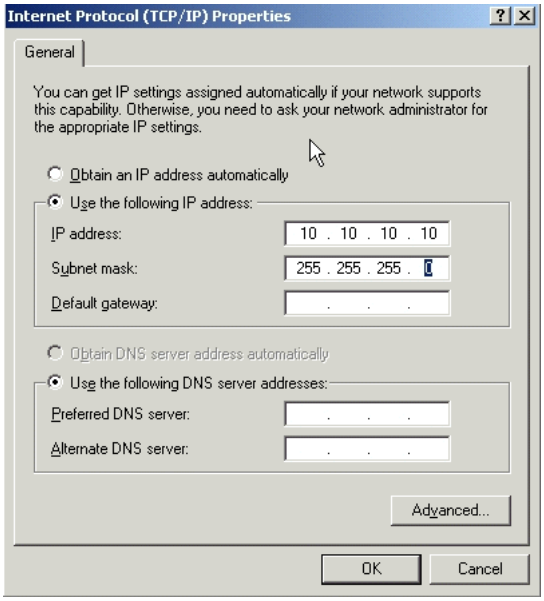
To install a loopback adapter on Microsoft Windows 2003 or Microsoft Windows XP:

1. Select **Start**, **Control Panel**.
2. Double-click **Add Hardware**. This starts up the Add Hardware wizard.
3. In the Welcome screen, click **Next**.
4. Select **Yes, I have already connected the hardware**, and click **Next**.
5. Select **Add a new hardware device**, and click **Next**.
6. Select **Install the hardware that I manually select from a list**, and click **Next**.
7. Select **Network adapters**, and click **Next**.
8. From the Manufacturer list, select **Microsoft**.

   From the **Network Adapter** list, select **Microsoft Loopback Adapter**.

   Click **Next**.
9. The wizard is ready to install your hardware. Click **Next**.
10. Click **Finish** to complete the Add Hardware wizard.
11. If you are a Microsoft Windows 2003 user, then you must restart your computer.
12. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections control panel.
13. Right-click the connection that was just created. This is usually Local Area Connection 2. Choose **Properties**.
14. On the **General** tab, select **Internet Protocol (TCP/IP)**, and click **Properties**.

Figure 2–3 Internet Protocol (TCP/IP) Properties Dialog Box Showing Values for the Loopback Adapter



15. In the Properties dialog box (Figure 2–3), enter the following values:

    IP Address: Enter a non-routable IP for the loopback adapter. The following non-routable addresses are recommended:

    - 192.168.*x*.*x* (*x* is any value between 1 and 255)
    - 10.10.10.10

    Subnet mask: Enter `255.255.255.0`

    Leave all other fields empty.

    Click **OK**.

16. Click **OK** in the Local Area Connection 2 Properties dialog box.

17. Restart the computer.

18. Add a line to the file, `C:\windows\system32\drivers\etc\hosts`, with the following format:

    ```
    IP_address   hostname.domainname   hostname
    ```

    This line should come after the `localhost` line in the file.

    Replace *IP_address* with the non-routable IP address you entered in step 15.

    Replace *hostname* and *domainname* with the appropriate values.

    Example:

    ```
    10.10.10.10   mycomputer.mydomain.com   mycomputer
    ```

19. Check the network configuration:

    a. Select **Start**, **Control Panel**. Double-click **System**, and click the **Computer Name** tab. In **Full computer name**, make sure you see the hostname and the domain name.

b. Click **Change**. In **Computer name**, you should see the hostname, and in **Full computer name**, you should see the hostname and domain name (Figure 2–5).

c. Click **More**. In **Primary DNS suffix of this computer**, you should see the domain name.

2.6.6.3 Checking the Hostname

If your DHCP server also assigns the hostname for your computer (in addition to assigning an IP address), then the installer might use this hostname instead of the hostname you defined locally.

To ensure that the installer uses the local hostname, you have two options:

- Option 1: Start up the installer with the `OUI_HOSTNAME` parameter. This parameter specifies the hostname that you want to use.

  ```
  E:\> setup.exe OUI_HOSTNAME=myhostname.mydomain.com
  ```

- Option 2: Before running the installer, add a line to the `C:\windows\system32\drivers\etc\hosts` file with the following format:

  ```
  IP_address   hostname.domainname   hostname
  ```

  This line should come after the `localhost` line in the file.

  Replace `IP_address` with the loopback adapter's IP address. This should be a non-routable IP address.

  Replace `hostname` and `domainname` with the appropriate values.

  Example:

  ```
  10.10.10.10   mycomputer.mydomain.com   mycomputer
  ```

If you have already installed Oracle Application Server, then you can change the hostname after installation using the Change IP/Hostname procedures documented in *Oracle Application Server Administrator's Guide*.

2.6.6.4 Removing a Loopback Adapter on Microsoft Windows 2003 or Microsoft Windows XP

To remove a loopback adapter on Microsoft Windows 2003 or Microsoft Windows XP:

1. Display the System control panel.

   Microsoft Windows 2003: Select **Start**, **Control Panel**, **System**.

   Microsoft Windows XP: Select **Start**, **Control Panel**, then double-click **System**.

2. In the **Hardware** tab, click **Device Manager**.

3. In the Device Manager window, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.

4. Right-click **Microsoft Loopback Adapter** and select **Uninstall**.

2.6.7 Copying CD-ROMs or DVD-ROM to Hard Drive and Installing from the Hard Drive

Instead of installing from the Oracle Application Server CD-ROMs or DVD-ROM, you can copy the contents of the CD-ROMs or DVD-ROM to a hard drive and install from there. This might be easier if you plan to install many instances of Oracle Application Server on your network, or if the computers where you want to install Oracle Application Server do not have CD-ROM or DVD-ROM drives.

You can also install from remote CD-ROM or DVD-ROM drives. For details, refer to Section 2.6.8, "Installing from a Remote CD-ROM or DVD-ROM Drive".

When you install from the hard drive, the installer does not prompt you to swap CD-ROMs. It can find all the files if they are in the proper locations (refer to Figure 2–4).

Accessing the Hard Drive from Other Computers

If you want to install Oracle Application Server on remote computers from the hard drive where you copied the contents of the CD-ROM or DVD-ROM, then you have to do the following steps:

1. On the local computer, share the hard drive.
2. On the computers where you want to install Oracle Application Server, map to the shared hard drive.
3. Run the installer from the remote computers where you want to install Oracle Application Server.

   Note that you have to use the drive letter for the mapped drive to access the installer (for example, `H:\appserver10_1_2\setup.exe`).

   You cannot use the universal naming convention (UNC) syntax (*hostname**sharename*) to access the installer.

Space Requirement

Ensure that the hard drive contains enough space to hold the contents of the CD-ROMs or the `application_server` directory on the DVD-ROM. Each CD-ROM contains approximately 650 MB. This means that if you are copying three CD-ROMs, you need approximately 1.9 GB of disk space.

On the DVD-ROM, the `application_server` directory is approximately 1.6 GB.

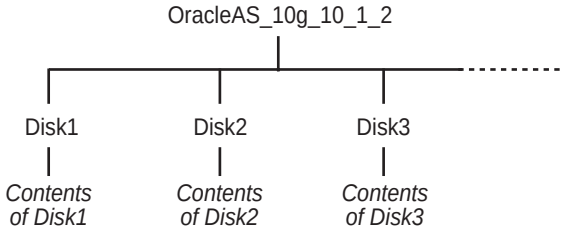
This space is in addition to the space required for installing Oracle Application Server (listed in Table 2–1).

To Copy the CD-ROMs:

1. Create a directory structure on your hard drive as shown in Figure 2–4.

   You need to create a parent directory (called `OracleAS_10g_10_1_2` in the example, but you can name it anything you like), and, under the parent directory, create subdirectories called `Disk1`, `Disk2`, and so on. The names of the subdirectories must be `Disk`*`N`*, where *`N`* is the CD-ROM number.

Figure 2–4 Directory Structure for Copying CD-ROMs to Disk



2. Copy the contents of each CD-ROM into the corresponding directory.

   You can copy the files using Microsoft Windows Explorer or the command line. If you are using the command line, then you can use the `xcopy` command.

The following example assumes `E:` is the CD-ROM drive, and `C:\OracleAS_10g_10_1_2\Disk`*N* are the directories to which you want to copy the CD-ROMs.

```
E:\> xcopy /e /i  E:\1012disk1  C:\OracleAS_10g_10_1_2\Disk1
E:\> xcopy /e /i  E:\1012disk2  C:\OracleAS_10g_10_1_2\Disk2
... Repeat for each CD-ROM.
```

To run the installer from the copied files, invoke the `setup.exe` executable from the `Disk1` directory. Run it from the computer that will be running Oracle Application Server.

```
C:\> cd OracleAS_10g_10_1_2\Disk1
C:\OracleAS_10g_10_1_2\Disk1> setup.exe
```

To Copy the application_server Directory from the DVD-ROM

You can copy the `application_server` directory using Microsoft Windows Explorer or the command line. If you are using the command line, then perform the following steps:

1. (optional) Create a directory to contain the `application_server` directory.
2. Copy the `application_server` directory from the DVD-ROM to your hard disk.

   The example assumes E: is the DVD-ROM drive, and `C:\application_server` is the destination directory:

   ```
   E:\> xcopy /e /i  E:\application_server  C:\application_server
   ```

To run the installer from the copied files, invoke the `setup.exe` executable from the computer that will be running Oracle Application Server.

```
C:\> cd application_server
C:\application_server> setup.exe
```

2.6.8 Installing from a Remote CD-ROM or DVD-ROM Drive

If the computer where you want to install Oracle Application Server does not have a CD-ROM or DVD-ROM drive, then you can perform the installation from a remote CD-ROM or DVD-ROM drive. Check that you have performed the following steps.

On the Remote Computer, Share the CD-ROM or DVD-ROM Drive

The remote CD-ROM or DVD-ROM drive that you want to use must allow shared access. To set this up, perform the following steps on the remote computer (which has the CD-ROM or DVD-ROM drive):

1. Log in to the remote computer as an Administrator user.
2. Start up Microsoft Windows Explorer.
3. Right-click the CD-ROM or DVD-ROM drive letter and choose **Sharing and Security** (Microsoft Windows 2003, Microsoft Windows XP).
4. In the **Sharing** tab (Refer to Figure 2–5):

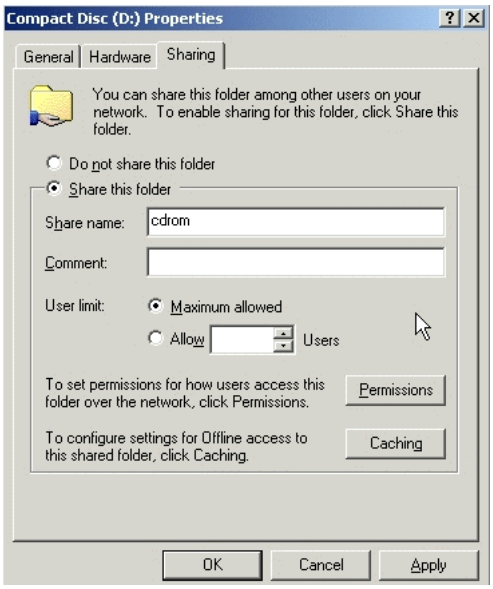
   Select **Share this folder**.

Share name: Give it a share name such as `cdrom` or `dvd`. You will use this name when you map the CD-ROM or DVD-ROM drive on the local computer. Refer to Step d on page 2-22.

Click **Permissions**. You need at least read permission for the user who will be accessing it to install Oracle Application Server.

Click **OK** when done.

Figure 2–5 Sharing a CD-ROM Drive



5. CD-ROM: Insert Oracle Application Server Disk 1 into the CD-ROM drive.

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

On the Local Computer, Map the CD-ROM or DVD-ROM Drive

Perform the following steps on the local computer to map the CD-ROM or DVD-ROM drive and to run the installer:

1. Map the remote CD-ROM or DVD-ROM drive.
   a. Start up Microsoft Windows Explorer on the local computer.
   b. Select **Tools**, **Map Network Drive**. This displays the Map Network Drive dialog box.
   c. Select a drive letter to use for the remote CD-ROM or DVD-ROM drive.
   d. In **Folder**, enter the location of the remote CD-ROM or DVD-ROM drive using the following format:

      `\\remote_hostname\share_name`

      Replace *remote_hostname* with the name of the remote computer with the CD-ROM or DVD-ROM drive.

      Replace *share_name* with the share name that you entered in step 4 on page 2-21.

      Example: `\\computer2\cdrom`

e. Windows 2003, Windows XP: To connect to the remote computer as a different user, click **different user name**, and enter the username.

f. Click **Finish** (Windows 2003, Windows XP).

2. Run the installer from the mapped CD-ROM or DVD-ROM drive.

   When the installer prompts you to switch CD-ROMs, eject the CD-ROM and insert the requested CD-ROM.

> **Note:** The installer must be running when you are switching CD-ROMs. Do **not** exit the installer when switching CD-ROMs. If you exit the installer, then it will be unable to continue from where it left off. In addition, the partial installation that it created is not usable, and may need to be removed manually.

2.6.9 Installing on Remote Computers Through Remote Control Software

If you want to install and run Oracle Application Server on a remote computer (that is, if the remote computer has the hard drive and will run Oracle Application Server components), but you do not have physical access to the computer, then you can do it if it is running remote control software such as VNC or Symantec pcAnywhere. You also need the remote control software running on your local computer.

You can install Oracle Application Server on the remote computer in one of two ways:

- If you have copied the contents of the Oracle Application Server CD-ROM or DVD-ROM to a hard drive, then you can install from the hard drive.
- You can insert the CD-ROM or DVD-ROM into a drive on your local computer, and install from the CD-ROM or DVD-ROM.

Installing from a Hard Drive

If you have copied the contents of the Oracle Application Server CD-ROM or DVD-ROM to a hard drive, then you can install from the hard drive.

Perform the following steps:

1. Make sure that the remote control software is installed and running on both the remote and local computers.
2. Share the hard drive that contains the Oracle Application Server CD-ROM or DVD-ROM.
3. On the remote computer, map a drive letter to the shared hard drive. You would use the remote control software to do this on the remote computer.
4. Through the remote control software, run the installer on the remote computer. You access the installer from the shared hard drive.

Installing from a Remote CD-ROM or DVD-ROM Drive

You can insert the CD-ROM or DVD-ROM into a drive on your local computer, and install from the CD-ROM or DVD-ROM. This is similar to the scenario described in Section 2.6.8, "Installing from a Remote CD-ROM or DVD-ROM Drive".

Perform the following steps:

1. Make sure that the remote control software is installed and running on both the remote and local computers.
2. On the local computer, share the CD-ROM or DVD-ROM drive.

On the remote computer, map a drive letter to the shared CD-ROM or DVD-ROM drive. You would use the remote control software to do this on the remote computer.

These steps are described in Section 2.6.8, "Installing from a Remote CD-ROM or DVD-ROM Drive".

3. Through the remote control software, run the installer on the remote computer. You access the installer from the shared CD-ROM or DVD-ROM drive.

2.7 Prerequisite Checks Performed by the Installer

Table 2–5 lists the checks performed by the installer:

Table 2–5 Prerequisite Checks Performed by the Installer

Item	Description
User	The installer checks that the user has administrative privileges.
Monitor	The installer checks that the monitor is configured to display at least 256 colors.
Operating System version	Refer to Table 2–1 for supported versions.
Microsoft Windows service pack	Refer to Table 2–1 for supported service packs.
Memory	Refer to Table 2–1 for recommended values.
Total pagefile (virtual memory) size	Refer to Table 2–1 for recommended values.
Space in TEMP directory	Refer to Table 2–1 for recommended values.
Instance name	The installer checks that the computer on which you are installing Oracle Application Server does not already have an instance of the same name.
Oracle home directory name	The installer checks that the Oracle home directory name does not contain any spaces.
Path to the Oracle home directory	The installer checks that the path to the Oracle home directory is not longer than 127 characters.
Oracle home directory contents	The installer checks that the Oracle home directory does not contain any files that might interfere with the installation.
Oracle home directory	You should install Oracle Application Server in a new directory.
Port 1521	The installer displays a warning if port 1521 is in use by any application, including database listeners of any version. You need to stop the application that is using port 1521, then click **OK** in the warning dialog box. If another application is using port 1521, then you need to stop it or configure it to use a different port. Alternatively, you can change the database listener to use a port other than 1521, but you can do this only after installation. Refer to Oracle Application Server Administrator's Guide for details.
Static port conflicts	The installer checks the ports listed in the `staticports.ini` file, if specified. Refer to Section 2.3, "Ports".

Table 2–5 (Cont.) Prerequisite Checks Performed by the Installer

Item	Description
Cluster file system	The installer checks that you are not installing Oracle Application Server in a cluster file system (CFS).
Oracle Enterprise Manager directories are writable	The installer runs this check only if you are reinstalling Oracle Application Server in the same Oracle home. The installer checks that the following directories are writable by the operating system user running the installer: ■ *ORACLE_HOME*\sysman\emd ■ *ORACLE_HOME*\sysman\config ■ *ORACLE_HOME*\sysman\webapps\emd\WEB-INF\config
Oracle Enterprise Manager files exist	The installer runs this check only if you are reinstalling Oracle Application Server in the same Oracle home. The installer checks that the following files exist: ■ *ORACLE_HOME*\sysman\config\iasadmin.properties ■ *ORACLE_HOME*\sysman\webapps\emd\WEB-INF\config\consoleConfig.xml

3

Things You Should Know Before Starting the Installation

This chapter contains the following topics:

3.1 Oracle Home Directory

The directory in which you install Oracle Application Server is called the Oracle home. During installation, you specify the full path to this directory and a name for this Oracle home.

3.1.1 Installing in a Non-Empty Oracle Home

You cannot install Oracle Application Server in a directory that already contains some files. For example, if you cancel an installation, or if an installation failed, then you have to clean the directory before you can reinstall Oracle Application Server in it. Also, the installer cannot *repair* an installation.

> **See Also:** For instructions on how to clean up the directory, refer to Section F.3.2, "Message About Installing in a Non-Empty Directory".

3.2 Oracle Home Name

One of the screens in the installer prompts you for the Oracle home directory (which is the destination directory) and also an Oracle home name. This Oracle home name does not need to be the same as the directory name.

The Oracle home name can consist of alphanumeric and the underscore (_) characters, and cannot be longer than 128 characters.

The Oracle home name is used in the following ways:

- Some Oracle Application Server components run as Windows services. When naming these services, the installer inserts the Oracle home name in the service name using the following format:

  `Oracle<OracleHomeName><ComponentName>`

  For example, if you name the Oracle home as `Home10_1_2`, then the process management service will be called `Home10_1_2ProcessManager`.

- The installer also uses the Oracle home name in Start menu items. For example, if the Oracle home name is `Home10_1_2`, then you will get the following menu items:
  - Start, Programs, Oracle - Home10_1_2
  - Start, Programs, OracleAS 10g - Home10_1_2

3.3 Installing Additional Languages

By default, the installer installs Oracle Application Server with text in English and in the operating system language. If you need additional languages, then click the **Product Languages** button in the Select a Product to Install screen.

When you select additional languages to install, the installer installs text in the selected languages. It also installs fonts required to display the languages.

For some components, languages are installed only if you select them during installation. In this case, if you access the application in a language that is not available, then it will fall back on the server locale language.

For other components, available languages are installed regardless of what you select during installation. In this case, however, fonts are installed only for the languages that are explicitly selected. When you access the application, it uses text in your language because the language was installed. However, if you do not have the appropriate fonts to render the text, then the text appears as square boxes. This usually applies to the Chinese, Japanese, and Korean languages. You can install fonts after installation.

> **See Also:** Refer to Section F.3.6, "User Interface Does Not Display in the Desired Language or Does Not Display Properly".

You must install all languages that you need during installation. If you run Oracle Application Server in an environment that uses a language that you did not install, then the user interface can display text in that language and in English, or it can display square boxes (caused by missing fonts) instead of text.

Note: Note that you cannot install additional languages after installation.

3.4 The ias_admin User and Restrictions on its Password

The installer prompts you to specify the password for the `ias_admin` user. The `ias_admin` user is the administrative user for Oracle Application Server instance. To manage Oracle Application Server instances using Application Server Control, log in as `ias_admin`.

Password for the ias_admin User

The password for the `ias_admin` user has the following restrictions:

- Passwords must be shorter than 30 characters.
- Passwords can contain only alphanumeric characters from your database character set, the underscore (_), the dollar sign ($), and the number sign (#).
- Passwords must begin with an alphabetic character. Passwords cannot begin with a number, the underscore (_), the dollar sign ($), or the number sign (#).
- Passwords cannot be Oracle reserved words. The *Oracle Database SQL Reference Guide* lists the reserved words. You can find this document on OTN at `http://www.oracle.com/technology/documentation`

> **Note:** When entering your password, check that the state of the Caps Lock key is what you want it to be. Passwords are case-sensitive.

You must remember the password because you need to enter it when you log on to Application Server Control as the `ias_admin` user, to manage Oracle Application Server.

> **See Also:** For details about resetting the password if you forget it, refer to *Oracle Application Server Administrator's Guide*.

3.5 Comparing Installing Components against Configuring Components

When you select components on the Select Configuration Options screen, the installer installs and configures the selected components. For the unselected components, the installer still installs them, but does not configure them.

In most cases, you can configure components that you did not select on the Select Configuration Options screen after installation using the Application Server Control.

> **See Also:** Refer to *Oracle Application Server Administrator's Guide* for details.

3.6 Where Does the Installer Write Files?

The installer writes files to the following directories:

Table 3–1 Directories Where the Installer Writes Files

Directory	Description
Oracle home directory	This directory contains Oracle Application Server files. You specify this directory when you install Oracle Application Server.
Inventory directory (*system_drive*`:\Program Files\Oracle\Inventory`)	The installer uses the inventory directory to keep track of the Oracle products installed on your computer. The inventory directory is created when you install the first Oracle product on the computer. In subsequent installations, the installer uses the same inventory directory.
TEMP directory	The installer writes files needed only during installation to a temporary directory. The temporary directory is specified by the TEMP variable. For details, refer to Section 2.5.5, "TEMP".

Additionally, the installer also creates entries in the Windows registry.

3.7 Starting the Oracle Universal Installer

1. Log on to the computer as a user who is a member of the Windows Administrators group.
2. Insert the disk.

   CD-ROM users: Insert Oracle Application Server Disk 1 into the CD-ROM drive.

   DVD-ROM users: Insert the Oracle Application Server DVD-ROM into the DVD-ROM drive.
3. If your computer supports the auto-run feature, then the installer runs automatically.

   If your computer does not support the auto run feature, then you have to start the installer manually as follows:

   Note: If you are running the installer on a computer that is already running Oracle Database 10*g*, then you have to start the installer with the following option:

   ```
   E:\> setup.exe -J-Dsun.java2d.noddraw=true
   ```

   If you do not start the installer with this option, then the installer may not display.

   CD-ROM users: Double-click `setup.exe`.

   DVD-ROM users: Double-click `setup.exe` in the `application_server` directory.

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

4

Installing Middle Tier

This chapter explains the procedure to install Oracle Application Server Middle Tier, and contains the following topics:

4.1 Components in the Middle Tier

Oracle Application Server Middle Tier provides components for deploying and running applications. The J2EE and Web Cache type of installation provides a framework for developing JavaServer Pages, servlets, and Enterprise JavaBeans applications. It contains the following components:

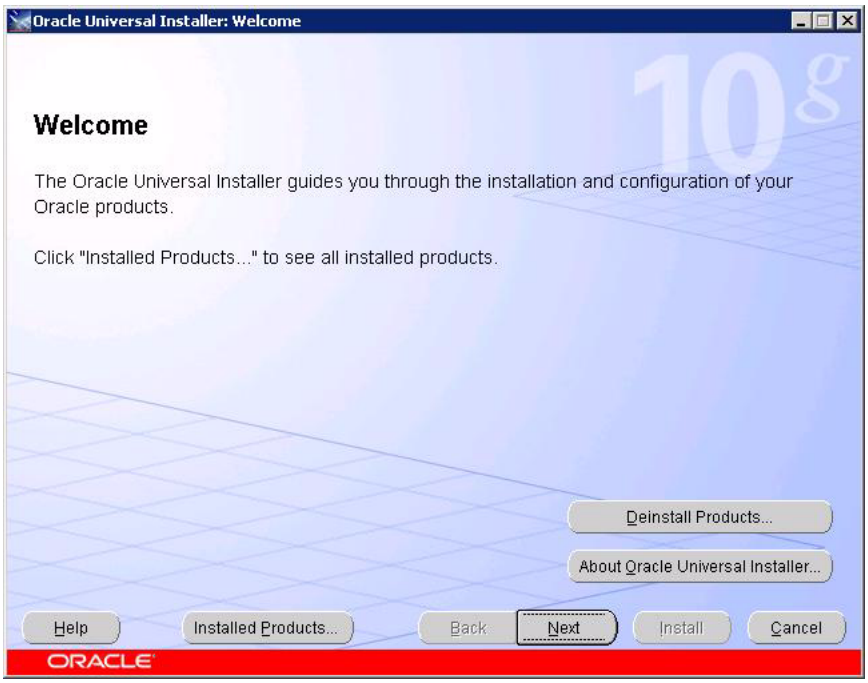
- Oracle HTTP Server
- Oracle Application Server Containers for J2EE
- Oracle Application Server Web Cache

4.2 Installing Oracle Application Server

To install Oracle Application Server Middle Tier J2EE and Web Cache instance, perform the following steps:

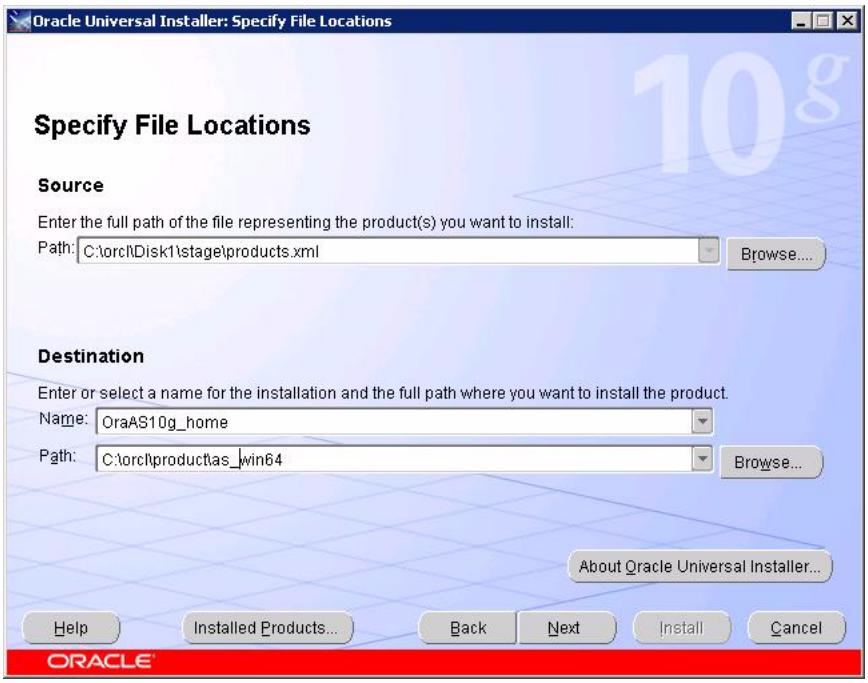
1. Insert the Oracle Application Server CD-ROM in your CD-ROM drive.
2. Double-click `setup.exe`. The Oracle Universal Installer Welcome screen is displayed as shown in Figure 4–1. It provides information about the Oracle Universal Installer (OUI).

Figure 4–1 Oracle Universal Installer Welcome Screen



3. Click **Next**. The Specify File Locations screen is displayed as shown in Figure 4–2.

Figure 4–2 Specify File Locations Screen



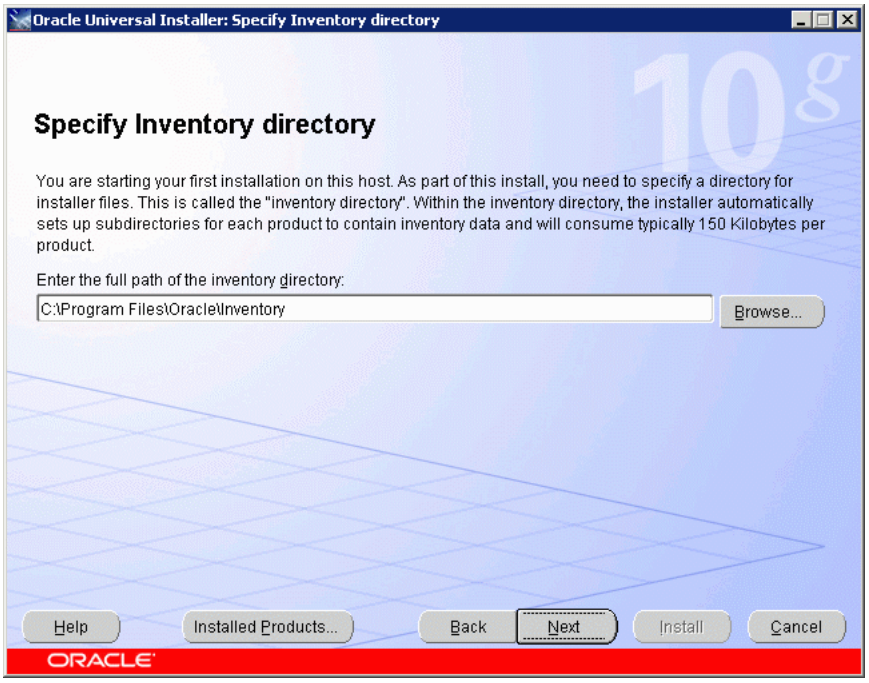
4. Enter the following information in the fields provided:
   a. Source Path: The default value is displayed. Do not change this value.
   b. Destination Name: Enter the desired Oracle home name.

c. Destination Path: Browse or enter the path to the directory where you want to install the Oracle Application Server Middle Tier.

5. If you need to specify the inventory location, then Click **Back**. The Welcome screen will be displayed again.

6. On the Welcome screen, click **Next** again. The Specify Inventory Directory screen is displayed as shown in Figure 4–3

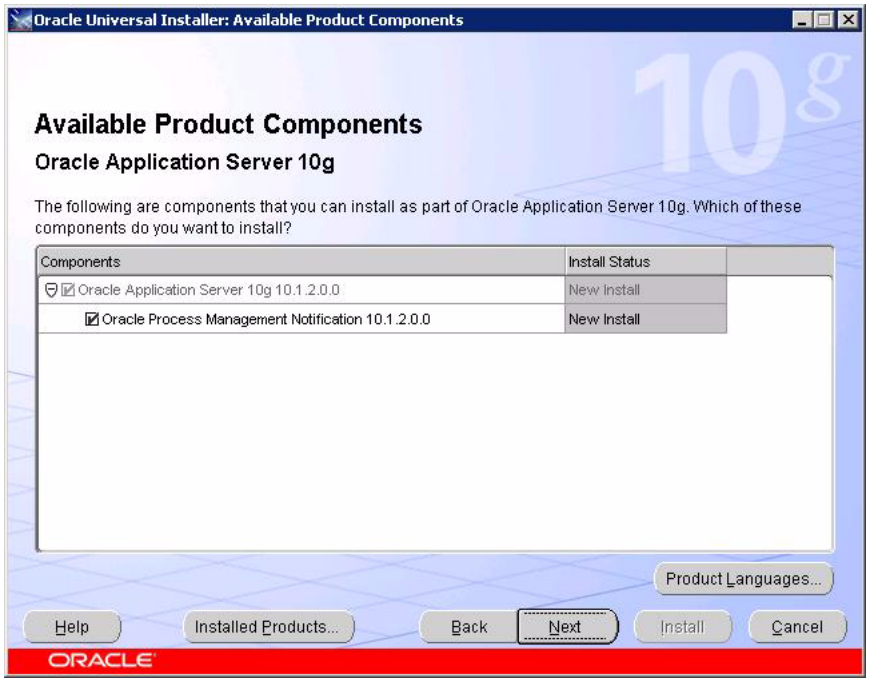
Figure 4–3 Specify Inventory Directory Screen



Note: The Specify Inventory Directory screen is displayed only during a fresh installation of Oracle Application Server. If you want to reinstall the product on the same computer, then remove the value of `inst_loc` in the key `HKLM\Software\Oracle` and then remove the `c:\program files\oracle` folder.

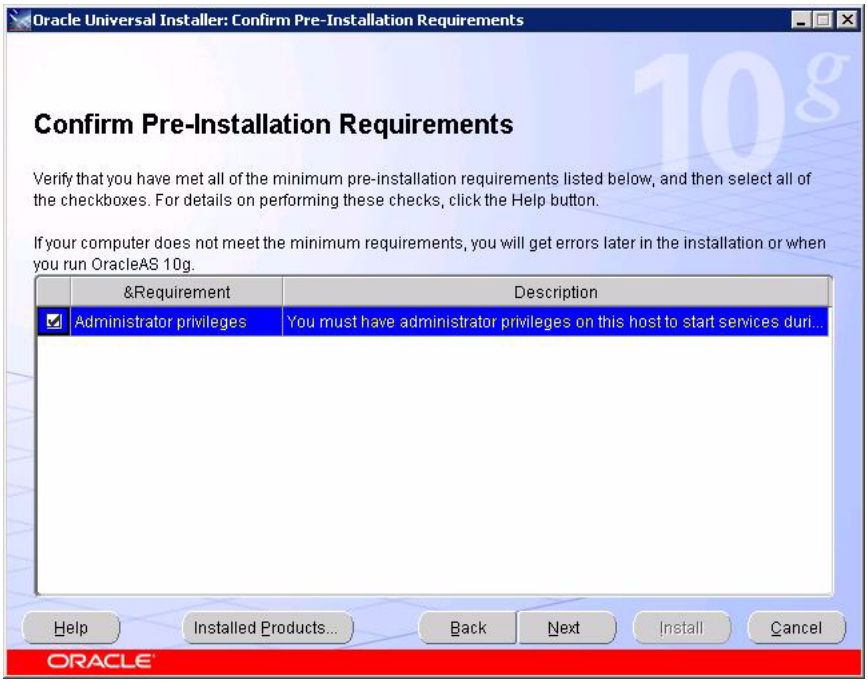
7. Click **Next**. The Available Product Components screen will be displayed as shown in Figure 4–4

Figure 4–4 Available Product Components Screen



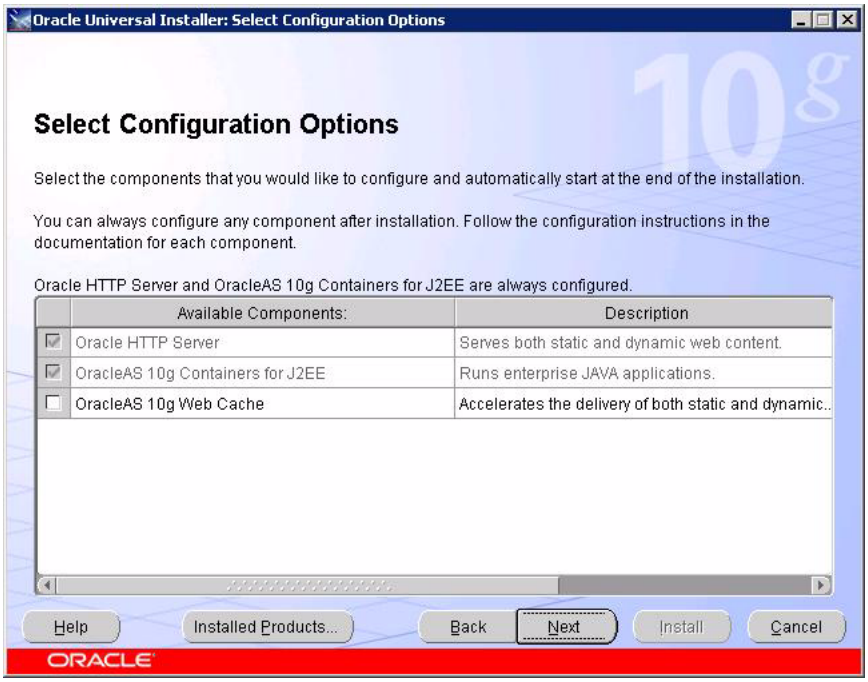
8. Click **Next**. The Confirm Pre-Installation Requirements screen is displayed as shown in Figure 4–5.

Figure 4–5 Confirm Pre-Installation Requirements Screen



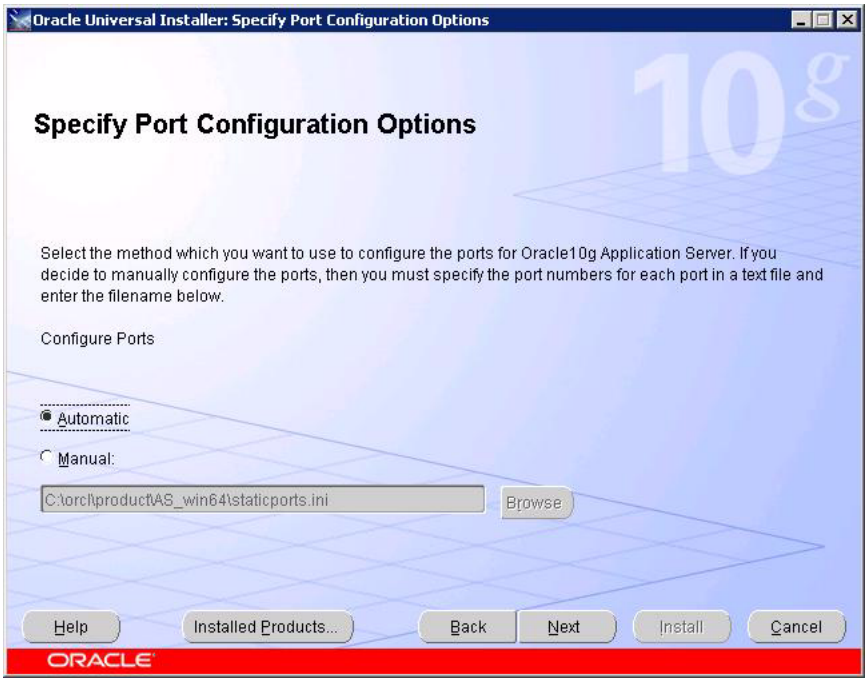
9. Verify that you meet all the requirements listed, and select the checkboxes.
10. Click **Next**. The Select Configuration Options screen is displayed as shown in Figure 4–6.

Figure 4–6 Select Configuration Options Screen



11. Select **OracleAS 10g Web Cache** and click **Next**.
12. The Specify Port Configuration Options screen is displayed as shown in Figure 4–7.

Figure 4–7 Specify Port Configuration Options Screen

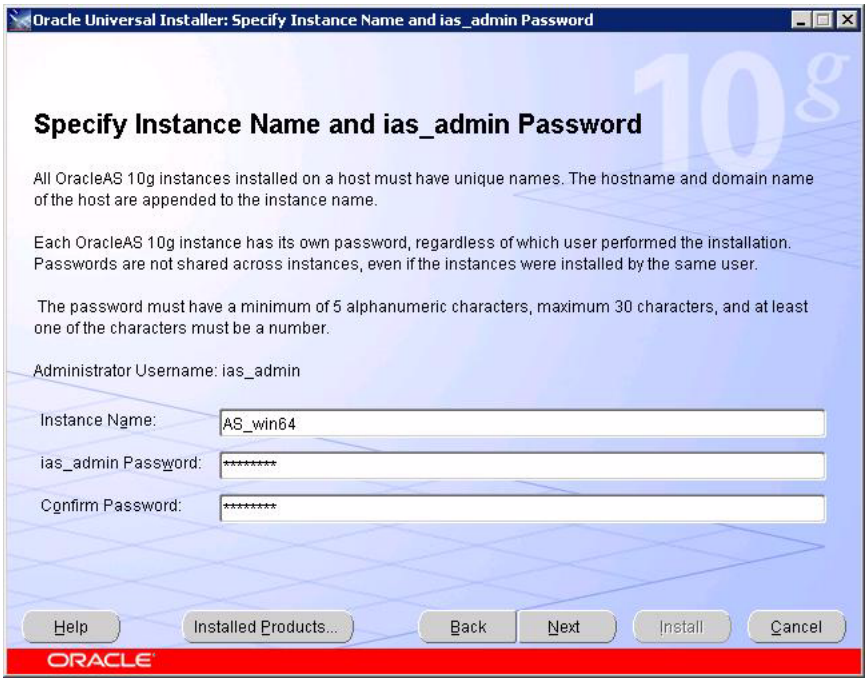


13. If you want to use default ports for the components, then select **Automatic**.

If you do not want to use the default ports, and you have created a `staticports.ini` file, then select **Manual** and enter the fullpath to your `staticports.ini` file in the field provided.

14. Click **Next**. The Specify Instance Name and ias_admin Password screen is displayed as shown in Figure 4–8.

Figure 4–8 Specify Instance Name and ias_admin Password Screen



15. Enter the following information in the fields provided:

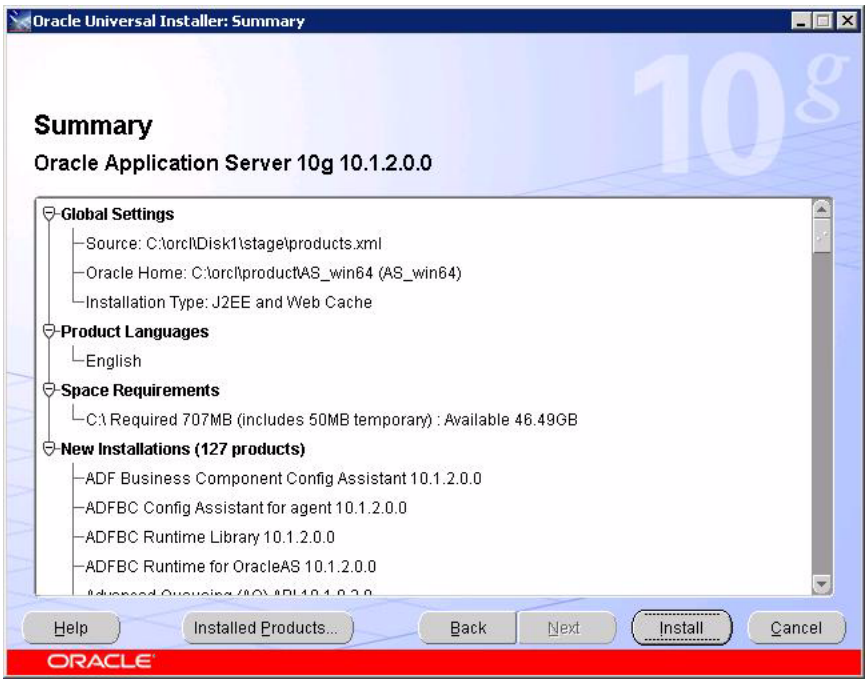
    a. Instance Name: Enter a name for this instance. Instance names can contain alphanumeric characters and the _ (underscore) character.

    b. ias_admin Password and Confirm Password: Set the password for the ias_admin user. This is the administrative user for the instance.

    See Also: Section 3.4, "The ias_admin User and Restrictions on its Password" for more information about the password restrictions.

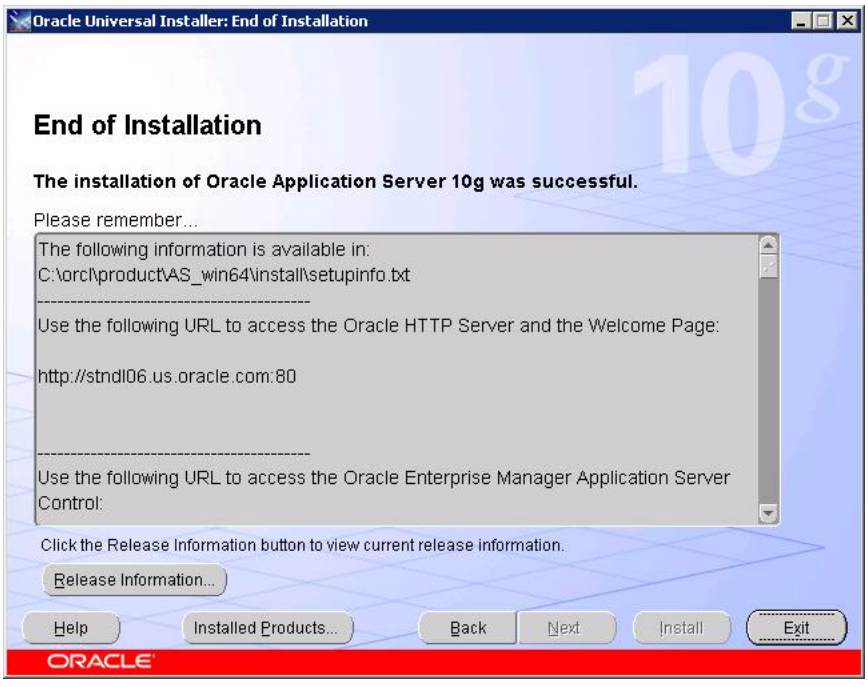
16. Click **Next**. The Summary screen is displayed as shown in Figure 4–9. Review the selections made on previous screens, and click **Install**.

Figure 4–9 Summary Screen



17. The End of Installation screen is displayed as shown in Figure 4–10, indicating that the installation has completed. Click **Exit** to exit the installer.

Figure 4–10 End of Installation Screen



4.3 Determining Port Numbers Used by Components

After installation, you might need to know port numbers used by certain components.

To get a list of port numbers look in the *ORACLE_HOME*\install\portlist.ini file. *ORACLE_HOME* refers to the directory containing the Oracle Application Server installation.

Note: If you change the port number for a component after installation, then `portlist.ini` will not be updated.

5

Post-Installation Tasks

This chapter contains the following topics:

5.1 State of Oracle Application Server Instances After Installation

After installation, the components that you have configured are started.

You can view the Welcome page and the Application Server Control page in a browser. The URLs for these pages are displayed in the last screen of the Oracle Universal Installer. You can view the contents of the last screen in the file *`ORACLE_HOME`*`\install\setupinfo.txt`.

Some of the Oracle Application Server components run as Microsoft Windows services. You can see them in the Services dialog. To display the Services dialog:

On Microsoft Windows 2003, select **Start**, **Administrative Tools**, **Services**.

On Microsoft Windows XP, select **Start**, **All Programs**, **Administrative Tools**, **Services**.

You can use scripts or you can use the Oracle Enterprise Manager Application Server Control to start and stop Oracle Application Server components. For details, refer to the *Oracle Application Server Administrator's Guide*.

5.2 If You Restart the Computer After Installation

If you restart the computer after installation, be aware that not all components will be started up automatically upon restart. For instructions on how to start up processes and the start-up order, refer to the *Oracle Application Server Administrator's Guide*.

5.3 If You Restart the Computer After Installation

If you restart the computer after installation, not all components will start up automatically. Only services are started up automatically. Components that do not use services will remain down until you start them manually. For instructions on how to start processes and the start-up order, refer to the *Oracle Application Server Administrator's Guide*.

5.4 Passwords for Oracle Application Server Components

By default, all passwords for Oracle Application Server components are set to be the same as the Oracle Application Server instance password. For security reasons, you should change the passwords of the various components to have different values.

Refer to the *Oracle Application Server Administrator's Guide* and the component guides in the Oracle Application Server Documentation Library for details on how to alter the passwords for the components you have installed.

5.5 Backup and Recovery

After installation would be a good time to start backing up the files, and to set up your backup and recovery strategy. For details, refer to the *Oracle Application Server Administrator's Guide*.

5.6 SSL

By default, most components are not configured for SSL. To enable SSL, refer to the SSL section in the *Oracle Application Server Administrator's Guide*.

5.7 Regional and Language Option Settings and the NLS_LANG Parameter

Ensure that the language setting of your account is consistent with the system default language. Based on the language setting, the `NLS_LANG` parameter is automatically defined in the Microsoft Windows registry.

After installation, do not change the system default language. Otherwise, the `NLS_LANG` parameter and the language setting will be inconsistent.

5.8 Component Configuration After Installation

If you did not configure a component during installation (that is, if you did not select the component in the Select Configuration Options screen), then you can configure some components after installation. Some components have dependencies that you have to complete before you can configure the component.

5.9 What to Do Next

After installing Oracle Application Server, you should read the *Oracle Application Server Administrator's Guide*. Specifically, you should read the "Getting Started After Installing Oracle Application Server" chapter.

You should also perform a complete Oracle Application Server environment backup after installing Oracle Application Server. This enables you to restore a working environment in case something goes wrong. For details on how to perform a complete

Oracle Application Server environment backup, refer to the *Oracle Application Server Administrator's Guide*.

You should also perform a complete Oracle Application Server environment backup after each successful patchset upgrade and after each successful configuration change.

A

Silent and Non-Interactive Installation

This appendix describes how to install Oracle Application Server in silent mode. This appendix contains the following topics:

A.1 Silent Installation

Silent installation eliminates the need to monitor the Oracle Application Server installation because there is no graphical output and no input by the user.

You can perform a silent installation of Oracle Application Server by supplying a response file in the Oracle Universal Installer and specifying the `-silent` flag on the command line. The response file is a text file containing variables and parameter values, which provide answers to the installer prompts.

If this is a first time installation of Oracle Application Server, then you must create the registry keys before starting. For details about creating a registry key, refer to Section A.3, "Pre-Installation".

Use silent installation of Oracle Application Server when there are similar installations on more than one computer. In addition, use silent installation when performing the Oracle Application Server installation from a remote location using the command line.

A.2 Non-Interactive Installation

Non-interactive installations also use a response file to automate the Oracle Application Server installation. In non-interactive installations, there is graphical output and a user may enter input.

Non-interactive installation of Oracle Application Server is also accomplished by supplying the Oracle Universal Installer with a response file but without specifying the `-silent` flag on the command line. If you have not provided responses to all of the installer prompts, then you need to enter information during the installation.

If this is a first time installation of Oracle Application Server, then you must create the registry keys before starting. For details about creating a registry key, refer to Section A.3, "Pre-Installation"

Use non-interactive installation of Oracle Application Server when there are specific screens you want to observe during installation.

A.3 Pre-Installation

If you have not installed Oracle Application Server on your computer, then you need to create the following Registry key and value:

`HKEY_LOCAL_MACHINE/SOFTWARE/Oracle/inst_loc = Inventory_Directory`

The *`Inventory_Directory`* is the full path to your installer files. For example:

```
C:\Program Files\Oracle\Inventory
```

A.4 Create the Response File

Before doing a silent or non-interactive installation, you must provide information specific to your installation in a response file. The installer will fail if you attempt an installation using a response file that is not configured correctly. Response files are text files that you can create or edit in a text editor.

This section contains the following topics:

- Creating Response Files from Templates
- Creating Response Files by Using the Record Mode in the Installer
- Example Response File

A.4.1 Creating Response Files from Templates

Templates for response files are available in the `stage\Response` directory on Disk 1 of the Oracle Application Server CD-ROM. The Response file template available for the J2EE and Web Cache installation types is as follows:

```
oracle.iappserver.iapptop.Core.rsp
```

Refer to the template file for descriptions of the parameters in the file.

Note: For Boolean parameters, specify either `true` or `false`.

A.4.2 Creating Response Files by Using the Record Mode in the Installer

You can run the installer in record mode to save your inputs to a file that you can use later as a response file. This feature is useful if you need to perform the same installation on different computers.

To run the installer in record mode:

1. Start the installer with the `-record` and `-destinationFile` parameters.

   ```
   E:\> setup.exe -record -destinationFile newResponseFile
   ```

   Replace `newResponseFile` with the full path to the response file that you want the installer to create. For example, `C:\myWebCacheResponse.rsp`.

2. Enter the values in the installer screens. The installer will write these values to the file specified in the `-destinationFile` parameter.

   When you get to the Summary screen, the installer automatically writes all your values to the specified file. At this point, you can complete the installation on this computer, or you can exit without performing the installation.

Secure information such as passwords, is not written to the file, so you must modify the response file before you can use it.

For all installations, modify the following parameters:

```
ACCEPT_LICENSE_AGREEMENT=true
oracle.iappserver.instance:szl_InstanceInformation={"instancename",
"instancepassword", "instancepassword"}
PreReqConfigSelections=""
nValidationRepositoryHost=0
nValidationRepository=0
nValidationStartProcPortals=0
nValidationStartProcBusiness=0
nValidationClusterSupport=0
nValidationStartProcCore=0
nValidationClusterRepository=0
oracle.iappserver.instance:nValidationInstanceInfo=0
silent=true
```

For Middle Tier installations, modify the following parameters:

```
oracle.iappserver.iapptop:startupProcesses=""
oracle.iappserver.iapptop:SHOW_IAS_COMPONENT_CONFIG_PAGE=false
oracle.iappserver.iapptop:n_ValidationPreReqConfigSelections=0
oracle.iappserver.iapptop:nValidationPortListSelect=0
oracle.iappserver.iapptop:nValidationOID2=0
oracle.iappserver.iapptop:nValidationInstanceInfo=0
oracle.iappserver.iapptop:nValidationOID=0
```

Refer to the generated response file for descriptions of the parameters in the file.

A.4.3 Example Response File

The following section describes a sample response file for the Oracle Application Server J2EE and Web Cache installation type.

> **Note:** Ensure that you read the description of each `parameter`=*value* in the provided sample file, and edit its *value* accordingly for your environment.

A.4.3.1 Example Response File for Standalone J2EE and Web Cache

The following is an example of a response file for a silent installation of standalone instance of J2EE and Web Cache as described in Section 4.2, "Installing Oracle Application Server".

> **Note:** If you do not copy the CD-ROMs to the hard drive, then the installer will prompt you to switch CD-ROMs during installation. To complete the installation without any prompting, you must copy the contents of the CD-ROMs to the hard drive and specify the `LOCATION_FOR_DISK`*n* parameters.

```
RESPONSEFILE_VERSION=2.2.1.0.0
UNIX_GROUP_NAME=" "
FROM_LOCATION="E:\Disk1\stage\products.xml"
FROM_LOCATION_CD_LABEL="Oracle Application Server 10G"
LOCATION_FOR_DISK2="C:\path\to\disk2\files"
LOCATION_FOR_DISK3="C:\path\to\disk3\files"
ORACLE_HOME="C:\oracle\ora_j2ee"
ORACLE_HOME_NAME="oracle_j2eehome_name"
TOPLEVEL_COMPONENT={"oracle.iappserver.iapptop","10.1.2.0.0"}
SHOW_SPLASH_SCREEN=false
SHOW_WELCOME_PAGE=false
SHOW_CUSTOM_TREE_PAGE=false
SHOW_COMPONENT_LOCATIONS_PAGE=false
SHOW_SUMMARY_PAGE=false
SHOW_INSTALL_PROGRESS_PAGE=false
SHOW_REQUIRED_CONFIG_TOOL_PAGE=false
SHOW_CONFIG_TOOL_PAGE=false
SHOW_RELEASE_NOTES=true
SHOW_ROOTSH_CONFIRMATION=false
SHOW_END_SESSION_PAGE=false
SHOW_EXIT_CONFIRMATION=false
NEXT_SESSION=false
NEXT_SESSION_ON_FAIL=false
DEINSTALL_LIST={"oracle.iappserver.iapptop","10.1.2.0.0"}
SHOW_DEINSTALL_CONFIRMATION=false
SHOW_DEINSTALL_PROGRESS=true
CLUSTER_NODES={}
ACCEPT_LICENSE_AGREEMENT=true
SELECTED_LANGUAGES={"en"}
INSTALL_TYPE="J2EE and Web Cache"
oracle.iappserver.iapptop:OPTIONAL_CONFIG_TOOLS="{}"
oracle.iappserver.infrastructure:OPTIONAL_CONFIG_TOOLS="{}"
oracle.iappserver.devcorner:OPTIONAL_CONFIG_TOOLS="{}"
oracle.sysman.server:OPTIONAL_CONFIG_TOOLS="{}"
oracle.rdbms.sqlplus.isqlplus:OPTIONAL_CONFIG_TOOLS="{}"
oracle.options.ops.csscommon:OPTIONAL_CONFIG_TOOLS="{}"
oracle.networking.netca:OPTIONAL_CONFIG_TOOLS="{}"
oracle.options.ops.vipca:OPTIONAL_CONFIG_TOOLS="{}"
oracle.iappserver.iapptop:szl_PortListSelect={"YES","C:\oracle\mystaticports.ini"}
oracle.iappserver.instance:szl_InstanceInformation={"j2ee_10_1_2", "password1",
"password1"}
oracle.iappserver.iapptop:szOIDwithSSLStatus="N"
oracle.iappserver.iapptop:startupProcesses=""
n_farmRepository=0
mailServerName=""
b_securityAccess=false
b_reportsStartup=false
b_formsStartup=false
b_configureWireless=false
b_configurePortal=false
b_configurePersonalization=false
b_configureJazn=true
b_configureDisco=false
b_configureCalypso=true
b_clusterSupport=false
b_FileBasedClustering=false
b_FarmRepository=false
oracle.iappserver.iapptop:SHOW_IAS_COMPONENT_CONFIG_PAGE=false
PreReqConfigSelections=""
oracle.iappserver.iapptop:OIDport="389"
```

```
oracle.iappserver.iapptop:OIDhost=""
nValidationRepositoryHost=0
oracle.iappserver.iapptop:n_ValidationPreReqConfigSelections=0
nValidationStartProcPortals=0
nValidationStartProcBusiness=0
nValidationStartProcCore=0
oracle.iappserver.iapptop:nValidationPortListSelect=1
oracle.iappserver.iapptop:nValidationOID2=0
oracle.iappserver.iappdialog:nValidationOID2=0
oracle.iappserver.instance:nValidationInstanceInfo=0
oracle.java.jdbc.thin12:PROD_HOME="C:\oracle\ora_j2ee\oracle_java_jdbc_thin12"
oracle.options.ano.ssl.owm:PROD_HOME="C:\oracle\ora_j2ee\oracle_options_ano_ssl_
owm"
oracle.networking.netclt:PROD_HOME="C:\oracle\ora_j2ee\oracle.networking.netclt"
oracle.java.javavm.javatools:PROD_HOME="C:\oracle\ora_
j2ee\oracle.java.javavm.javatools"
oracle.xml.xsql:PROD_HOME="C:\oracle\ora_j2ee\oracle_xml_xsql"
oracle.options.ano.ssl:PROD_HOME="C:\oracle\ora_j2ee\oracle_options_ano_ssl"
oracle.networking.netmgr:PROD_HOME="C:\oracle\ora_j2ee\oracle.networking.netmgr"
oracle.networking.netca:PROD_HOME="C:\oracle\ora_j2ee\oracle_networking_netca"
oracle.assistants.acf:PROD_HOME="C:\oracle\ora_j2ee\oracle.assistants.acf"
oracle.assistants.emcf:PROD_HOME="C:\oracle\ora_j2ee\oracle.assistants.emcf"
oracle.install.instcommon:PROD_HOME="C:\oracle\ora_j2ee\oracle_install_instcommon"
oracle.rdbms.sqlplus:PROD_HOME="C:\oracle\ora_j2ee\oracle.rdbms.sqlplus"
oracle.rsf.net_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_net_rsf"
oracle.rdbms.aqapi:PROD_HOME="C:\oracle\ora_j2ee\oracle_rdbms_aqapi"
oracle.rdbms.xml.xsu:PROD_HOME="C:\oracle\ora_j2ee\oracle_rdbms_xml_xsu"
oracle.java.jdbc.thin14:PROD_HOME="C:\oracle\ora_j2ee\oracle_java_jdbc_thin14"
oracle.java.jdbc.oci_common:PROD_HOME="C:\oracle\ora_j2ee\oracle_java_jdbc_oci_
common"
oracle.rsf.ssl_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_ssl_rsf"
oracle.rsf.nlsrtl_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_nlsrtl_rsf"
oracle.rsf.nlsrtl_rsf.lbuilder:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_nlsrtl_
rsf"
oracle.rsf.ssl_rsf.sslrsf_ic:PROD_HOME="C:\oracle\ora_j2ee\oracle.rsf.ssl_
rsf.sslrsf_ic"
oracle.xml.classgen.java:PROD_HOME="C:\oracle\ora_j2ee\oracle_xml_classgen_java"
oracle.options.ops.opscf:PROD_HOME="C:\oracle\ora_j2ee\oracle.options.ops.opscf"
oracle.java.jdbc.jdbc_common:PROD_HOME="C:\oracle\ora_j2ee\oracle_java_jdbc_jdbc_
common"
oracle.rsf.plsql_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_plsql_rsf"
oracle.rsf.precomp_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_precomp_rsf"
oracle.rsf.slax_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_slax_rsf"
oracle.rsf.agent_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_agent_rsf_agent_rsf_
cmp"
oracle.rsf.clntsh_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_clntsh_rsf_clntsh_
rsf_cmp"
oracle.rsf.rdbms_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_rdbms_rsf"
oracle.rsf.has_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_has_rsf"
oracle.java.jdbc.thin14.thin14_ic:PROD_HOME="C:\oracle\ora_j2ee\oracle_java_jdbc_
thin14"
oracle.rsf.rdbms_rsf.rdbms_rsf_ic:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_rdbms_
rsf_rdbms_rsf_ic"
oracle.rsf.xdk_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_rdbms_rsf"
oracle.rsf.dbjava_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_dbjava_rsf"
oracle.rsf.ops_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_net_rsf"
oracle.xml.parser.java:PROD_HOME="C:\oracle\ora_j2ee\oracle.xml.parser.java"
oracle.java.jdbc.oci_common.ocicommon_ic:PROD_HOME="C:\oracle\ora_
j2ee\oracle.java.jdbc.oci_common.ocicommon_ic"
oracle.rsf.oracore_rsf:PROD_HOME="C:\oracle\ora_j2ee\oracle_rsf_oracore_rsf"
```

```
silent=true
```

A.5 Start the Installation

To make the installer use the response file, specify the location of the response file that you want to use as a parameter when starting the installer.

To perform a non-interactive installation, use the following command:

```
E:\> setup.exe -responseFile absolute_path_and_filename
```

To perform a silent installation, use the `-silent` parameter as follows:

```
E:\> setup.exe -silent -responseFile absolute_path_and_filename
```

A.6 Post-Installation

The success or failure of the non-interactive and silent installations is logged in the `installActions.log` file. In addition, the silent installation creates the `silentInstall.log` file. The log files are created in the `C:\Program Files\Oracle\Inventory\oui_inventory\Logs` directory.

The `silentInstall.log` file contains the following line if the installation was successful:

```
The installation of OracleAS <Installation Type> was successful.
```

The `installActions.log` file contains specific information for each Oracle Application Server installation type.

> **See Also:** Appendix E, "Configuration Assistants"

> **Note:** Application Server Control Configuration Assistant and DCM Repository Backup Assistant success messages appear for first time installation of Oracle Application Server.

A.7 Security Tips for Silent and Non-Interactive Installations

One of the pieces of information in the response file is the installation password. The password information is in clear text.

To minimize security issues regarding the password in the response file, adhere to the following guidelines:

- Set the permissions on the response files so that they are readable only by the operating system user who will be performing the silent or non-interactive installation.
- If possible, remove the response files from the system after the silent or non-interactive installation is completed.

A.8 Deinstallation

You can perform a silent deinstallation of Oracle Application Server by supplying a silent deinstallation parameter to the response file that you used for installation.

Add the following parameter to your installation response file:

```
REMOVE_HOMES={"<ORACLE_HOME to be removed>"}
```

For example:

```
REMOVE_HOME="C:\oracle\ora_j2ee"
```

> **Note:** You still need to follow the deinstallation steps described in Appendix D, "Deinstallation and Reinstallation". One of the key steps is to run the deconfig tool before running the silent deinstallation command. The silent deinstallation command only replaces the step where you run the installer interactively to deinstall the instance.

To perform a silent deinstallation, use the `-deinstall` parameter as follows:

```
E:\> setup.exe -silent -deinstall -responseFile absolute_path_and_filename
```

B

Default Port Numbers

The installer, by default, assigns port numbers to components from a set of default port numbers. This appendix contains a list of these port numbers.

If you want to use a different set of port numbers, then you have to create a file called `staticports.ini`, in which you list the port numbers that you want to use. For details, refer to Section 2.3.4, "Using Custom Port Numbers (the Static Ports Feature)".

B.1 Method of Assigning Default Port Numbers

The installer assigns default port numbers to each component using the following method:

1. The installer checks if the default port number is in use. If it is not in use, then the installer assigns it to the component.
2. If the default port number is already in use by an Oracle product or by any running application, then the installer tries the lowest available number in the port number range and assigns it to the component. It keeps trying the port numbers in the range until it finds one that is available.

B.2 Default Port Numbers

Table B–1 lists the default port numbers for components. The last column of this table specifies the component name as it appears in the `staticports.ini` file, which enables you to override the default port numbers. For details, refer to Section 2.3.4, "Using Custom Port Numbers (the Static Ports Feature)".

Table B–1 Default Port Numbers and Ranges (Grouped by Component)

Component	Default Port	Port Number Range	Name in staticports.ini
Oracle Process Manager and Notification Server (OPMN)			
Oracle Notification Server Request Port	6003	6003 - 6099	`Oracle Notification Server Request port`
Oracle Notification Server Local Port	6100	6100 - 6199	`Oracle Notification Server Local port`
Oracle Notification Server Remote Port	6200	6200 - 6299	`Oracle Notification Server Remote port`
Oracle Application Server Containers for J2EE (OC4J)			

Table B–1 (Cont.) Default Port Numbers and Ranges (Grouped by Component)

Component	Default Port	Port Number Range	Name in staticports.ini
OC4J AJP	3301	3301 - 3400	Not settable through staticports.ini
OC4J RMI	3201	3201 - 3300	Not settable through staticports.ini
JMS	3701	3701 - 3800	Not settable through staticports.ini
IIOP	3401	3401 - 3500	Not settable through staticports.ini
IIOPS1	3501	3501 - 3600	Not settable through staticports.ini
IIOPS2	3601	3601 - 3700	Not settable through staticports.ini
Oracle HTTP Server			
Oracle HTTP Server Listener (OracleAS Web Cache **not** configured)	*7777*	*7777 - 7877*	`Oracle HTTP Server Listen port`
Oracle HTTP Server Listener (SSL)	4443	4443 - 4543	`Oracle HTTP Server Listen (SSL) port`
Oracle HTTP Server Listener (non-SSL, OracleAS Web Cache configured)	*7778*	*7777 - 7877*	`Oracle HTTP Server port`
Oracle HTTP Server Listener (SSL, OracleAS Web Cache configured)	4444	4443 - 4543	`Oracle HTTP Server SSL port`
Java Object Cache	7000	7000 - 7099	`Java Object Cache port`
DCM Java Object Cache	7100	7100 - 7199	`DCM Java Object Cache port`
SOAP server	9998	9998 - 9999	Not settable through staticports.ini
Port Tunneling	7501	7501 - 7599	Not settable through staticports.ini
Oracle HTTP Server Diagnostic port	7200	7200 - 7299	`Oracle HTTP Server Diagnostic port`
OracleAS Web Cache			
OracleAS Web Cache - HTTP Listener	*7777*	*7777 - 7877*	`Web Cache HTTP Listen port`
OracleAS Web Cache - HTTP Listener (SSL)	4443	4443 - 4543	`Web Cache HTTP Listen (SSL) port`
OracleAS Web Cache Administration	4000	4000 - 4300	`Web Cache Administration port`
OracleAS Web Cache Invalidation	4001	4000 - 4300	`Web Cache Invalidation port`
OracleAS Web Cache Statistics	4002	4000 - 4300	`Web Cache Statistics port`
Oracle Enterprise Manager Application Server Control			
Application Server Control	1810	1810 - 1829	`Application Server Control port`

Table B–1 (Cont.) Default Port Numbers and Ranges (Grouped by Component)

Component	Default Port	Port Number Range	Name in staticports.ini
Oracle Management Agent	1830	1830 - 1849	Not settable through staticports.ini
Application Server Control - RMI	1850	1850 - 1869	`Application Server Control RMI port`
Application Server Control - SSL	1810	1810 - 1829	This port number is assigned after installation, when you configure Application Server Control for SSL. See the Oracle Application Server Administrator's Guide for details.
Enterprise Manager Console HTTP port (orcl)	5500		Not settable through staticports.ini
Enterprise Manager Agent port (orcl)	1831		Not settable through staticports.ini
Log Loader	44000	44000 - 44099	`Log Loader port`

C

Ports to Open in Firewalls

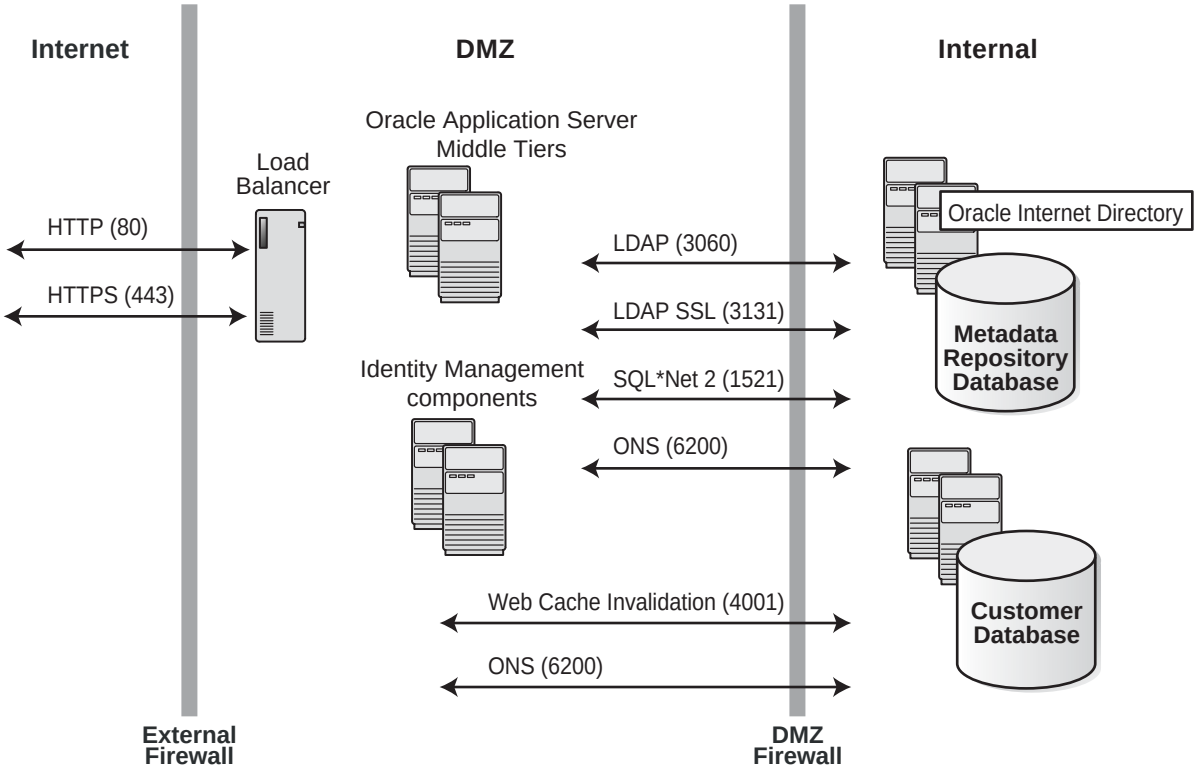
If you plan to install Oracle Application Server behind firewalls, then you need to open certain ports in the firewall during installation, and also during runtime.

When you are installing Middle Tiers or Identity Management components, you need access to the Oracle Internet Directory, OracleAS Metadata Repository, Oracle Notification Server and OracleAS Web Cache (the invalidation port). You need to open ports used by these components in the firewall, as shown in Figure C–1:

- LDAP: port 3060
- LDAP SSL: port 3131
- SQL*Net 2: port 1521
- Oracle Notification Server: port 6200
- Web Cache Invalidation: port 4001

> **Note:** The port numbers listed here are the default ports for the components. You may have different ports in your environment.

Figure C–1 Ports Needed to Be Opened in the Firewall When Installing Oracle Application Server Behind Firewalls



D

Deinstallation and Reinstallation

This appendix guides you through the deinstallation and reinstallation process for Oracle Application Server.

D.1 New Tool: Deconfig Tool

The Deconfig tool that you need to run as part of the deinstallation procedure. This tool removes entries in OracleAS Metadata Repository and Oracle Internet Directory for the Oracle Application Server instance that you want to deinstall.

To run the Deconfig tool, run the Perl interpreter on the script. Use the Perl interpreter provided with Oracle Application Server.

If you run it without any parameters, then the tool prompts you for the necessary information.

D.1.1 Parameters

-u *oid_user*

Specify the Oracle Internet Directory user.

You can specify the Oracle Internet Directory user using the user's simple name or the user's distinguished name (DN). For example, the user's simple name can be `jdoe@mycompany.com`, which corresponds to the DN `cn=jdoe,l=us,dc=mycompany,dc=com`.

The Oracle Internet Directory user needs to have privileges for deinstalling the components that are configured in the Oracle Application Server instance that you want to deinstall. These privileges are the same as for installing and configuring the component.

For example, if you are deinstalling an OracleAS Infrastructure instance that is running Oracle Delegated Administration Services and Oracle Application Server Single Sign-On, then make sure the user has privileges to configure these components.

If you want to run the tool as the Oracle Internet Directory superuser, then be sure to use `cn=orcladmin`, and not just `orcladmin`. These are two different users.

-w *password*

Specify the password for the Oracle Internet Directory user.

-r *realm*

Specify the realm in which to authenticate the user. This value is required only if your Oracle Internet Directory has more than one realm.

-dbp *sys_db_password*

Specify the password for the SYS user in the database. This is the OracleAS Metadata Repository database used by Oracle Internet Directory.

This value is required only if you are deinstalling an Identity Management-only instance that has Oracle Internet Directory configured.

If you specify this parameter and it is not needed, then the password value is simply not used.

-help or -h

You can also run the Deconfig tool with the `-h` or `-help` parameter to display help.

D.1.2 Log Files Generated by the Deconfig Tool

The Deconfig tool writes log entries to the *`ORACLE_HOME`*`\cfgtoollogs\DeconfigureWrapper.log` file.

D.2 Deinstallation Procedure Overview

To deinstall Oracle Application Server, perform the following high-level steps. The details are provided in later sections.

1. Deinstall the Oracle Application Server Middle Tier instance.
   a. Run the Deconfig tool on the instance to remove entries in the Microsoft Windows registry.
   b. Run the Oracle Universal Installer to deinstall the product.
   c. Remove any remaining files.

Items to Remove or Clean Up

To deinstall an Oracle Application Server instance, you have to remove the items listed in Table D–1. The procedures for doing so are described later in this appendix.

Table D–1 Items to Deinstall

Items to Remove	Tool to Use
Files from the Oracle home directory	Installer If the installer does not remove all the files, then you can remove the remaining files using the `del` command.

Table D–1 (Cont.) Items to Deinstall

Items to Remove	Tool to Use
Entries for the deleted instance in the Inventory directory	Installer
Instance name from Farm page	Installer
Entries for the deleted instance in the Microsoft Windows registry	Deconfig tool You can also remove the entries manually. Refer to Section D.5, "Deinstalling All Oracle Products Manually".

Note: The installer does not permit custom deinstallation of individual components.

D.3 Deinstalling Middle Tier

To deinstall Oracle Application Server Middle Tier:

1. Log in as the operating system user.
2. Stop all processes associated with the instance.

   See Also: For details on how to stop the processes, refer to Oracle Application Server Administrator's Guide.

3. Run the Deconfig tool.

   ```
   C:\> cd ORACLE_HOME\bin
   C:\> ORACLE_HOME\perl\5.6.1\bin\MSWin32-x86\perl.exe deconfig.pl [parameters]
   ```

   See Also: For details about the parameters, refer to Section D.1, "New Tool: Deconfig Tool".

4. Start the Oracle Universal Installer.

   Select **Start**, **Programs**, **Oracle**, `OracleHomeName`, **Oracle Installation Products**, **Universal Installer**.

5. In the installer, perform the following steps:
   a. In the Welcome screen, click **Deinstall Products**.
   b. In the Inventory screen, select the instance that you want to deinstall, and click **Remove**.
   c. In the Confirmation screen, verify the components selected for deinstallation. Click **Yes** to continue.
   d. In the Deinstallation Progress screen, monitor the progress of the deinstallation.
   e. Exit the installer after deinstallation is complete.
6. Restart your computer to stop any remaining processes associated with the deinstallation.
7. Delete any remaining files in the Oracle home directory of the instance that was deleted.

   ```
   C:\> del %ORACLE_HOME%
   ```

8. The installer does not remove all entries from the Microsoft Windows registry. If you want to remove all registry entries, then refer to Section D.5, "Deinstalling All Oracle Products Manually".

> **Note:** The procedure in Section D.5, "Deinstalling All Oracle Products Manually" removes registry entries for ***all*** Oracle products from your computer. Do not perform this procedure if you have other Oracle Application Server instances or other Oracle products such as Oracle database or Oracle Developer Suite on your computer and if you want to keep them.

D.4 Harmless Errors in the Log File

After you deinstall the J2EE and Web Cache instance, you may get the `unable to delete file` and `unable to find make file` errors in the `oraInstall`*`timestamp`*`.err` file. These error messages would appear as follows:

```
Ignoring Exception during de-install
oracle.sysman.oii.oiil.OiilDeinstallException:
An error occurred during runtime. oracle.sysman.oii.oiil.OiilDeinstallException:
An error occurred during runtime.
...
Ignoring Exception during de-install
oracle.sysman.oii.oiil.OiilDeinstallException:
Unable to delete file
/home/j2ee/sysman/emd/targets.xml
oracle.sysman.oii.oiil.OiilDeinstallException: Unable to delete file
/home/j2ee/sysman/emd/targets.xml
at instantiateFileEx.deinstallAction(instantiateFileEx.java:935)
...
Ignoring Exception during de-installoracle.sysman.oii.oiil.OiilDeinstallException:
Unable to find make file:
/home/j2ee/network/lib/ins_net_client.mk
oracle.sysman.oii.oiil.OiilDeinstallException: Unable to find make file:
/home/j2ee/network/lib/ins_net_client.mk
at ssmakeux.deinstallAction(ssmakeux.java:246)
...
```

These are harmless error messages and you can ignore them.

D.5 Deinstalling All Oracle Products Manually

The following procedure removes all Oracle products from your computer.

> **Caution:** The following instructions remove *all* Oracle components, services, and registry entries from your computer. Exercise extreme care when removing registry entries. Removing incorrect entries can cause your computer to stop working.

1. Delete Registry keys.
   a. Select **Start**, **Run**. Type in `regedit`, and click **OK**. The Registry Editor window is displayed.

b. Delete the following folders from the registry. To delete a folder, select the folder name, and click **Edit**, **Delete** from the menu.

   In some of the following entries, `OracleHomeName` indicates the name of the Oracle home, which you entered in the Specify File Locations screen of the installer, and `Number` indicates a random number added to the Oracle home name.

   * `HKEY_LOCAL_MACHINE / SOFTWARE / ORACLE`
   * `HKEY_LOCAL_MACHINE / SYSTEM / CurrentControlSet / Services / OracleHomeName Number`
   * `HKEY_LOCAL_MACHINE / SYSTEM / ControlSet X / Services / OracleHomeName Number`

     `X` is a number, for example, 001.
   * `HKEY_CURRENT_USER / Software / OracleHomeName Number`
   * `HKEY_CLASSES_ROOT / ORACLE`

c. Exit the Registry Editor window.

2. Edit or delete environment variables.

   To display environment variables:

   a. On the desktop, right-click **My Computer** (on Windows 2003, the icon is labeled with the name of your computer) and click **Properties**. Click the **Advanced** tab, and click **Environment Variables**.

   b. Highlight the Path system variable. Click the **Edit** button and modify the path in the Variable Value field.

      This removes all references to any previous Oracle home paths.

      For example, the following shows an Oracle-modified Path system variable:

      ```
      C:\OraHome\jdk\jre\bin\classic;C:\OraHome\jdk\jre\bin;C:\OraHome\bin;
      C:\OraHome\jlib;C:\OraHome\jre\1.4.2\bin;C:\windows\system32;C:\windows;
      C:\windows\System32\Wbem
      ```

      The following shows the Path system variable after removal of the Oracle home references:

      ```
      C:\windows\system32;C:\windows;C:\windows\System32\Wbem
      ```

3. Click **OK**.

4. Click **Start**, **All Programs**. Right-click the folder and select **Delete**.

   All Oracle program folders are removed.

5. Delete the Oracle user.

   a. Right-click **My Computer** (on Windows 2003, the icon is labeled with the name of your computer) and select **Manage**.

   b. Expand **Local Users and Groups**.

   c. Select **Users**.

   d. Delete the name of the user who installed the Oracle product.

   e. Double click **My Computer** on your desktop. Inspect the Documents and Settings directory on your hard drive and delete any Oracle user entries.

6. Restart your computer.
7. Remove remaining Oracle home directories from your hard drive.

   For example:

   ```
   C:\Oracle\*, C:\Program Files\Oracle\*
   ```

8. Restart your computer.

D.6 Reinstallation

The installer does not allow reinstallation of an Oracle Application Server instance in a directory that already contains an Oracle Application Server instance. To reinstall Oracle Application Server in the same directory, you have to deinstall the existing instance and then install it.

> **See Also:** For help with common deinstallation problems, refer to Appendix F, "Troubleshooting".

E

Configuration Assistants

This appendix lists the configuration assistants and the location of their log files.

- Section E.1, "Troubleshooting Configuration Assistants"
- Section E.2, "Description of Oracle Application Server Configuration Assistants"

E.1 Troubleshooting Configuration Assistants

This section contains the following topics:

- Section E.1.1, "General Tips"
- Section E.1.2, "Configuration Assistant Result Codes"

E.1.1 General Tips

If a configuration assistant fails, then try the following steps to correct the problem:

1. Review the installation log files listed in Section F.1, "Log Files".
2. Review the log files for the failed configuration assistant. Configuration assistant log files are listed in Section E.2, "Description of Oracle Application Server Configuration Assistants". Try to fix the issue that caused the error.
3. If the failed configuration assistant has any dependencies, then run the dependencies again. You must do this even if the dependency completed successfully.
4. Select the configuration assistant in the installer to run the failed configuration assistant, and then click **Retry**.

   If the configuration assistant fails again after you click **Retry**, then remove the file and re-run the configuration assistant again.

   If the configuration assistant fails again after you click **Retry**, then remove the component entry from the file. For example, the following lines show the OracleAS Web Cache entry in the `targets.xml` file:

```
<Target TYPE="oracle_webcache" NAME="instance2.domain.com_Web Cache"
DISPLAY_NAME="Web Cache">
   <Property NAME="HTTPPort" VALUE="7777" />
   <Property NAME="logFileName" VALUE="webcache.log" />
   <Property NAME="authrealm" VALUE="Oracle Web Cache Administrator" />
   <Property NAME="AdminPort" VALUE="4000" />
   <Property NAME="HTTPProtocol" VALUE="http" />
   <Property NAME="logFileDir" VALUE="/sysman/log" />
   <Property NAME="HTTPMachine" VALUE="domain.com" />
   <Property NAME="HTTPQuery" VALUE="" />
```

```
   <Property NAME="controlFile" VALUE="/ORACLE_HOME/webcache/bin/webcachectl" /
>
   <Property NAME="MonitorPort" VALUE="4002" />
   <Property NAME="HTTPPath" VALUE="/" />
   <Property NAME="authpwd" VALUE="administrator" />
   <Property NAME="authuser" VALUE="administrator" />
   <CompositeMembership>
      <MemberOf TYPE="oracle_ias" NAME="domain.com" ASSOCIATION="null" />
   </CompositeMembership>
</Target>
```

5. If an optional configuration assistant fails and it does not have any dependencies, then run the remaining configuration assistants. Uncheck the cancelled optional configuration assistant, highlight and check the next listed configuration assistant, and click **Retry**.
6. If configuration assistant failure occurs when running configuration assistant commands on the command line, then re-run the configuration assistant commands again.

   You can use the generated script file named `configtoolcmds.pl` located in the directory to execute the failed configuration assistant again. The `configtoolcmds.pl` script is generated after you exit the installer. During silent or non-interactive installation, the `configtoolcmds.pl` script is generated immediately after the configuration assistant fails.
7. If you see a `Fatal Error. Reinstall` message, then find the cause of the problem by analyzing the log files. You cannot recover from a fatal error by correcting the problem and continuing the installation. You must remove the current installation and reinstall Oracle Application Server. The following tasks describe the recovery procedure:
   a. Deinstall the failed installation using the procedure described in Appendix D, "Deinstallation and Reinstallation".
   b. Correct the cause of the fatal error.
   c. Reinstall Oracle Application Server.

E.1.2 Configuration Assistant Result Codes

If a configuration assistant fails, then the installation screen displays the error message, and the configuration assistant writes its result code (Table E–1) to the following log file:

Table E–1 Result Codes for Configuration Assistants

Result Code	Description
`0`	Configuration assistant succeeded
`1`	Configuration assistant failed
`-1`	Configuration assistant cancelled

E.2 Description of Oracle Application Server Configuration Assistants

Table E–2 lists the Oracle Application Server configuration assistants in alphabetical order. Different installations use different configuration assistants depending on the installation type and configuration options that you selected.

Table E–2 Oracle Application Server Configuration Assistants

Configuration Assistant	Description	Log File Locations
ADF Configuration Assistant	Integrates Oracle Application Development Framework Runtime Libraries with Oracle Enterprise Manager Application Server Control. This configuration assistant requires the *ORACLE_HOME*`\jlib\emConfigInstall.jar` file.	`ORACLE_HOME\oraInventory\logs\installActions`*timestamp*`.log`
Application Server Control Configuration Assistant	Starts the Oracle Management Agent and the Application Server Control to deploy applications through the Oracle Enterprise Manager Application Server Control.	`ORACLE_HOME\cfgtoollogs\configtools`*timestamp*`.log`
DCM Repository Backup Assistant	Enables you to back up your DCM repository.	`ORACLE_HOME\dcm\logs`

HTTP Server Configuration Assistant	Configures Oracle HTTP Server, registers it with Oracle Enterprise Manager Application Server Control, and adds an entry to the `ORACLE_HOME\sysman\emd\targets.xml` file.	`ORACLE_HOME\Apache\Apache\logs`
		
		`ORACLE_HOME\Apache\Apache\ httpd.log`
		
		`ORACLE_HOME\cfgtoollogs\configtools`*timestamp*`.log`

Java Security Configuration Assistant	Changes the default password, and sets or reassigns new passwords for JAAS security.	`ORACLE_HOME\cfgtoollogs\jaznca.log`
OC4J Configuration Assistant	Integrates OC4J with Application Server Control. It performs the following steps: ■ Add entries to the `targets.xml` file. ■ Add entries to the `iasadmin.properties` file. This configuration assistant requires the `deploy.ini` file.	`ORACLE_HOME\cfgtoollogs\configtools`*timestamp*`.log`
OC4J Instance Configuration Assistant	Configures OC4J instances for deployed Oracle Application Server applications.	`ORACLE_HOME\cfgtoollogs\configtools`*timestamp*`.log`

OPMN Configuration Assistant	Starts OPMN and OPMN-managed processes.	`ORACLE_HOME\cfgtoollogs\configtools`*timestamp*`.log`
		
		`ORACLE_HOME\cfgtoollogs\ipm.log`
		
		`ORACLE_HOME\cfgtoollogs\ons.log`

OPMN Configuration Assistant - start Oracle HTTP Server	Starts Oracle HTTP Server through OPMN.	`ORACLE_HOME\cfgtoollogs\configtools`*timestamp*`.log`
		
		`ORACLE_HOME\cfgtoollogs\HTTP_Server~1`

Table E–2 (Cont.) Oracle Application Server Configuration Assistants

Configuration Assistant	Description	Log File Locations
OracleAS Randomize Password Configuration Assistant	Changes the default password of all schemas.	None

Register DCM Plug-Ins With Oracle Enterprise Manager Configuration Assistant	Registers DCM plug-ins with Oracle Enterprise Manager.	`ORACLE_HOME\cfgtoollogs\configtools`*`timestamp`*`.log`
		
		`ORACLE_HOME\dcm\logs\dcmctl_logs`

Web Cache Configuration Assistant	Configures OracleAS Web Cache and registers it with Oracle Enterprise Manager Application Server Control.	`ORACLE_HOME\cfgtoollogs\configtools`*`timestamp`*`.log`

F

Troubleshooting

This appendix describes solutions to common problems that you might encounter when installing Oracle Application Server. It contains the following sections:

- Section F.1, "Log Files"
- Section F.2, "General Troubleshooting Tips"
- Section F.3, "Installation Problems and Solutions"
- Section F.4, "Need More Help?"

F.1 Log Files

The installer writes the following log files:

- *inventory_location*\logs\installActions*timestamp*.log
- *inventory_location*\logs\oraInstall*timestamp*.err
- *inventory_location*\logs\oraInstall*timestamp*.out

The default *inventory_location* is:

```
C:\Program Files\Oracle\Inventory
```

F.2 General Troubleshooting Tips

If you encounter an error during installation of Oracle Application Server:

- Read the *Oracle Application Server Release Notes* for the latest updates. The release notes are available with the platform-specific documentation. The most current version of the release notes is available on Oracle Technology Network (http://www.oracle.com/technology/documentation).
- Verify that your computer meets the requirements specified in Chapter 2, "Requirements".
- If you entered incorrect information on one of the installation screens, then return to that screen by clicking **Back** until you see the screen.
- If a configuration assistant failed, then check the log file for that configuration assistant. Section E.2, "Description of Oracle Application Server Configuration Assistants" lists the configuration assistants and the location of their log files. If you do not see log files from some configuration assistants in the *ORACLE_HOME*\cfgtoollogs directory, then exit the installer. This causes the installer to copy the log files to that directory.
- If an error occurred while the installer is copying or linking files:

1. Note the error and review the installation log files.
2. Remove the failed installation by following the steps in Appendix D, "Deinstallation and Reinstallation".
3. Correct the issue that caused the error.
4. Restart the installation.

F.3 Installation Problems and Solutions

This section describes common Oracle Application Server installation problems and solutions:

F.3.1 Location of Log Files

Problem

Log files are inaccessible.

Solution

There are two sets of log files:

- The installer writes the following log files:
  - *inventory_location*`\logs\installActions`*timestamp*`.log`
  - *inventory_location*`\logs\oraInstall`*timestamp*`.err`
  - *inventory_location*`\logs\oraInstall`*timestamp*`.out`

  The default *inventory_location* is:

  ```
  C:\Program Files\Oracle\Inventory
  ```

- The configuration assistants write log files in the *ORACLE_HOME*`\cfgtoollogs` directory.

If you want to access the log files created by the configuration assistants, then you need to exit the installer first. The log files are inaccessible if the installer is still in use.

F.3.2 Message About Installing in a Non-Empty Directory

Problem

The installer displays a message that you are installing into a non-empty directory.

Solution

If you started an installation and went beyond the Specify File Locations screen, but did not complete the installation, then the installer has already created the Oracle home directory that you specified. If you later try to install again in the same directory, which contains some files created by the installer, then the installer gives a warning that the directory is not empty.

Perform the following steps:

1. In the Warning dialog box, click **No** to return to the Specify File Locations screen.
2. Click **Installed Products**. The Inventory screen is displayed.

   If your Oracle home is listed in the Inventory screen, then you have to deinstall the Oracle home. For details, refer to Appendix D, "Deinstallation and Reinstallation".

   If your Oracle home is not listed in the Inventory screen, then you can just delete the files from the Oracle home and continue with the installation.

F.3.3 Unable to Clean Up a Failed Installation

Problem

Installation was not successful.

Solution

You have to deinstall it first before you can install Oracle Application Server again. For instructions, refer to Appendix D, "Deinstallation and Reinstallation".

F.3.4 Forgot the Password for the cn=orcladmin Account

Problem

You forgot the password for the `cn=orcladmin` account.

Solution

You can reset the password in the database. The DSE root attribute name is `orclsupassword`.

Note that after a certain number of failed attempts to connect, the `cn=orcladmin` account becomes locked. In this case, you have to unlock the account. Refer to the Section F.3.5, "cn=orcladmin Account Becomes Locked" for instructions on how to unlock the account.

F.3.5 cn=orcladmin Account Becomes Locked

Problem

The `cn=orcladmin` account becomes locked after ten failed attempts to connect. This is controlled by the password policy. Ten failed attempts is the default value.

Solution

If you know the `cn=orcladmin` password, then you can unlock the account by running the following command:

```
C:\> ORACLE_HOME\bin\oidpasswd connect=dbsid unlock_su_acct=true
```

where `dbsid` is the SID for the database. For example:

```
C:\> ORACLE_HOME connect=asdb unlock_su_acct=true
OID DB user password: enter_ODS_password
OID superuser account unlocked successfully.
```

The command prompts for the password of the Operational Data Source (ODS) schema. By default, the ODS password is the same as for the `cn=orcladmin` and `ias_admin` accounts, which you entered during installation.

To change the password policy, refer to *Oracle Internet Directory Administrator's Guide*.

F.3.6 User Interface Does Not Display in the Desired Language or Does Not Display Properly

Problem

Messages in the user interface do not appear in the desired language. They are not displayed correctly.

Solution

Currently Oracle Application Server does not support adding or removing languages after installation.

If you are serving non-English content, then ensure that you add all the languages that you need during installation. To add languages during installation, click the **Product Languages** button in the Select a Product to Install screen. To check what languages are installed by default, refer to Section 3.3, "Installing Additional Languages".

If you are serving non-English content and forgot to click the Product Languages in the installation, then the user interface might not display properly because the required fonts were not installed. You can fix this by installing the fonts from the "OracleAS Metadata Repository Upgrade Assistant and Utilities" CD-ROM or from the Oracle Application Server DVD-ROM by performing the following steps:

1. Insert and mount the "OracleAS Metadata Repository Upgrade Assistant and Utilities" CD-ROM or the Oracle Application Server DVD-ROM.
2. CD-ROM: Copy the contents of the `utilities\fonts` directory on the CD-ROM to the *`ORACLE_HOME`*`\jdk\jre\lib\fonts` directory on your computer.

   DVD-ROM: Copy the contents of the `repca_utilities\utilities\fonts` directory on the DVD-ROM to the *`ORACLE_HOME`*`\jdk\jre\lib\fonts` directory on your computer.

F.3.7 Unable to Run Oracle Application Server On-Network and Off-Network

Problem

You installed Oracle Application Server when the computer was connected to the network, and now you want to run it off-network.

Solution

If you want to run Oracle Application Server on-network as well as off-network, then you need to install a loopback adapter. On computers with static IP address, when you go off-network, your Ethernet adapter will be down (`ipconfig` shows cable disconnected) and `ipconfig` cannot resolve that IP.

For details on loopback adapters, refer to Section 2.6.6, "Installing a Loopback Adapter".

F.3.8 General Configuration Assistant Failures

This part of the section describes general tips for troubleshooting configuration assistant failures. Refer to the following sections for specific configuration assistant failures.

See Also : Appendix E, "Configuration Assistants".

Problem

Configuration assistant failed.

Solution

Check the following:

- Check the log files for the failed configuration assistant to determine the problem. The log files are located in the *`ORACLE_HOME`*`\cfgtoollogs` directory.

  Fix the problem indicated in the log file, and click **Retry** to rerun the failed configuration assistant.

F.3.9 Application Server Control Configuration Assistant Failure

Problem

Application Server Control Configuration Assistant fails with the following error message:

```
Launched configuration assistant 'Application Server Control Configuration
Assistant'
------------------------------------------------
Tool type is: Recommended.
The command being spawned is:
'C:\Product\OracleAS\Infra/bin/emctlins.bat'
Oracle 10g Application Server Control 10.1.2.0.0
Copyright (c) 1996, 2004 Oracle Corporation. All rights reserved.
http://mypc.mydomain.com:1810/emd/console/aboutApplication
Starting Oracle 10g Application Server Control ...The OracleOH_INFRA_1012ASControl
service is starting
.................................................................
.................................................................
.................................................................
The OracleOH_INFRA_1012ASControl service could not be started.
A service specific error occurred: 1.
More help is available by typing NET HELPMSG 3547.
Invalid Exit Code. The following result code will be used for configuration
assistants: 1
Configuration assistant "Application Server Control Configuration Assistant"
failed
```

Solution

If you get the preceding error message, then it means that the Application Server Control Configuration Assistant failed because it tried to configure Application Server Control components using ports that are already in use by other processes.

To fix this, determine the ports that the configuration assistant tried to use, check which ports are already in use, and then reconfigure Application Server Control to use different ports. The steps in detail are:

1. In the *ORACLE_HOME*`\sysman\config\emd.properties` file, get the port number specified on the `EMD_URL` line. This is the port number used by the `emagent` process.
2. In the `ORACLE_HOME\sysman\j2ee\config\emd-web-site.xml` file, get the port number listed in the `web-site` element. This is the HTTP connection port for Application Server Control.
3. In the `ORACLE_HOME\sysman\j2ee\config\rmi.xml` file, get the port number listed in the `rmi-server` element. This is the port number used for Remote Method Invocation (RMI) communication with the Application Server Control OC4J instance.
4. Run `netstat -a` to check which of the ports determined from the preceding steps are already in use.

   For example, to check if port 1851 is already in use by an existing process, you can run the following command:

   ```
   C:\> netstat -a | find "1851"
   ```

5. For the ports that are already in use, configure Application Server Control to use different ports that are not currently in use.

   If the `emagent` process port is already in use, then reconfigure it with the following command:

   ```
   C:\> emctl config agent port new_emagent_port
   ```

   If the HTTP connection port is already in use, then reconfigure it with the following command:

   ```
   C:\> emctl config iasconsole port new_AS_Control_HTTP_port
   ```

   If the RMI port is already in use, then reconfigure it with the following command:

   ```
   C:\> emctl config iasconsole rmiport new_RMI_port
   ```

6. Click **Retry** in the Configuration Assistant screen to rerun the Application Server Control Configuration Assistant, or start Application Server Control from the Services control panel. The service name is `Oracle<`*OracleHomeName*`>ASControl`.

F.3.10 OPMN Configuration Assistant - Start HTTP Server Failures

Problem

The problem is that Oracle HTTP Server is already running. The OPMN Configuration Assistant - Start HTTP Server fails when you rerun it.

Solution

Before re-running the configuration assistant, stop Oracle HTTP Server with the following command:

```
C:\> ORACLE_HOME\opmn\bin\opmnctl stopproc ias-component=HTTP_Server
```

Then rerun the OPMN Configuration Assistant - Start HTTP Server.

F.4 Need More Help?

If this appendix does not solve the problem you encountered, then try the following sources:

- *Oracle Application Server Release Notes*, available on the Oracle Technology Network (`http://www.oracle.com/technology/documentation`)
- Oracle*MetaLink* (`http://metalink.oracle.com`)

If you do not find a solution for your problem, then open a service request.

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