Oracle9i Application Server

Release Notes

Release 2 (9.0.2) for Windows NT/2000

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Part No. A90334-03



Oracle9i Application Server Release Notes, Release 2 (9.0.2) for Windows NT/2000

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Oracle9*i* Application Server Release Notes, Release 2 (9.0.2) for Windows NT/2000 Part No. A90334-03

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Preface

This preface contains the following topics:

- Intended Audience
- Documentation Accessibility
- Organization
- Related Documentation
- Conventions

Intended Audience

The *Oracle9i Application Server Release Notes* is intended for anyone interested in Oracle9*i* Application Server.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle Corporation is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at

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This documentation may contain links to Web sites of other companies or organizations that Oracle Corporation does not own or control. Oracle Corporation neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Organization

This document contains:

Chapter 1, "Summary of Changes"

This chapter provides the latest information about operating system requirements, deprecated features, licensing information, and provides links to component release notes.

Chapter 2, "Installation and Migration Issues"

This chapter contains the latest information for installation, postinstallation, deinstallation, reinstallation, and migration.

Chapter 3, "Management and Security Issues"

This chapter summarizes management and security issues associated with Oracle9*i* Application Server.

Chapter 4, "Documentation Errata"

This chapter presents documentation errata for Oracle9*i* Application Server documentation set.

Related Documentation

For more information, see these Oracle resources:

- Oracle9i Application Server Documentation Library
- Oracle9i Application Server Platform-Specific Documentation on Oracle9i Application Server Disk 1

In North America, printed documentation is available for sale in the Oracle Store at

http://oraclestore.oracle.com/

Customers in Europe, the Middle East, and Africa (EMEA) can purchase documentation from

http://www.oraclebookshop.com/

Other customers can contact their Oracle representative to purchase printed documentation.

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

http://otn.oracle.com/admin/account/membership.html

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

http://otn.oracle.com/docs/index.htm

Conventions

This section describes the conventions used in the text and code examples of this documentation set. It describes:

- Conventions in Text
- Conventions in Code Examples
- Conventions for Microsoft Windows Operating Systems

Conventions in Text

We use various conventions in text to help you more quickly identify special terms. The following table describes those conventions and provides examples of their use.

Convention	Meaning	Example
Bold	Bold typeface indicates terms that are defined in the text or terms that appear in a glossary, or both. Bold also indicate a GUI element.	When you specify this clause, you create an index-organized table.
Italics	Italic typeface indicates book titles or emphasis.	Oracle9i Database Concepts
		Ensure that the recovery catalog and target database do <i>not</i> reside on the same disk.

Convention	Meaning	Example
UPPERCASE monospace	Uppercase monospace typeface indicates elements supplied by the system. Such elements include parameters, privileges, datatypes, RMAN keywords, SQL keywords, SQL*Plus or utility commands, packages and methods, as well as system-supplied column names, database objects and structures, usernames, and roles.	You can specify this clause only for a NUMBER column.
(fixed-width) font		You can back up the database by using the BACKUP command.
		Query the TABLE_NAME column in the USER_TABLES data dictionary view.
		Use the DBMS_STATS.GENERATE_STATS procedure.
lowercase	executables, filenames, directory names, and sample user-supplied elements. Such elements include computer and database names, net service names, and connect identifiers, as well as user-supplied database objects and structures, column names, packages and classes, usernames and roles, program units, and parameter values. Note: Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	Enter sqlplus to open SQL*Plus.
<pre>monospace (fixed-width)</pre>		The password is specified in the orapwd file.
font		Back up the datafiles and control files in the /disk1/oracle/dbs directory.
		The department_id, department_name, and location_id columns are in the hr.departments table.
		Set the QUERY_REWRITE_ENABLED initialization parameter to true.
		Connect as oe user.
En		The JRepUtil class implements these methods.
lowercase	Lowercase italic monospace font represents placeholders or variables.	You can specify the parallel_clause.
<pre>italic monospace (fixed-width) font</pre>		Run Uold_release. SQL where old_release refers to the release you installed prior to upgrading.

Conventions in Code Examples

Code examples illustrate SQL, PL/SQL, SQL*Plus, or other command-line statements. They are displayed in a monospace (fixed-width) font and separated from normal text as shown in this example:

SELECT username FROM dba_users WHERE username = 'MIGRATE';

The following table describes typographic conventions used in code examples and provides examples of their use.

Convention	Meaning	Example	
[]	Brackets enclose one or more optional items. Do not enter the brackets.	DECIMAL (digits [, precision])	
{}	Braces enclose two or more items, one of which is required. Do not enter the braces.	{ENABLE DISABLE}	
1	A vertical bar represents a choice of two	{ENABLE DISABLE}	
	or more options within brackets or braces. Enter one of the options. Do not enter the vertical bar.	[COMPRESS NOCOMPRESS]	
	Horizontal ellipsis points indicate either:		
	 That we have omitted parts of the code that are not directly related to the example 	CREATE TABLE AS subquery;	
 That you can repeat a portion of code 		SELECT col1, col2,, coln FROM employees;	
· ·	Vertical ellipsis points indicate that we have omitted several lines of code not directly related to the example.		
Other notation	You must enter symbols other than	acctbal NUMBER(11,2);	
	brackets, braces, vertical bars, and ellipsis points as shown.	acct CONSTANT NUMBER(4) := 3;	
Italics	Italicized text indicates placeholders or	CONNECT SYSTEM/system_password	
	variables for which you must supply particular values.	DB_NAME = database_name	
UPPERCASE	Uppercase typeface indicates elements supplied by the system. We show these terms in uppercase in order to distinguish them from terms you define. Unless terms	<pre>SELECT last_name, employee_id FROM employees;</pre>	
		SELECT * FROM USER_TABLES;	
	appear in brackets, enter them in the order and with the spelling shown. However, because these terms are not case sensitive, you can enter them in lowercase.	DROP TABLE hr.employees;	

Convention	Meaning	Example
lowercase	programmatic elements that you supply. For example, lowercase indicates names	<pre>SELECT last_name, employee_id FROM employees;</pre>
		sqlplus hr/hr
	Note: Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	CREATE USER mjones IDENTIFIED BY ty3MU9;

Conventions for Microsoft Windows Operating Systems

The following table describes conventions for Microsoft Windows operating systems and provides examples of their use.

Convention	Meaning	Example
Choose Start >	How to start a program.	To start the Oracle Database Configuration Assistant, choose Start > Programs > Oracle - HOME_NAME > Configuration and Migration Tools > Database Configuration Assistant.
File and directory names	File and directory names are not case sensitive. The following special characters are not allowed: left angle bracket (<), right angle bracket (>), colon (:), double quotation marks ("), slash (/), pipe (), and dash (-). The special character backslash (\) is treated as an element separator, even when it appears in quotes. If the file name begins with \ then Windows assumes it uses the Universal Naming Convention.	<pre>c:\winnt"\"system32 is the same as C:\WINNT\SYSTEM32</pre>
C:\>	Represents the Windows command prompt of the current hard disk drive. The escape character in a command prompt is the caret (^). Your prompt reflects the subdirectory in which you are working. Referred to as the <i>command prompt</i> in this manual.	C:\oracle\oradata>

Convention	Meaning	Example	
	The backslash (\) special character is sometimes required as an escape character for the double quotation mark	C:\>exp scott/tiger TABLES=emp QUERY=\"WHERE job='SALESMAN' and sal<1600\"	
	(") special character at the Windows command prompt. Parentheses and the single quotation mark (') do not require an escape character. Refer to your Windows operating system documentation for more information on escape and special characters.	<pre>C:\>imp SYSTEM/password FROMUSER=scott TABLES=(emp, dept)</pre>	
HOME_NAME	Represents the Oracle home name. The home name can be up to 16 alphanumeric characters. The only special character allowed in the home name is the underscore.	C:\> net start OracleHOME_ NAMETNSListener	

Convention Meaning		Example
ORACLE_HOME and ORACLE_ BASE	In releases prior to Oracle8 <i>i</i> release 8.1.3, when you installed Oracle components, all subdirectories were located under a top level ORACLE_HOME directory that by default used one of the following names:	Go to the ORACLE_BASE\ORACLE_HOME\rdbms\admin directory.
	■ C:\orant for Windows NT	
	■ C:\orawin95 for Windows 95	
	■ C:\orawin98 for Windows 98	
	This release complies with Optimal Flexible Architecture (OFA) guidelines. All subdirectories are not under a top level <code>ORACLE_HOME</code> directory. There is a top level directory called <code>ORACLE_BASE</code> that by default is <code>C:\oracle</code> . If you install Oracle9i release 1 (9.0.1) on a computer with no other Oracle software installed, then the default setting for the first Oracle home directory is <code>C:\oracle\oragle</code> . The Oracle home directory is located directly under <code>ORACLE_BASE</code> .	
	All directory path examples in this guide follow OFA conventions.	
	Refer to <i>Oracle9i Database Getting Starting</i> for Windows for additional information about OFA compliances and for information about installing Oracle products in non-OFA compliant directories.	

Summary of Changes

This release notes document contains information about Oracle9*i* Application Server Release 2 (9.0.2) that did not make it into the documentation set. Although this document is accurate at the time of publication, you can access the latest information and additions to these release notes on the Oracle Technology Network at:

http://otn.oracle.com/products/ias

Topics in this chapter include:

- Purpose of this Document
- Component Release Notes
- **Certification Information**
- **Licensing Information**
- **Deprecated Features**

1.1 Purpose of this Document

This document describes differences between Oracle9i Application Server Release 2 (9.0.2) for Windows NT/2000 and its documented functionality.

This document contains the following:

- operating system patches required for running Oracle9i Application Server
- installation and migration issues and workarounds
- general management and security issues and workarounds
- updates to books in the documentation library

This is the main release notes document for the product, and Oracle Corporation recommends you review its contents before reading the component release notes listed in the next section.

1.2 Component Release Notes

For latest information about specific Oracle9iAS components, refer to the component-specific release notes from the links below.

Table 1–1 Component Release Notes

Solution Area	Component Release Notes		
J2EE and Internet	■ Oracle HTTP Server Release Notes		
Applications Install Type	■ Oracle9iAS Containers for J2EE Release Notes		
	■ Oracle9iAS Web Services Release Notes		
	■ Oracle9iAS Web Cache Release Notes		
	■ Oracle Enterprise Manager Web Site Release Notes		
Portal and Wireless Install	■ Oracle9iAS Portal Release Notes		
Туре	Oracle Ultra Search Release Notes		
	 Oracle9iAS Wireless Release Notes 		
Business Intelligence and	■ Oracle9iAS Discoverer Release Notes		
Forms Install Type	■ Oracle9iAS Forms Developer and Forms Services Release Notes		
	■ Oracle9iAS Personalization Release Notes		
	 Oracle9iAS Reports Services Release Notes 		

Table 1–1 (Cont.) Component Release Notes

Solution Area	Component Release Notes		
Infrastructure Install Type	 Oracle 	e Enterprise Manager Release Notes	
	 Oracle 	e Internet Directory Release Notes	
	Oracle	e9iAS Single Sign-On Release Notes	
Developer Kits	Oracle	e9i XML Developer Kits Release Notes	
Integration and Client	 Oracle 	29iAS InterConnect Release Notes	
Components	 Oracle 	e Workflow Release Notes	
	 Oracle 	e9i Application Server Client Release Notes	

1.3 Certification Information

Latest certification information for Oracle9iAS, Release 2 (9.0.2), is available at:

http://metalink.oracle.com

1.4 Licensing Information

Licensing information for Oracle9*i*AS, Release 2 (9.0.2), is available at:

http://esource.oraclecorp.com/webdbprd-dad/webdb/esrc/esr_main.home

1.5 Deprecated Features

The deprecated features for Oracle9iAS, Release 2 (9.0.2) for Windows NT/2000 include:

- Oracle9iAS Unified Messaging. This is still available in the UNIX versions of Oracle9iAS, Release 2 (9.0.2).
- Oracle9iAS Database Cache
- Enterprise Java Engine
- IIS Plugin
- mod_ssl based on openssl. This has been replaced by mod_ossl.

A list of deprecated features is also available on OTN under the title "Oracle9iAS Release 2 (9.0.2) Deprecated Features":

http://otn.oracle.com/products/ias

Deprecated	Features
------------	-----------------

Installation and Migration Issues

This chapter describes installation and migration issues and their workarounds. Topics include:

- **Installation Issues**
- Postinstallation Issues
- **Deinstallation Issues**
- Reinstallation Issues
- Migration Issues

2.1 Installation Issues

This section covers these installation issues:

- Install Oracle9iAS on Machine With Static IP Address
- Modification in init.ora for Oracle9iAS Metadata Repository
- MS-DOS Windows Appear During Installation
- Service Errors and NoClassDefFound Exceptions

2.1.1 Install Oracle9iAS on Machine With Static IP Address.

Make sure you install Oracle9iAS on a machine that has a static IP address.

2.1.2 Modification in init.ora for Oracle9iAS Metadata Repository

If you are using Oracle9iAS Metadata Repository, edit the init.ora file to remove the following entry:

_optim_peek_user_binds=FALSE

2.1.3 MS-DOS Windows Appear During Installation

During the installation process, when the various configuration tools are running, some MS-DOS windows appear. There is no information displayed on the windows regarding why they appear.

These windows appear due to a JDK 1.3 related issue. Do not kill these windows as they will disappear automatically once the configuration tool completes its actions.

2.1.4 Service Errors and NoClassDefFound Exceptions

After accessing a large number of different module services or HTTP adapter-based services (with JSP-based content sources hosted on the same Java VM), some of the services fail with a 'service error'. Accessing the target JSPs results in a 'NoClassDefFound' exception. Restarting the server corrects the problem.

When an application is loaded for the first time, the OC4J classloaders read the class bytes in the library jars into memory; it does so even without the classes being instantiated (because the application instantiates classes from an in-memory array).

Class files resulting from compiling JSP files are loaded dynamically. With time, the heap gets filled up and newer classes from compiled JSPs cannot be read into the memory array(s), nor instantiated on the heap. Hence the top-level classloaders fail with a 'NoClassDefFound' exception. In subsequent lookups, the 'OutOfMemoryError' is not thrown since the JDK classloader loadClass() implementation semantics prescribe NOT reloading classes that could not deterministically be loaded earlier.

To determine if this is the case, check the number of OutOfMemoryErrors in sys panama.log. That number should be the same as the number of times the server has been restarted.

If it is the case, increase the heap-size for the VM by modifying the Java option subelement of the OC4J element corresponding to the instanceName OC4J Wireless.

- 1. From your browser, point to Oracle Enterprise Manager at http://<host>:1810.
- 2. Log in to Enterprise Manager as ias_admin/<password supplied at install time>.
- **3.** Select your middle tier instance.
- **4.** Select OC4J_Wireless. The OC4J_Wireless screen appears.
- **5.** Select "Server Properties" (located under Instance Properties at the bottom of the OC4J_Wireless page) to invoke the Server Properties page. A page with command-line options appears which includes an editable field for Java Options which you use to set the heap size.
- **6.** Use the Java Options field to set the heap size.
- Remove the option -noclassgc.
- **8.** Click **Apply**.

See Also: "Setting the JVM Heap Size for OC4J Processes" section in the *Oracle9i Application Server Performance Guide*.

2.2 Postinstallation Issues

This section covers the following postinstallation issue:

Information About Starting The Directory Integration Server on Windows NT

2.2.1 Information About Starting The Directory Integration Server on Windows NT

Only the owner of the OracleDirectoryService, which runs with the name "OracleDirectoryService_%SID%" in any Oracle installation, can start the Directory Integration Server. By default, on Windows NT, all the services run with the credentials of a user named SYSTEM, which is internal for NT. So, the owner of the OracleDirectoryService needs to be reset to the administrator/loginid authorized to run Oracle Directory and related services. To do this, perform the following steps:

- 1. Configure a user with login service privileges. To achieve this, do the following:
 - a. Click on Start > Settings > Control Panel > Services.
 - **b.** When you double click on OracleDirectoryService_%SID%, a service windows appears.
 - In the "Logon as" section, select "this account".
 - **d.** Specify the login ID and password. Click **OK**.
 - Stop and start the service.
- Register the Directory Integration Server by running odisrvreg.
- Start the Directory Integration Server using oidctl.

2.3 Deinstallation Issues

This section covers the following deinstallation issue:

Information about Deinstalling OracleProcessManager Service

2.3.1 Information about Deinstalling OracleProcessManager Service

If you install Oracle9iAS with Oracle9iDS, and then deinstall Oracle9iAS, OracleProcessManager service will not be deinstalled. This service can only be deinstalled with Oracle9*i*DS. However, it is safe to remove this service manually without deinstalling Oracle9iDS.

2.4 Reinstallation Issues

There are no known issues associated with reinstallation.

2.5 Migration Issues

This section covers the following migration issue:

osslconvert Tool Might Fail During Certificate Migration

2.5.1 osslconvert Tool Might Fail During Certificate Migration

The osslconvert tool may fail during certificate migration. During the failure, a popup window appears with the following message:

```
application osslconvert.exe:
The instruction at "xxxxxxxx" referenced memory at "xxxxxxxx". The memory could
not be written.
```

You should ignore this failure and continue with the migration process. If this failure persists, then edit the ComSpec environment variable to add more environment space. This is done by adding /e: <size> to the end of the ComSpec value. The maximum size is 32768 bytes.

Migration	Issues
-----------	--------

Management and Security Issues

This chapter summarizes management and security issues associated with Oracle9i Application Server. Topics include:

- Management Issues
- **Security Issues**

3.1 Management Issues

This section contains the following topics:

- Clock Synchronization
- Use Port Option to Configure Loading Application
- Concurrent Administrative Operations on a Cluster Not Supported
- Directing Requests to OC4J Instances in Different Oracle Homes

3.1.1 Clock Synchronization

Several Oracle9iAS components require the clocks on the machines on which they run to be synchronized. You can synchronize the clocks by running the Network Time Protocol (NTP) daemon on these machines. You do this by using abouttime or such similar software for Windows.

3.1.2 Use Port Option to Configure Loading Application

There are several ways to configure how to load an application.

- One is to load it dynamically when the first request comes in. This approach uses named pipes for communication.
- Another approach is to load the application at startup. With this approach, you can configure it to use the port option or the named pipe option (where you do not have to specify the port). This release supports the port option only.

3.1.3 Concurrent Administrative Operations on a Cluster Not Supported

Concurrent administrative operations on a cluster are not supported in Oracle9iAS Release 2 (9.0.2). Configuration information for clusters is stored in a central repository. All members of the cluster have access to this repository. This keeps configuration consistent across the cluster. Since the objects in the repository are shared across the cluster, concurrent write access to these objects is not allowed.

3.1.4 Directing Requests to OC4J Instances in Different Oracle Homes

This section describes how to direct requests to OC4I instances running on Oracle homes that are different from the one that first received the request. In other words, Oracle HTTP Server receives a request, then forwards it to an OC4J instance that belongs to a different Oracle home. In that Oracle home, OC4J instances are running, but Oracle HTTP Server may or may not be running. The Oracle homes can be installed on the same machine or different machines.

This scenario is different from clusters. In a cluster, all the Oracle9iAS instances are configured identically, and mod_oc4j sends requests to the instances in the cluster in a round-robin fashion. See the "Application Server Clustering" chapter in the Oracle9i Application Server Administrator's Guide for details on clustering.

In this scenario, the Oracle9iAS instances do not need to be the same type: they can be different mid-tier types and they can be configured differently. You can even direct requests between an infrastructure and a mid-tier type. See Section 3.1.4.3, "Directing Requests between Infrastructure and Mid-Tier" for details.

3.1.4.1 Requirements

For this to work, your environment must have the following characteristics:

- The Oracle homes must belong to the same farm (that is, they use the same metadata repository).
- The targeted Oracle home must have the desired OC4J instances (for example, OC4J_Portal, OC4J_DAS, OC4J_Wireless) and the OC4J instance must be running.
- The application must be deployed on the OC4J instance to which you want to route the request. In addition, the application must have the same URL prefix as on the local instance.
- The mid-tier may be clustered with other identically configured mid-tier installations.

3.1.4.2 General Procedure

The procedure for directing requests to another Oracle home is to edit the Oc4jConf directive in the

 ${\it ORACLE_HOME/Apache/Apache/conf/mod_oc4j.}$ conf file. The directive maps URLs to OC4J instances.

By default, the directive directs requests to OC4J instances in the local Oracle home (the OC4J instances belong to the same host:port specified in the URL).

For example, the following lines route requests that begin with /webapp and /portal to the home and OC4J_Portal OC4J instances on the local Oracle9iAS instance, respectively:

```
Oc4jMount /webapp/* home
Oc4jMount /portal/* OC4J_Portal
```

To direct requests to an OC4J instance on another Oracle home, you prepend the name of the Oracle9*i*AS instance to the OC4J instance name, and you use the keyword "instance".

Syntax:

```
Oc4jMount url instance://ias_instance_name1:oc4j_instance_name[, ias_instance_name2:oc4j_instance_name, ...]

Oc4jMount url cluster://cluster_name1:oc4j_instance_name[, cluster_name2:oc4j_instance_name, ...]
```

where:

- instance is a keyword.
- cluster is a keyword.
- url specifies the URL for the application.
- ias_instance_nameN specifies the names of Oracle9iAS instances. These instances can run on the same or different machine. The instance name includes the machine name. See Section 3.1.4.6, "Determining Oracle9iAS Instance Names" for details.

If you specify more than one instance name, the requests are sent to the instances in a round-robin manner.

- *cluster_nameN* specifies the names of the clusters to which you want to direct the requests. Oracle HTTP Server distributes the requests to the Oracle9iAS instances in the cluster. See Section 3.1.4.8, "Determining Cluster Names" for details.
 - For clustering details, see the "Application Server Clustering" chapter in the *Oracle9i Application Server Administrator's Guide.*
- oc4i instance name specifies the name of the OC4I instance name on the Oracle9iAS instance. See Section 3.1.4.7, "Determining OC4J Instance Names" for details.

Non-Clustered Example For example, the following lines direct the requests to instances on an Oracle9iAS instance called "pw.machine2.us.oracle.com". The instances are running on a machine called "machine2.us.oracle.com".

```
Oc4jMount /webapp/* instance://pw.machine2.us.oracle.com:home
Oc4jMount /portal/* instance://pw.machine2.us.oracle.com:OC4J_Portal
```

The syntax allows you to specify more than one instance to which to direct the requests. You separate the instances with the comma character. For example, the following line directs /portal/* requests to the OC4J_Portal instance running on machine2 and machine3 (all on one line):

```
Oc4jMount /portal/* instance://pw.machine2.us.oracle.com:OC4J_Portal,
pw.machine3.us.oracle.com:OC4J_Portal
```

In the example above, the pw.machine2.us.oracle.com and the pw.machine3.us.oracle.com Oracle9iAS instances do not need to be the same install type, but they do need to be running the OC4J_Portal instance.

3.1.4.2.2 Clustered Example The syntax also allows you to direct requests to clusters. Oracle HTTP Server distributes the requests to the Oracle9iAS instances in the cluster.

The following example directs requests to OC4J_Portal instances in Oracle9iAS instances in the forms cluster cluster.

```
Oc4jMount /portal/* cluster://forms_cluster:OC4J_Portal
```

3.1.4.3 Directing Requests between Infrastructure and Mid-Tier

A specific situation where you might want to redirect requests is where you have installed the Oracle9iAS infrastructure and a mid-tier install type on the same machine, but in different Oracle homes. You have Oracle HTTP Server processes running from both Oracle homes; they listen at different port numbers. Figure 3–1 shows such a situation: a machine, called machine1, has two Oracle homes. The infrastructure Oracle HTTP Server listens at port 7777, and the mid-tier Oracle HTTP Server listens at port 7780.

INFRASTRUCTURE OC4J instances Request: http://machine1:7777 home Oracle HTTP Server Oracle Internet OC4J_DAS Directory mod_plsql mod_oc4j mod_osso OC4J_Demos opmn Single Sign-On Server MIDDLE TIER home Request: http://machine1:7780 dcm OC4J_Portal Oracle HTTP Server OC4J_Demos mod oc4i mod osso mod plsql OC4J BI Forms Metadata repository opmn OC4J_Wireless dcm

Figure 3–1 Original configuration

You now want to reduce the number of Oracle HTTP Server processes. One way of doing this is to configure Oracle HTTP Server running on one Oracle home (infrastructure's or mid-tier's) so that it can be the front-end to the other Oracle home. Two scenarios are possible:

- You can configure Oracle HTTP Server running on the infrastructure Oracle home so that it can be the front-end to the mid-tier as well. This enables you to shut down Oracle HTTP Server processes running from the mid-tier Oracle home. See Section 3.1.4.4, "Directing Requests through the Infrastructure".
- You can configure Oracle HTTP Server running on the mid-tier Oracle home so that it can be the front-end to the infrastructure as well. This enables you to shut down Oracle HTTP Server processes running from the infrastructure Oracle home. See Section 3.1.4.5, "Directing Requests through the Mid-Tier".

In both scenarios, the Oracle9iAS instances are different (infrastructure and mid-tier installation types) and thus cannot be clustered together.

The following table lists the advantages and disadvantages of consolidating Oracle HTTP Servers:

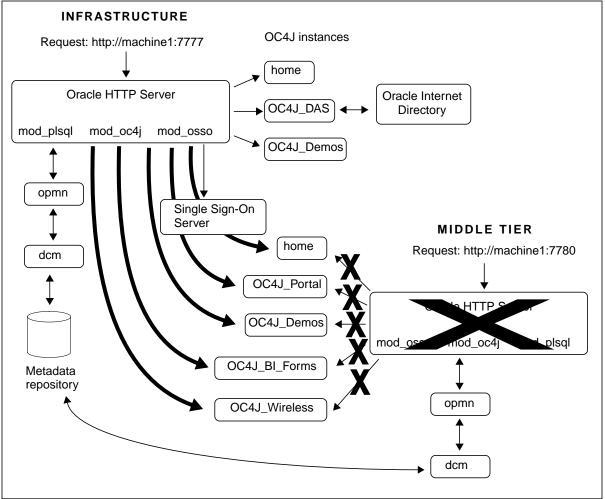
Table 3–1 Advantages and disadvantages of consolidating Oracle HTTP Servers

Advantages	Disadvantages
 Only one Oracle HTTP Server to configure Fewer processes on the machine Fewer ports to open for the firewall Only one certificate needed for SSL 	 If Oracle HTTP Server goes down for any reason, URLs on both mid-tier and infrastructure become unavailable because that is your only HTTP Server. If you set up the mid-tier to be the front-end to the infrastructure (that is, you shut down the infrastructure Oracle HTTP Server), some infrastructure services (such as SSO) become unavailable.

3.1.4.4 Directing Requests through the Infrastructure

In this scenario (Figure 3-2), you shut down the Oracle HTTP Server running on the mid-tier. All requests goes through the Oracle HTTP Server running on the infrastructure Oracle home.

Figure 3–2 Using only the infrastructure Oracle HTTP Server



To enable the infrastructure Oracle HTTP Server to handle these requests, you have to do the following step:

Configure the mod oc4j.conf file on the infrastructure

To configure the mod oc4j.conf file on the infrastructure:

- Make a copy of the infrastructure mod_oc4j.conf file, so that you have a backup.
- 2. Copy the Oc4 jMount lines from the mid-tier mod oc4j.conf to the infrastructure mod oc4j.conf.

Note that there are some lines that are the same in both the infrastructure and mid-tier files. Do not copy these lines from the mid-tier file (that is, use the lines already in the infrastructure file).

The list below shows the lines in the mid-tier mod oc4j.conf file.

Note: Your list of Oc4jMount directives might not match exactly the list shown above. The exact contents depends on the mid-tier installation type. Bigger installation types, such as Business Intelligence and Forms, have more directives than other installation types. You just need the ones that you see in your mod_oc4j.conf file.

```
Oc4jMount /j2ee/*
                                               # do not copy; already in the infrastructure file
Oc4jMount /wwcp
                          OC4J_Wireless
Oc4jMount /wwcp/*
                          OC4J Wireless
Oc4jMount /modules
                          OC4J_Wireless
Oc4jMount /modules/*
                          OC4J_Wireless
Oc4jMount /push
                          OC4J Wireless
Oc4jMount /push/*
                          OC4J_Wireless
Oc4jMount /async
                          OC4J_Wireless
Oc4jMount /async/*
                          OC4J Wireless
Oc4jMount /ptq
                          OC4J_Wireless
Oc4jMount /ptq/*
                          OC4J_Wireless
Oc4jMount /jocdemo
                                               # do not copy; already in the infrastructure file
                          OC4J Demos
Oc4jMount /jocdemo/*
                                               # do not copy; already in the infrastructure file
                          OC4J_Demos
Oc4jMount /ojspdemos
                          OC4J_Demos
Oc4jMount /ojspdemos/*
                          OC4J_Demos
Oc4jMount /repdemo
                          OC4J_Demos
Oc4jMount /repdemo/*
                          OC4J_Demos
Oc4jMount /bmp
                          OC4J_Demos
Oc4jMount /bmp/*
                          OC4J_Demos
```

```
Oc4jMount /callerInfo
                           OC4J_Demos
Oc4jMount /callerInfo/*
                           OC4J_Demos
Oc4jMount /onlineorders
                           OC4J Demos
                                               # do not copy; already in the infrastructure file
Oc4jMount /onlineorders/* OC4J_Demos
                                               # do not copy; already in the infrastructure file
Oc4jMount /webapp
                                               # do not copy; already in the infrastructure file
                          home
Oc4jMount /webapp/*
                          home
                                               # do not copy; already in the infrastructure file
Oc4jMount /cabo
                          home
                                               # do not copy; already in the infrastructure file
                          home
                                               # do not copy; already in the infrastructure file
Oc4jMount /cabo/*
Oc4jMount /studio
                                    OC4J_Portal
Oc4jMount /studio/*
                                    OC4J_Portal
Oc4jMount /jpdk
                                    OC4J_Portal
Oc4jMount /jpdk/*
                                    OC4J_Portal
Oc4jMount /syndserver
                                    OC4J_Portal
Oc4jMount /syndserver/*
                                    OC4J Portal
Oc4jMount /ultrasearch/query
                                    OC4J Portal
Oc4jMount /ultrasearch/query/*
                                    OC4J_Portal
Oc4jMount /customization
                                    OC4J_Portal
Oc4jMount /customization/*
                                    OC4J Portal
Oc4jMount /webtool
                                    OC4J_Portal
Oc4jMount /webtool/*
                                    OC4J_Portal
Oc4jMount /wcp
                                    OC4J_Portal
Oc4jMount /wcp/*
                                    OC4J_Portal
Oc4jMount /ultrasearch/admin
                                    OC4J_Portal
Oc4jMount /ultrasearch/admin/*
                                    OC4J Portal
Oc4jMount /ultrasearch/admin_sso
                                    OC4J_Portal
Oc4jMount /ultrasearch/admin_sso/* OC4J_Portal
                                    OC4J Portal
Oc4jMount /uddi
Oc4jMount /uddi/*
                                    OC4J_Portal
Oc4jMount /provider/ultrasearch
                                    OC4J_Portal
Oc4jMount /provider/ultrasearch/*
                                    OC4J_Portal
Oc4jMount /portal
                                    OC4J_Portal
Oc4jMount /portal/*
                                    OC4J_Portal
Oc4jMount /examples
                                    OC4J_Portal
Oc4jMount /examples/*
                                    OC4J_Portal
Oc4jMount /OP
                                    OC4J_BI_Forms
Oc4jMount /OP/*
                                    OC4J_BI_Forms
Oc4jMount /reports
                                    OC4J_BI_Forms
Oc4jMount /reports/*
                                    OC4J_BI_Forms
Oc4jMount /click
                                    OC4J_BI_Forms
Oc4jMount /click/*
                                    OC4J_BI_Forms
Oc4jMount /discoverer
                                    OC4J_BI_Forms
Oc4jMount /discoverer/*
                                    OC4J_BI_Forms
```

3. Edit the lines in the infrastructure mod oc4j.conf file so that it contains the "instance: //" keyword and the name of the mid-tier instance.

Table 3–2 shows an example of how the lines would look in the infrastructure mod oc4j.conf. In the table, ias mid tier instance name refers to the name of your mid-tier instance. Note that the table shows only a sample of two lines; you need to edit the rest of the lines that you copied.

Table 3–2 mod_oc4j.conf

Lines in mid-tier mod_oc4j.conf (sample)	Edited lines in infrastructure mod_oc4j.conf (sample)		
Oc4jMount /wwcp OC4J_Wireless Oc4jMount /wwcp/* OC4J_Wireless	Oc4jMount /wwcp Oc4jMount /wwcp/*	<pre>instance://ias_mid_tier_instance_name:OC4J_Wireless instance://ias_mid_tier_instance_name:OC4J_Wireless</pre>	

You can edit the mod oc4j.conf file using OEM or a text editor. See Section 3.1.4.9, "Editing the mod_oc4j.conf File" for details. If you use a text editor to edit mod_oc4j.conf, you must run "dcmctl updateConfig" and restart Oracle HTTP Server after you edit the file.

4. Start up the OC4J Demos and home OC4J instances on the infrastructure. By default, these OC4J instances are not started up in the infrastructure. You can start them up using dcmctl or OEM.

3.1.4.5 Directing Requests through the Mid-Tier

Figure 3–3 shows a configuration where the infrastructure Oracle HTTP Server goes away, and all requests go through the mid-tier Oracle HTTP Server.

Note: This scenario is recommended only for J2EE and Web Cache mid-tier installation types and only if you do not use SSO in any way. Some components, such as SSO, cannot work without the infrastructure Oracle HTTP Server. This means that if you use components that use SSO, you cannot use this scenario. This includes Portal, Wireless, and DAS. It is recommended if you are directing requests between infrastructure and mid-tier, you direct your requests the other way (through the infrastructure Oracle HTTP Server instead of through the mid-tier Oracle HTTP Server).

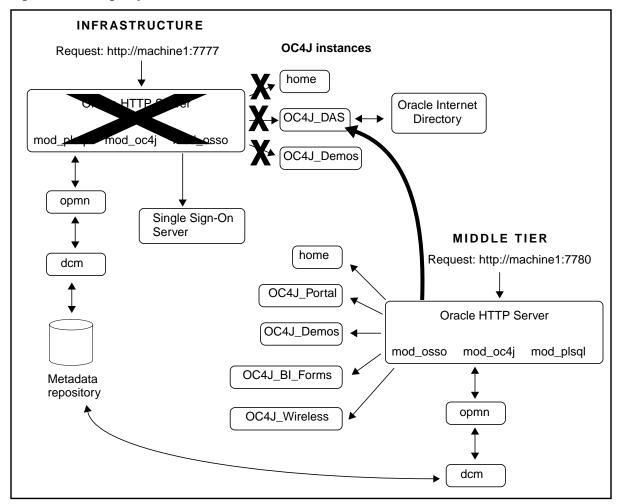


Figure 3-3 Using only the mid-tier Oracle HTTP Server

You have to configure Oracle HTTP Server on the mid-tier to handle requests that used to be handled by the infrastructure Oracle HTTP Server. This involves:

Editing the mod_oc4j.conf file to accept requests for the OC4J_DAS instance.

To configure the mid-tier mod_oc4j.conf file:

- Make a copy of the mid-tier mod_oc4j.conf file, so that you have a backup.
- Copy the Oc4jMount lines from the infrastructure mod_oc4j.conf to the mid-tier mod_oc4j.conf.

Note that there are some lines that are the same in both the infrastructure and mid-tier files. Do not copy these lines from the infrastructure file (that is, use the lines already in the mid-tier file). The only lines that you need to copy are the /oiddas lines.

The list below shows the lines in the infrastructure mod oc4j.conf file.

```
# do not copy; already in the mid-tier file
Oc4jMount /j2ee/*
Oc4jMount /jocdemo
                                              # do not copy; already in the mid-tier file
                          OC4J_Demos
Oc4jMount /jocdemo/*
                          OC4J Demos
                                              # do not copy; already in the mid-tier file
                                              # do not copy; already in the mid-tier file
Oc4iMount /onlineorders
                          OC4J Demos
Oc4jMount /onlineorders/* OC4J_Demos
                                              # do not copy; already in the mid-tier file
Oc4jMount /webapp
                          home
                                              # do not copy; already in the mid-tier file
                                              # do not copy; already in the mid-tier file
Oc4jMount /webapp/*
                         home
Oc4jMount /cabo
                         home
                                              # do not copy; already in the mid-tier file
Oc4jMount /cabo/*
                         home
                                              # do not copy; already in the mid-tier file
Oc4jMount /oiddas
                          OC4J_DAS
Oc4jMount /oiddas/*
                          OC4J_DAS
```

3. Edit the lines in the mid-tier mod oc4j.conf file so that it contains the "instance: //" keyword and the name of the infrastructure instance, as shown in Table 3–3.

In the table, ias infra instance name refers to the name of the infrastructure instance.

Table 3–3 mod_oc4j.conf when directing requests to the mid-tier Oracle home

Copy from: Infrastructure mod_oc4j.conf To: Mid-Tier mod_oc4j.conf Oc4jMount /oiddas OC4J DAS Oc4jMount /oiddas instance://ias_infra_instance_name:OC4J_DAS Oc4jMount /oiddas/* OC4J_DAS Oc4jMount /oiddas/* instance://ias_infra_instance_name:OC4J_DAS

You can edit the mod_oc4j.conf file using Enterprise Manager or a text editor. See Section 3.1.4.9, "Editing the mod_oc4j.conf File" for details.

Note: If you use a text editor to edit mod_oc4j.conf, you must run "dcmctl updateConfig" and restart Oracle HTTP Server after you edit the file.

3.1.4.6 Determining Oracle9*i*AS Instance Names

You can determine the name of an Oracle9iAS instance by running the dcmctl command with the whichInstance option:

```
prompt> dcmctl whichInstance
doctest_j2ee.machine1.us.oracle.com
```

The instance name contains the host name, including the domain name.

dcmctl is in ORACLE_HOME/dcm/bin. If you have multiple Oracle homes on the same machine, run the command from the appropriate ORACLE_HOME.

For example, to route requests from the mid-tier to infrastructure OC4J instances (scenario 2), you need the name of the infrastructure instance.

```
prompt > cd INFRASTRUCTURE_ORACLE_HOME
prompt> cd dcm/bin
prompt> ./dcmctl whichInstance
doctest_infra.machinel.us.oracle.com
```

3.1.4.7 Determining OC4J Instance Names

You can determine the names of installed OC4J instances on a machine by running the dcmctl command with the listComponents option on that machine:

```
prompt> dcmctl listComponents
HTTP Server
OC4J_BI_Forms
OC4J Demos
OC4J Portal
OC4J_Wireless
home
```

The command returns the names of Oracle HTTP Server instances as well. You can determine the type of a component by running the dcmctl command with the getComponentType option:

```
prompt> dcmctl getComponentType -co home
prompt> dcmctl getComponentType -co "HTTP Server"
ohs
```

To route requests from the mid-tier to the infrastructure OC4J instances (scenario 2), you need the OC4J_DAS instance on the infrastructure.

3.1.4.8 Determining Cluster Names

You can determine the names of clusters by running the dcmctl command with the listClusters option.

prompt> dcmctl listClusters forms cluster

3.1.4.9 Editing the mod_oc4j.conf File

You can edit the ORACLE_HOME/Apache/Apache/conf/mod_oc4j.conf file using a text editor or Enterprise Manager.

> **Note:** If you use a text editor to edit mod_oc4j.conf, you need to run dcmctl with the updateConfig option to sync the changes with the DCM repository. Then you have to restart Oracle HTTP Server so that it can read the updated file.

To edit the mod_oc4j.conf file using Enterprise Manager:

Navigate to the Enterprise Manager Web site:

http://host:1810/

where host specifies the machine running Enterprise Manager. The default port is 1810.

- On the Farm page, click the name of the mid-tier instance.
- **3.** On the mid-tier instance home page, click **HTTP Server** in the System Components table.
- **4.** On the HTTP Server page, click **Advanced Server Properties** in the Administration section.
- **5.** On the Advanced Server Properties page, click **mod_oc4j.conf**.

This displays the "Edit mod_oc4j.conf" page.

- **6.** Make your changes to the file.
- Click Apply.
- **8.** Click **Yes** when prompted to restart HTTP Server.

To edit the mod_oc4j.conf file using a text editor:

1. Change directory to ORACLE_HOME/Apache/Apache/conf.

```
prompt> cd ORACLE_HOME/Apache/Apache/conf
```

- Make your changes to the file using a text editor.
- 3. Run dcmctl with the updateConfig parameter.

```
prompt> cd ORACLE_HOME/dcm/bin
prompt> ./dcmctl updateConfig
```

4. Restart Oracle HTTP Server.

```
prompt> ./dcmctl restart -ct ohs
```

3.2 Security Issues

The following are known issues associated with Oracle9iAS security.

Avoid Adding User Certificates to Trustpoints or Trusted Certificate Lists

3.2.1 Avoid Adding User Certificates to Trustpoints or Trusted Certificate Lists

If a wallet contains a user certificate as a trustpoint for a server, then a core dump occurs when the user connects to the server.

Oracle Corporation recommends not adding user certificates to trustpoints or trusted certificate lists in the Oracle wallet. Instead, install the certificate authority (CA) signers' certificate as a trustpoint.

Documentation Errata

This section describes documentation issues in the following documentation:

- Oracle9i Application Server Administrator's Guide
- Oracle9i Application Server Concepts
- Oracle9i Application Server Security Guide
- Online Help

4.1 Oracle9i Application Server Administrator's Guide

Following are the known issues in the Oracle9i Application Server Administrator's Guide:

- Additional Information for the "Managing Oracle Internet Directory" Chapter
- Include Additional Port Numbers for Oracle9iAS Web Cache
- Correct Information Regarding Routing Priority for OC4J Requests
- **Updated Syntax for OPMN Samples**

4.1.1 Additional Information for the "Managing Oracle Internet Directory" Chapter

The "Installing and Configuring Oracle9iAS" section in the "Managing Oracle Internet Directory" chapter of the Oracle9i Application Server Administrator's Guide should contain the following information:

- In addition to being in the iASAdmins group, you must also be the "owner" of the iASAdmins group.
- 2. You must also be in the OracleDBCreators group if you need to create a new infrastructure database.
- To perform a Portal installation, you must also be in the OracleDASAdminGroup in the Root Oracle Context.

4.1.2 Include Additional Port Numbers for Oracle9 iAS Web Cache

Table "Oracle9iAS Port Usage (Sorted by Component)" in the "Default Port Numbers and Port Ranges" chapter of the Oracle9i Application Server Administrator's Guide contains an incomplete list of port numbers for Oracle9iAS Web Cache. Table 4–1 contains the complete list of Oracle9*i*AS Web Cache port numbers.

Table 4–1	Oracle9iAS Port	Usage (Sorted by	Component)
-----------	-----------------	------------------	------------

Component	Default Port Number	Port Range
Oracle9iAS Web Cache HTTP Listen- non-SSL	7777	7777-7877
Oracle9iAS Web Cache HTTP Listen-SSL	4443	4443-4543
Oracle9iAS Web Cache Administration	4000	4000-4030
Oracle9iAS Web Cache Invalidation	4001	4000-4030
Oracle9iAS Web Cache Statistics	4002	4000-4030

4.1.3 Correct Information Regarding Routing Priority for OC4J Requests

Section "Component Instances: Oracle HTTP Server" in the "Clustering" chapter of the of the Oracle9i Application Server Administrator's Guide contains the following incorrect statement:

"Forward an incoming stateless request to any OC4J process in the cluster. The priority is to forward the incoming request first to an OC4J process in its own application server instance. If none are available, it forwards the request to any OC4J process in another application server instance in the cluster."

It should be:

"Forward an incoming stateless request to any OC4J process in the cluster. It gives equal weight to each of the available OC4J processes in the cluster, local or remote, when determining where to forward the request."

4.1.4 Updated Syntax for OPMN Samples

There are three syntax errors in the sample configurations provided in the "Sample Configurations for Oracle Process Manager" section of the "High Availability" chapter of the Oracle9i Application Server Administrator's Guide.

- The attribute describing the number of processes in the custom tag should be "numProcs" (not "num_of_procs").
- **2.** The local, remote, and request attributes are all required in the port tag.
- The island id and number of processes are defined with the "id" and "numProcs" attributes in the island tag (not with the islandID attribute).

The following samples use the correct syntax:

4.1.4.1 One Oracle HTTP Server Process, One OC4J Process with Defaults

This configuration starts one Oracle HTTP Server and one OC4J process with default values.

```
<notification-server>
  <port local="6001"</pre>
        remote="6002"
        request="6003">
  </port>
  <log-file path="/private/my_directory/tmp/opmn_logs/ons.log"</pre>
            level="5">
  </log-file>
</notification-server>
cess-manager>
  <ohs/>
  <oc4j>
    <config-file path=ORACLE_HOME/j2ee/home/config/server.xml />
  </oc4j>
  <log-file path="/private/my_directory/tmp/opmn_logs/ipm.log"</pre>
           level="4">
  </log-file>
</process-manager>
```

4.1.4.2 One Oracle HTTP Server Process, Two OC4J Processes, and One **Generic Process with User-Specified Values**

This configuration starts one Oracle HTTP Server process, two OC4J processes, and one generic process with several user-specified values.

```
cprocess-manager>
    <ohs gid="a1" maxRetry="3">
        <config-file path="/my_directory/conf/httpd.conf"/>
    </ohs>
    <oc4j instanceName="home" maxRetry="4" gid="o1">
        <config-file path="/my_directory/conf/oc4j.xml"/>
        <port ajp="3000-3001" rmi="3002-3003" jms="3004-3005"/>
        <island id="myIslandA" numProcs="2"/>
    </oc4j>
    <custom gid="g1" numProcs = "1">
        <start path="/my_directory/bin/exec1"/>
            <environment>
                 prop name="PATH" value="/my_directory/ias/lib"/>
                cprop name="CLASSPATH" value="/my_directory/ias/bin"
            </environment>
    </general>
</process-manager>
```

4.1.4.3 One Oracle HTTP Server Process, Two OC4J Processes with **User-Specified Values**

This configuration starts one Oracle HTTP Server and two OC4J processes with some user-specified values.

```
<notification-server>
  <port local="6001"</pre>
       remote="6002"
       request="6003">
 </port>
    <log-file path="/private/my_directory/tmp/opmn_logs/ons.log"</pre>
              level="5">
    </log-file>
</notification-server>
  cess-manager>
<!-- Start one ohs process with a process group ID of al, with a config file in
a non-default directory location -- >
  <ohs gid="a1" maxRetry="3">
            <config-file path="Apache/Apache/my_conf/httpd.conf"/>
  </ohs>
<!-- Start two oc4j processes with a process group ID of o1, with a instanceName
of myClusterA (This should be the worker specified in the mod oc4; config file),
and an island id of myIslandA. Since we are starting two processes we have to
specify the port range used when starting the processes. So OC4J process1 starts
with ajp port 8010, jms port 8020 and rmi port 8030. The second OC4J process
uses ajp port 8011, jms port 8021, and rmi port 8031. -->
 <oc4j instanceName="myInstanceA" gid="o1">
   <port ajp="8010-8012", jms="8020-8022" rmi="8030-8032"/>
  <island id="myIslandA" numProcs="2"/>
 </oc4j>
<!-- If the logs should be created in a specific directory provide that location
here --!>
  <log-file path="/tmp/ipm.log" level="4"/>
</process-manager>
```

4.2 Oracle9i Application Server Concepts

Following is the known issue in the *Oracle9i Application Server Concepts*:

Characterization of New iPlanet Connector

4.2.1 Characterization of New iPlanet Connector

The Oracle9i Application Server Concepts positioned Oracle Internet Directory incorrectly and mischaracterized the new iPlanet connector.

The sentence from the *Oracle9i Application Server Concepts*:

"With Oracle9iAS, Oracle Internet Directory includes an agent for out-of-the-box synchronization with Oracle Human Resources and an agent for synchronizing information with selected third party LDAP servers"

should read:

"With Oracle9iAS, Oracle Internet Directory includes connectors for out-of-the-box synchronization with Oracle Human Resources and iPlanet Directory Server 4.2 and 5.0."

4.3 Oracle9i Application Server Security Guide

Following are the known issues in the *Oracle9i Application Server Security Guide*:

- SSLPassPhraseDialog Not Valid in Virtual Host Context
- Remove PLsqlEnableConnectionPooling from Configured dads.conf File
- Updated Information Regarding Oracle9iAS Portal Default User Accounts
- Updated Information for Default User Password Policy

4.3.1 SSLPassPhraseDialog Not Valid in Virtual Host Context

The Oracle9i Application Server Security Guide lists the "virtual host" as a context for SSLPassPhraseDialog directive. The valid context for SSLPassPhraseDialog directive is "server" only.

4.3.2 Remove PLsqlEnableConnectionPooling from Configured dads.conf File

The "Configuring Oracle9iAS Single Sign-On"chapter of the Oracle9i Application Server Security Guide contains information about a configured dads.conf file. The term PlsqlEnableConnectionPooling should be deleted from the file.

4.3.3 Updated Information Regarding Oracle9iAS Portal Default User Accounts

The "Oracle9iAS Portal Default User Accounts" bullet in the "Relationship between Oracle9iAS Portal and Oracle Internet Directory" section of the "Configuring Oracle9iAS Portal Security" chapter of the *Oracle9i Application Server Security Guide* states the following:

(cn=PUBLIC, cn=PORTAL, cn=PORTAL_ADMIN) are created in the subscriber's user base (cn=Users, o=MyCompany, dc=com).

It should be changed to:

(cn=PUBLIC, cn=PORTAL, cn=PORTAL ADMIN) are created in the subscriber's user base (cn=Users, dc=MyCompany, dc=com).

4.3.4 Updated Information for Default User Password Policy

The "Default User Password Policy in Oracle9iAS" table in the "Oracle9i Application Server Security Architecture and Features" chapter of the Oracle9i *Application Server Security Guide* should state this additional information:

"After ten failed attempts to log in with an incorrect password, user accounts are locked out for a period of 24 hours."

4.4 Online Help

The following are issues with online help for various components:

- Broken Links to DAS Online Help
- Online Help May Not Display Correct Language

4.4.1 Broken Links to DAS Online Help

A few Portal Help topics include links to the DAS (Delegated Administration Service) Help. If you find that these links are broken, it is probably because they are pointing to the wrong machine or port for your Oracle Internet Directory (OID) server. You can do one of the following:

- Correct the machine name or port in the URL in your browser's location field.
- (Preferred) Correct the Javascript that is used for these links. The Javascript is located in the following directory:

```
ORACLE_HOME/portal/doc/h_extlnk.js
```

In the function show_das_help, change the URL to point to the correct machine and port:

```
function show_das_help(dastopic) {
   window.location="http://myoidmachine.com:3000/oiddas/oracle/ldap/das/onli
nehelp/das/"+dastopic;
```

4.4.2 Online Help May Not Display Correct Language

Translated versions of online help are installed into the Oracle home directory but are not always called correctly when using Oracle9iAS Discoverer Plus, Oracle9iAS Portal, or Oracle Ultra Search.

In order to view help information in the correct language, go to ORACLE_HOME/component/doc to find the translated help files.