

Oracle9i™ Application Server

Oracle9i Application Server Release Notes

Release 1.0.2.1 for Sun SPARC Solaris

March 8, 2001

Part No. A88727-01

This document summarizes the differences between Oracle9i Application Server Release 1.0.2.1 components and their documented functionality.

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Summary of Changes and New Features

These Release Notes are accurate to the best of our knowledge at the time of publication. Information that is discovered subsequently will be available through normal support channels.

You can access the latest information and additions to these Release Notes on the Oracle Technology Network at:

<http://technet.oracle.com/products/ias>

1.1 Purpose of this Document

This document notes differences between Oracle9i Application Server Release 1.0.2.1 for Sun SPARC Solaris components and their documented functionality.

1.2 Note About Product Naming

Product name changes in this release are:

Old Name	New Name
Oracle8i JVM	Oracle Enterprise Java Engine (EJE)
Oracle Forms Service	Oracle9iAS Forms Services
Oracle LDAP Developer's Kit	Oracle Internet Directory (Client)
Oracle Database Client Developer's Kit	Oracle Database Developer Kit
Oracle XML Developer's Kit	Oracle XML Developer Kit
Oracle Portal	Oracle9iAS Portal
Oracle Portal-to-Go	Oracle9iAS Wireless

Old Name	New Name
Oracle Database Cache	Oracle9iAS Database Cache
Oracle Web Cache	Oracle9iAS Web Cache
Oracle Reports Service	Oracle9iAS Reports Services
Oracle Discoverer	Oracle9iAS Discoverer
Oracle Transparent Gateways	Oracle Gateways
Oracle eMail Server	Oracle9iAS Email
Oracle Unified Messaging	Oracle9iAS Unified Messaging
Oracle Internet File System	Oracle9i File System

Note that some of the documentation and configuration screens in this release may still refer to these components by their old names.

1.3 Note About Apache JServ Processes

The maximum number of Apache JServ processes supported in an Oracle9i Application Server site has been increased from the Apache distribution default maximum of 25 to an Oracle9i Application Server maximum 128. This value is not runtime configurable.

1.4 JDK/JRE Certification

Oracle has certified the use of both JDK/JRE 1.1.8 and JDK/JRE 1.2.x for building and deploying Java applications with mod_jserv. For this release, all Java class libraries (e.g., Oracle BC4J [Business Components for Java], Oracle XML Developer's Kit) are shipped compiled with JDK 1.1.8_10. These compiled classes are certified to run under both supported versions of the Java JRE, and they must not be recompiled.

1.5 Global Server IDs for Oracle HTTP Server *powered by Apache*

You can use Global Server IDs to legally upgrade an export-level browser to use high grade encryption (128 bit) if the Apache server contains an appropriate GS-ID certificate and the browser has been patched to accept a GS-ID certificate. While all browsers are shipped with high encryption, it is disabled for export products. Note that with the recent change in US export laws, using GS-ID will not be necessary in

the future; for now, however, if you have an export grade browser and require a high level of encryption, follow the steps below to obtain a GS-ID certificate and enable your browser:

1. Buy a GS-ID Certificate.

Obtain a GS-ID certificate from an appropriate vendor. Oracle has tested the GS-ID certificate from Verisign

(<http://www.verisign.com/server/prd/g/index.html>).

Follow the instructions for downloading and saving the certificate on your server. After obtaining the certificate, the Oracle HTTP Server administrator must update the `httpd.conf` file. The lines to update are:

```
SSLCertificateFile <pathname>/gsid.crt
SSLCertificateKeyFile <pathname>/gsid.key
SSLCertificateChainFile <pathname>/gsidintermediate.crt
```

where `pathname` is the fully qualified path to the installed Verisign file(s).

2. Buy the Browser Patch.

Obtain a patch that will allow your browser to upgrade the encryption method. Sources include Apache (www.apache.org) and Fortify (www.fortify.net/intro.html). Oracle has tested the patch from Fortify. It straightforward to download and apply to your browser.

1.6 Selecting a Locale

To select a locale for Oracle9i Application Server installation:

1. On Solaris 2.6 with Common Desktop Environment (CDE), close all open windows.
2. Log out (right-click your desktop, select **Logout**, and click **OK**).
3. Select the desired locale from the Options menu. For German locale, choose Options > Language > C to es_BO > de (German)
4. Log in (type user name and password).
5. Open a terminal emulator window.
6. Type the following command to verify the locale:

```
env | grep LANG
```

The output of this command must include the LANG environment variable, and it must have the value selected in Step 3.

If the LANG environment variable is not shown or is set to a different value, check .profile, .login, .cshrc or other files where the LANG environment variable is set or unset. After fixing the problem, repeat these steps, beginning with Step 1.

7. Install Oracle9i Application Server on Solaris.

The translated files for the selected locale are installed. In addition, English files are always installed.

1.7 Examples and Demos

Demos and examples for most Oracle9i Application Server components can be found at <http://<hostname:port>> where hostname is the name of your machine and port is your Oracle HTTP Server listener port. For more information on this port, refer to the Apache documentation.

In addition, examples and demos of Oracle9i Application Server components are provided on your product CD-ROM and installed in the component directories.

1.8 Known Restrictions and Limitations

Before using Oracle9i Application Server, read through each item in this section to gain an understanding of the restrictions and limitations in this release that may require additional steps.

1.8.1 Support for Third Party Components in Oracle9i Application Server

All Third Party Components Portions of Oracle9i Application Server are distributed by Oracle under license from third parties ("Third Party Components"), including the Apache Web Server, version 1.3.12, licensed by the Apache Software Foundation. Oracle is distributing these Third Party Components as part of the Oracle9i Application Server product and, except as specified herein, will provide standard product support for the Third Party Components, as such support is further defined in the Oracle technical support policies. Please note that Oracle will only support the version of the Third Party Component shipped with Oracle9i Application Server and that other versions which may be freely available on the Internet will not be supported by Oracle.

Oracle may, as a courtesy, refer enhancement requests regarding the Third Party Components to the party who licensed the Component to Oracle; however, Oracle shall have no obligation to do so. In addition, no technical assistance requests will be filed on the non-Third Party Components (the "Oracle Components") unless the problem can be reproduced in an environment consisting of only the Oracle Components.

Apache Modules Oracle may distribute certain extensions to the Apache Web Server ("Apache Modules") to enhance the functionality provided by the Apache Web Server as part of Oracle9i Application Server. Apache Modules distributed by Oracle are referred to in these Release Notes as Oracle Apache Modules.

Oracle supports the following Oracle Apache Modules in this release:

mod_ssl	SSL support.
mod_perl	Support for writing Apache modules in Perl.
mod_jserv	Communication with servlet engine.
mod_plsql	PL/SQL support.
mod_ose	Delegates URLs to stateful Java and PL/SQL servlets in Oracle Servlet Engine (OSE).
http_core	Core Apache features.
mod_access	Host-based access control; provides access control based on client hostname or IP address.
mod_actions	Filetype/method-based script execution; provides for CGI scripts based on media type or request method.
mod_alias	Aliases and redirects; provides for mapping different parts of the host filesystem in the document tree, and for URL redirection.
mod_auth	User authentication using text files.
mod_auth_anon	Anonymous user authentication, FTP-style.
mod_autoindex	Automatic directory listings.
mod_cgi	Execution of CGI scripts; processes any file with mime type application/x-httpd-cgi.
mod_define	Configuration definitions.

<code>mod_digest</code>	MD5 authentication; provides for user authentication using MD5 Digest Authentication.
<code>mod_dir</code>	Basic directory handling; provides for "trailing slash" redirects and serving directory index files.
<code>mod_env</code>	Passing of environments to CGI scripts; provides for passing environment variables to CGI/SSI scripts.
<code>mod_expires</code>	Apply Expires: headers to resources; provides for the generation of Expires headers according to user-specified criteria.
<code>mod_headers</code>	Add arbitrary HTTP headers to resources; headers can be merged, replaced or removed.
<code>mod_include</code>	Server-parsed documents; provides for server-parsed HTML documents.
<code>mod_info</code>	Server configuration information; provides a comprehensive overview of the server configuration including all installed modules and directives in the configuration files.
<code>mod_log_config</code>	User-configurable logging replacement for <code>mod_log_common</code> ; provides for logging requests made to the server, using the Common Log Format or a user-specified format.
<code>mod_log_referer</code>	Logging of document references; provides for logging the documents that reference documents on the server.
<code>mod_mime</code>	Determining document types using file extensions.
<code>mod_mime_magic</code>	Determining document types using "magic numbers"; can be used to determine the MIME type of a file by looking at a few bytes of its contents.
<code>mod_negotiation</code>	Content negotiation.
<code>libproxy (mod_proxy)</code>	Caching proxy abilities; provides for an HTTP 1.0 caching proxy server.
<code>mod_rewrite</code>	Powerful URL-to-filename mapping using regular expressions; provides a rule-based rewriting engine to rewrite requested URLs on the fly.
<code>mod_setenvif</code>	Set environment variables based on client information; provides for the ability to set environment variables based upon attributes of the request.

<code>mod_so</code>	Support for loading modules at runtime; provides for loading of executable code and modules into the server at start-up or restart time.
<code>mod_speling</code>	Automatically correct minor typographical errors in URLs; attempts to correct misspellings of URLs that users enter, by ignoring capitalization and allowing up to one misspelling.
<code>mod_status</code>	Server status display; allows a server administrator to find out how well the server is performing, presenting an HTML page that gives the current server statistics in an easily readable form.
<code>mod_unique_id</code>	Generate unique request identifier for every request; provides a magic token for each request that is guaranteed to be unique across "all" requests under very specific conditions.
<code>mod_userdir</code>	User home directories; provides for user-specific directories.
<code>mod_usertrack</code>	User tracking using cookies.
<code>mod_vhost_alias</code>	Support for dynamically configured mass virtual hosting.

Any other Oracle Apache Modules that are included in Oracle9i Application Server are provided "as is" without warranty or support of any kind. Apache Modules from any source other than Oracle, including the Apache Software Foundation or a customer, will not be supported by Oracle.

In addition, Oracle will only provide technical support for problems that can be reproduced with an Apache configuration consisting only of supported Oracle Apache Modules.

Oracle supports the use of the included Perl interpreter within the supported Apache configuration only.

Support for Oracle9i Application Server Plug-ins: Oracle has developed several plug-in components that allow portions of 9i Application Server to be used with web listeners provided by third parties. Except as provided herein, Oracle will provide standard product support for these plug-in components, as such support is further defined in the Oracle technical support policies.

Support for these plug-in components does not imply that any other Oracle-supplied applications, tools, or components will be supported in an environment using these third-party listeners: consult product documentation for

details of product-specific support for third-party listeners. Oracle will only provide technical support for a configuration that has been certified by Oracle.

Oracle provides support only for the installation, configuration, and use of the Oracle-provided plug-in components, and does not provide general support on the installation, configuration, or use of any third party listener.

If a customer reports an issue with a plug-in component, Oracle will work on that issue using the normal support processes and escalation procedures. If Oracle determines that the problem lies in the third-party listener, it will be the customer's responsibility to obtain support from the listener vendor.

1.8.2 Preserving Changes to Oracle HTTP Server Configuration on Re-installation in Same Oracle Home

Be sure to save copies of `httpd.conf`, `jserv.conf`, `zone.properties`, and any Oracle HTTP Server configuration files that you have changed. When you re-install Oracle9iAS into the same Oracle home, existing configuration files are overwritten with the newly installed files.

1.8.3 Install Failure

Before installing Oracle9i Application Server on UNIX platforms, be sure that the environment variables `PATH`, `ORACLE_HOME`, and `LD_LIBRARY_PATH` are not set in any command shell initialization files, such as `.cshrc` for `csh`, `.bashrc` for `bash`, or `$ENV` for `ksh`.

Setting one of these variables in an initialization file could cause the installation of Oracle9i Application Server to fail. Setting one of these environment variables in a login initialization file, such as `.profile` for `sh`, `.login` for `csh`, `.kshrc` for `ksh`, or `.bash_login` for `bash` will not affect the installation of Oracle9i Application Server.

1.8.4 Configuring Oracle iFS and Oracle9iAS Email to run on the same machine

The Oracle iFS e-mail component and the Oracle eMail server both use Sendmail for mail transfer. iFS requires Sendmail version 8.9.3 or later and eMail Server requires versions of Sendmail later than 8. iFS ships an open source version of Sendmail 8.9.3 for Solaris and other UNIX ports. Windows NT and Windows 2000 installations require purchasing Sendmail version 3.0 or 3.0.2 (respectively) for both e-mail components.

To run the Oracle eMail server and Oracle iFS on the same machine, you must configure them by following the steps below in the order shown:

1. Use the Oracle iFS post-installation scripts to set up the Sendmail 8.9.3 executable and generate the `sendmail.cf` file. (For more information, see the postinstallation steps in the Oracle iFS Installation Guide).
2. Incorporate the changes required for Oracle eMail server into `sendmail.cf`. (For more information, see Chapter 3, Postinstallation, in the Oracle9iAS Email Installation Guide.)

Note: If you incorporate the eMail server configuration changes into `sendmail.cf` and then run the scripts, the scripts will overwrite the changes (that is, generate `sendmail.cf` anew).

If the IMAP servers provided by Oracle iFS and Oracle9iAS Email are to be run on the same machine, you must configure them to listen on different ports. (Use the Oracle iFS configuration utility and the Oracle9iAS Email Administration tool to specify the port for the component.)

For example, you can configure the Oracle9iAS Email to listen on the default port 143, and configure the Oracle iFS IMAP server to listen on some other port, as required by the installation.

The clients accessing the IMAP servers must have accounts mapped to these specific ports. To access both servers at the same time, you must use clients that allow you to set the IMAP port number. Alternatively, you can run the two IMAP4 servers on two different Internet Application Server installations.

1.8.5 ORA 1031 Error on Standard Edition Installation

In previous releases, the Standard Edition installation process assumed that the installing user is in the "dba" group. Therefore, the group selection dialog box was mistakenly suppressed. In this release, an additional dialog box displays during the Standard Edition install that allows the installing user to choose the operating system group that will have OSOPER and OSDBA privileges, if the installing user is not a member of the "dba" group. In this dialog box, you must choose the name of an operating system group of which you are a member.

1.8.6 Errors Opening redo Logs after Installation

After installing the Oracle9i Application Server seed database, you may see the following errors in the user dump location:

```
ORA-00313: open failed for members of log group 1 of thread 1
```

```
ORA-00312: online log 1 thread 1: '<redo log file_name>'
ORA-27037: unable to obtain file status
```

These are not serious errors. The redo logs are created in a future step of the seed database creation.

1.8.7 Building mod_perl DBI/DBD-Oracle and Apache::DBI

To build, install, and test mod_Perl DBI/DBD-Oracle and Apache::DBI for the Solaris platform, follow these steps:

1. Verify that the following software is available in your environment:
 - C compiler Sun SparcWorks version 5.0
 - GNU Make version 3.77
 - Perl version 5.005_03
2. Verify that your PATH environment variable is set correctly to locate the required software.
3. Install Oracle9i Application Server from your product CD. This version has mod_perl 1.21 built in. However, this install does not include the following modules:
 - Apache::DBI
 - Perl DBI
 - Perl DBD-Oracle
4. Set your PATH environment variable to pick up the correct Perl binaries. For example:

```
prompt> setenv ORACLE_HOME /private1/ias10
prompt> setenv PATH ${ORACLE_HOME}/Apache/perl/bin:${PATH}
```
5. Set the environment variable PERL5LIB to the following:

```
prompt> setenv PERL5LIB ${ORACLE_HOME}/Apache/perl/lib/5.00503:${ORACLE_
HOME}/Apache/perl/lib/site_perl/5.005
```
6. Download the following modules from <http://www.cpan.org/modules/by-module>:
 - DBI version 1.14
 - DBD::Oracle version 1.06

Apache::DBI version 0.87

7. Unpack the DBI package and follow the README instructions carefully to build, test, and install the module.
8. The DBD-Oracle module expects enough Oracle software available (such as \$ORACLE_HOME/lib, \$ORACLE_HOME/rdbms/lib, etc.) to build the driver successfully. Make sure that the following information is available in your environment:
 - a. Set the ORACLE_HOME environment variable to point to a valid Oracle9i Application Server install or an Oracle database install (for example, 8.1.6, 8.1.7, etc.).
 - b. Set the ORACLE_SID environment variable to point to a valid Oracle SID.
 - c. Verify that the LD_LIBRARY_PATH environment variable points to the libclntsh.so. This can be done by setting \$ORACLE_HOME/lib in the LD_LIBRARY_PATH environment variable.
 - d. If you are using National Language Support (NLS), make sure that you set the ORA_NLS and ORA_NLS33 environment variables to avoid ORA-01019 errors.
 - e. Optionally set the ORACLE_USERID environment variable (the tests will use scott/tiger by default).
9. Unpack the DBD-Oracle package and follow the README instructions carefully to build, test, and install the module. The database must be up in order for the tests to pass properly.
10. Unpack the Apache::DBI package and follow the README instructions carefully to build and install the module. There are no tests available for this module yet. This step will install the Apache AuthDBI.pm and DBI.pm modules.
11. Edit \$ORACLE_HOME/Apache/Apache/conf/httpd.conf as follows:
 - a. Uncomment the following line (remove the pound sign that is prepended):

```
PerlModule Apache::DBI
```

This allows the use of Apache::DBI's persistent database connections. For more information, read the Apache::DBI README instructions, specifically the section on Examples.

Note: `httpd.conf` is the main Apache server configuration file. Be sure to understand the instructions at the beginning of this file.

12. Now you are ready to test your persistent connection. As an example, perform the following to test the connection via your `startup.pl`:

a. Add this line to your `httpd.conf` file:

```
PerlRequire <absolute path to ApacheDBI's startup.pl script>
```

b. Modify the `startup.pl` connect call, such as:

```
Apache::DBI->connect_on_init('dbi:Oracle:', "scott/tiger", '');
```

c. Restart your Oracle HTTP Server:

```
prompt> $ORACLE_HOME/Apache/Apache/bin/apachectl start
```

d. Check Oracle HTTP Server logs to verify that connections were obtained correctly.

Tip: If Oracle HTTP Server logs report that the `ORACLE_HOME` environment variable is not set, try adding this line to your `httpd.conf` file:
`PerlSetEnv ORACLE_HOME "<absolute path to Oracle Home>"`

Another sample Perl script to test the connection is:

```
##### Perl script start #####
use DBI;
print "Content-type: text/plain\n\n";
$dbh = DBI->connect("dbi:Oracle:", "scott/tiger", "") || die $DBI::errstr;
$stmt = $dbh->prepare("select * from emp order by empno") || die $DBI::errstr;
$rc = $stmt->execute() || die $DBI::errstr;
while (($empno, $name) = $stmt->fetchrow()) { print "$empno $name\n"; }
warn $DBI::errstr if $DBI::err;
die "fetch error: " . $DBI::errstr if $DBI::err;
$stmt->finish() || die "can't close cursor";
$dbh->disconnect() || die "cant't log off Oracle";
##### Perl script End #####
```

1.8.8 mod_plsql Requirement

To use the mod_plsql module against a given back-end database, you need to manually install the Oracle PL/SQL Web ToolKit (OWA PL/SQL packages) on the back-end database. The OWA PL/SQL packages should be installed into the SYS database schema; make sure that you have only one installation of the OWA PL/SQL packages. Note that existing Oracle Application Server (OAS) customers upgrading to the Oracle9i Application Server have an older version of these packages that must be replaced.

For more information, see *Using the PL/SQL Gateway* in the Oracle9i Application Server Documentation Library. Or, you can access the online documentation available at http://hostname.domain:port/pls/admin_/title.htm.

1.8.9 Problems with mod_plsql Under Moderate Load

On NT, mod_plsql crashes under moderate load. This issue is explained in bug#1432961 and requires backports for bug#1179779 and bug#1405498 on the Oracle Client and Server side. These fixes should be applied to the 8.1.7 Oracle Client libraries in your Oracle home and the corresponding server side fix should be applied to the Oracle Database Server. Internal testing could not reproduce the issue on Solaris, although the bug does exist on all platforms. If you have these problems on your system, please apply the required patches to your platform as well. The patches are available on Metalink.

1.8.10 iCache Environment Variable Setting

A problem with the ORA_OCI_CACHE system environment variable causes mod_plsql to suspend or stop under moderate load. Ensure that this variable is not set when the Oracle HTTP Server is started.

1.8.11 Restoring Oracle Application Server OWA Packages

When you install the new mod_plsql OWA packages, it places them in the SYS database schema. This can create problems with Oracle Application Server applications using the PL/SQL cartridge. If you experience these problems and want to continue to use your Oracle Application Server PL/SQL cartridge applications, you must recreate the synonyms that reference the Oracle Application Server OWA packages.

To create these synonyms on the origin database machine:

1. Connect to the origin database as the SYS user in SQL*Plus.

2. Run the following commands in SQL*Plus. This drops all of the OWA public synonyms created during the Oracle9i Application Server installation process.

```
drop public synonym OWA_CUSTOM;  
drop public synonym OWA_GLOBAL;  
drop public synonym OWA;  
drop public synonym HTF;  
drop public synonym HTP;  
drop public synonym OWA_COOKIE;  
drop public synonym OWA_IMAGE;  
drop public synonym OWA_OPT_LOCK;  
drop public synonym OWA_PATTERN;  
drop public synonym OWA_SEC;  
drop public synonym OWA_TEXT;  
drop public synonym OWA_UTIL;  
drop public synonym OWA_INIT;  
drop public synonym OWA_CACHE;  
drop public synonym WPG_DOCLOAD;
```

3. Connect to the "oas_public" OWA package installation schema.
4. Ensure that the user schema has "CREATE PUBLIC SYNONYM" privileges. If it does not, then grant these privileges to the user schema before continuing with the next step.
5. Run the following commands in SQL*Plus. This recreates the OWA public synonyms so that they reference the Oracle Application Server OWA packages.

```
create public synonym OWA_CUSTOM for OWA_CUSTOM;  
create public synonym OWA_GLOBAL for OWA_CUSTOM;  
create public synonym OWA for OWA;  
create public synonym HTF for HTF;  
create public synonym HTP for HTP;  
create public synonym OWA_COOKIE for OWA_COOKIE;  
create public synonym OWA_IMAGE for OWA_IMAGE;  
create public synonym OWA_OPT_LOCK for OWA_OPT_LOCK;  
create public synonym OWA_PATTERN for OWA_PATTERN;  
create public synonym OWA_SEC for OWA_SEC;  
create public synonym OWA_TEXT for OWA_TEXT;  
create public synonym OWA_UTIL for OWA_UTIL;  
create public synonym OWA_INIT for OWA_CUSTOM;  
create public synonym OWA_CACHE for OWA_CACHE;  
create public synonym WPG_DOCLOAD for WPG_DOCLOAD;
```

1.8.12 mod_plsql Caching Error

If mod_plsql caching is not working properly, remove the final slash from the two cache_dir entries in \$ORACLE_HOME/Apache/modplsql/cfg/cache.cfg.

1.8.13 Oracle Demo Certificates Replacement

Oracle Demo certificates (that is, dummy certificates) are included with the Apache build so that the server may be tested in a non-production mode. Before going to production mode, you **MUST** replace the Oracle Demo certificate with a real certificate.

1.8.14 Oracle9iAS Database Cache Installation Errors

If the listener for the origin database is not properly configured, you may get the following errors when attempting to install Oracle9iAS Database Cache:

Adding users to the cache failed.

Reason: WTE-03501 Error updating list of users: Export failed on origin database
OCI error - ORA-28575: unable to open RPC connection to external procedure agent

Refer to the *Oracle9i Application Server Installation Guide* for detailed instructions to configure the listener for the origin database.

1.8.15 Oracle9iAS Database Cache Configuration

When you install Oracle9i Application Server Enterprise Edition, you can choose whether to configure Oracle9iAS Database Cache during the installation or at a later time. If you choose to configure Oracle9iAS Database Cache during the installation, the installation procedure uses default values for the following Oracle9iAS Database Cache attributes:

- The Oracle9iAS Database Cache host (by default, the host name qualified by the domain name).
- The Oracle9iAS Database Cache name (by default <cache_nodename-cache>).
- The port number for the listener for Oracle9iAS Database Cache (by default, 51719).
- The memory allocated to Oracle9iAS Database Cache (by default, 25 MB).
- The disk space allocated to Oracle9iAS Database Cache (by default, 32 MB).

- The location of the file that holds the disk space (by default, the \$ORACLE_HOME/dbs directory).

If you want to specify values other than the default values, you can choose not to configure Oracle9iAS Database Cache during the installation. Then, after the installation completes successfully, invoke the Oracle9iAS Database Cache Configuration Assistant using the following command:

```
prompt>$ORACLE_HOME/bin/wtacca -create -custom
```

For more details, refer to the Configuration Assistant online help.

1.8.16 Using Oracle9iAS Database Cache with Servlets

To access data cached in the middle tier using servlets, you must enable Oracle9iAS Database Cache by setting the ORA_OCI_ICACHE environment variable in the servlet environment. Add the following line to the `jserv.properties` file in the \$ORACLE_HOME/Apache/Jserv/etc directory:

```
wrapper.env=ORA_OCI_ICACHE=1
```

In addition, the TNS_ADMIN environment variable must be set to the location of the local network configuration. By default, the value is \$ORACLE_HOME/network/admin. Add the following additional line to `jserv.properties`:

```
wrapper.env=TNS_ADMIN=<absolute path to Oracle Home>/network/admin
```

1.8.17 loadjava Limitation in Oracle9iAS Database Cache Environment

Because of known issues with LOB support in the Oracle9iAS Database Cache environment (when ORA_OCI_CACHE is set to 1), the `loadjava` utility will not work.

1.8.18 Changes to `tnsnames.ora` and `init.ora` Requirement

To use the Oracle9iAS Database Cache PL/SQL API, you must connect using a Net8 net service name that is constructed using the service name, not the SID. As a result, the `tnsnames.ora` and `init.ora` file shipped with this release of Oracle9i Application Server need to be changed. See the Oracle9iAS Database Cache README file for information about the necessary changes.

1.8.19 BC4J Demo Failure

Before you run the online orders sample, follow the setup instructions in `bc4j.html`.

1.8.20 Oracle9iAS Portal Configuration Assistant Failure with Standard Edition Default Large Pool Size

During Oracle9i Application Server Standard Edition install, if you choose to install the Oracle9iAS Portal database objects into the newly created 8.1.7 Standard Edition database, the install fails because the default `large_pool_size` is not big enough. The workaround is to increase this size before running the Oracle9iAS Portal Configuration Assistant, as follows:

1. Shut down the database.
2. Double the size of the `large_pool_size` parameter in the `init.ora` file.
3. Restart the database.
4. Run the Oracle9iAS Portal Configuration Assistant.

If you do not perform these steps during an install, you can fix the problem as follows:

1. Drop the old Oracle9iAS Portal user.
2. Shut down the database.
3. Double the size of the `large_pool_size` parameter in the `init.ora` file.
4. Restart the database.
5. Run the Oracle9iAS Portal Configuration assistant from the `ORACLE_HOME` located at `$ORACLE_HOME/assistants/opca/launch.sh`.

Note: This problem does not occur if you install to a remote 8.1.6 database, and has only been observed in a Standard Edition install.

1.8.21 Oracle9iAS Portal Report Output Requirement

To schedule a report page in Oracle9iAS Portal, you must specify the output folder name and the status folder name in the Schedule Report Page dialog box. If you do not specify these names, the report output will not display in the content area for which the report component is defined.

1.8.22 Oracle Forms, Reports and Discoverer Patch Installation

When installing a patch, use `<IAS_HOME>/6iserver` as your `ORACLE_HOME` for Forms, Reports and Discoverer products, where `<IAS_HOME>` is the `ORACLE_HOME` used for Oracle9i Application Server.

1.8.23 Oracle9iAS Reports Services Security Framework

Oracle9iAS Reports Services has integrated with Oracle9iAS Portal to provide an enterprise security and deployment framework. For more information on this integration, refer to *Publishing Reports to the Web with Oracle Internet Application Server* in the Oracle9i Application Server Documentation Library.

1.8.24 Oracle9iAS Reports Services Error

If you have set the `TNS_ADMIN` environment variable or registry key to an alternate value, Oracle9iAS Reports Services may fail to start with an error 186 or REP-0186. In such a case, you can start Oracle9iAS Reports Services from an MS-DOS command prompt as follows:

```
prompt> setenv TNS_ADMIN <IAS_HOME>/6iserver/network/admin
prompt> <IAS_HOME>/6iserver/reports60_server start
```

replacing `<IAS_HOME>` with the directory where you installed Oracle9i Application Server. This will force Oracle9iAS Reports Services to use the `tnsnames.ora` file at `<IAS_HOME>/6iserver/network/admin`.

1.8.25 Oracle9iAS Reports Services Hangs Upon Authentication

Oracle9iAS Reports Services hangs when users authenticate.

To make Reports Portal integration work seamlessly, apply `tcpatch 6_0_8_11_3`.

1.8.26 Oracle9iAS Forms Services non-SSL Listener Requirement

Oracle9iAS Forms Services requires that Apache be listening on at least one port in non-SSL mode, because Oracle JInitiator cannot download the Forms Applet via SSL.

1.8.27 Oracle 9iAS Forms/Enterprise Manager Limitations

A patch will be available on March 26, 2001 on ARU and Metalink to resolve the following problems:

Bug 1286040, version 2.1 - NLS: Multibyte characters in Forms Listener Process Log are corrupted

Bug 1544477, version 6.08.11.3 - Event de-registering causes Error VD-1525

Bug 1549369, version 2.2.0 - Cannot de-register Forms Listener Up/Down Event

Bug 1554211, version 2.2 - Forms event fails with database version 8.1.7

Bug 1562864, version 2.1 - Oracle Agent cannot discover Forms servers in multiple Oracle homes on the same server

Bug 1562887, version 2.1.0.1.0 - Multiple SIDs will not start the Forms listener from Oracle Enterprise Manager

Bug 1383239, version 6.0.8.8 - OEM startup job returns "completed" status if it fails

Bug 1479367, version 8.1.7 - nmiforms.tcl is looking for an ORACLE_HOME environment variable in the wrong way

1.8.28 JInitiator 1.1.7.31 HTTPS Limitations

This release of Oracle9i Application Server ships with JInitiator 1.1.7.31. This JInitiator release does not work using HTTPS communication for Oracle9iAS Forms Services because of a missing DLL. To enable HTTPS communication with Oracle9iAS Forms Services, download the latest JInitiator from the Oracle Technology Network (OTN) at:

<http://technet.oracle.com/products/forms>

Click the Software tab and select the latest JInitiator posted, Release 1.1.7.32 or later.

Note: This release of Oracle9iAS Forms Services (6.0.8.11) has not been tested with releases of JInitiator earlier than 1.1.7.31.

1.8.29 Internet Explorer 5.0 Native JVM Limitations

Oracle9iAS Forms Services provides a signed CAB file to enable bronze support for Internet Explorer 5.0 running the native JVM (Java Virtual Machine). This support requires that the HTTP/HTTPS Forms Server and Web listener run on the same machine.

The following are current limitations when running with Internet Explorer 5.0 and the native JVM:

1. In HTTP or HTTPS mode, Forms Server and Web listener need to run on the same machine.
2. In HTTPS mode, Oracle9iAS Forms Services cannot communicate through a firewall.
3. In HTTPS mode, Oracle9iAS Forms Services applet must be downloaded in HTTPS mode.
4. In HTTPS mode, the heartbeat applet parameter must be set to a low value to maintain communication with the server. The value 0.3 (minutes) has been tested and verified.

For the latest information about the current level of client support and HTTPS restrictions, refer to the *Client Platform Statement of Direction* document at:

<http://technet.oracle.com/products/forms>

1.8.30 OPENSSL Command -CONFIG Option Requirement

The `openssl` command to create a certificate request or certificate requires the `-config` option to specify the location of `openssl.cnf` in `$ORACLE_HOME/Apache/open_ssl/bin`. Otherwise, the command will fail.

For example:

```
prompt> openssl req -config $ORACLE_HOME/Apache/open_ssl/bin -new -x509 -days  
365 -key ca.key -out ca.crt
```

1.8.31 mod_ssl Limitations

In this release, the symmetric encryption algorithms RC2, RC5, IDEA are not supported.

1.8.32 mod_rewrite Security Vulnerability

A security vulnerability is present in `mod_rewrite` that allows certain rules to offer access to any file on the Web server. To avoid these problems, rewrite rules should always map to a full URL rather than mapping directly to a file.

For example, if you have a Web server where `DocumentRoot` is set to `/webroot`, do not use:

```
RewriteRule /foobar/(.*) /webroot/myfiles/$1
```

which directly maps the request to a filesystem location. Rather, use a rule such as:

```
RewriteRule /foobar/(.*) http://myserver.mydomain.com/myfiles/$1
```

which restricts access to files that are accessible by the Apache instance (that is, files under the DirectoryRoot directory tree).

1.8.33 No Support for CA Facilities of OpenSSL

The Certifying Authorities (CA) facilities of OpenSSL are not supported and should not be used. Oracle9i Application Server is moving to the Certicom SSL stack, which does not include the CA features of SSL. You should use the openssl command only for generating certificate requests. Other functionality such as examining certificates, signing certificates, and so on, are not supported by Oracle.

1.8.34 Apache Configuration Error Upon Installation

When installing Oracle9i Application Server Enterprise Edition, and you have installed Apache previously in the same ORACLE_HOME, Apache configuration fails with the following error:

```
Syntax Error on line 14 of
<ORACLE_HOME>/Apache/Apache/conf/mod__ose.conf
Aurora Service - directive already effect for this server
<ORACLE_HOME>/Apache/Apache/bin/httpdctl start: httpd could not be
started
```

To work around this error:

1. Remove the double entry of mod__ose.conf in the file \$ORACLE_HOME/Apache/Apache/conf/oracle_apache.conf.
2. Restart your Oracle HTTP Server:

```
prompt>$ORACLE_HOME/Apache/Apache/bin/apachectl start
```

1.8.35 Errors Starting Apache with "APCCTL -START" When Using Virtual Hosts

If the port number directive and the NameVirtualHost directive ports do not match, this error will occur. To resolve this issue, make sure that both the port and NameVirtualHost are set to the same port. This can also be resolved by not specifying a port# in the NameVirtualHost directive.

Note that this problem will only occur when starting without SSL.

1.8.36 Automatic Class Reloading of JSPs Error

The Oracle9i Application Server installation adds the following extra entry to the `$ORACLE_HOME/Apache/Jserv/etc/jserv.properties` file:

```
wrapper.classpath=$ORACLE_HOME/Apache/Apache/htdocs/_pages
```

After installation, you need to delete this line and restart Oracle HTTP Server. Otherwise, automatic class reloading of JavaServer Pages (JSPs) will not work correctly.

1.8.37 Increasing Memory for Apache JServ Applications

If the Apache JServ log or the browser report an "Out Of Memory" condition, the cause is most likely to be that the JVM ran out of memory. This normally happens when data handled by the JVM exceeds its memory allocation pool.

To increase the maximum size of the memory allocation pool for a JVM, use the following steps:

1. Add this line to `$ORACLE_HOME/Apache/Jserv/etc/jserv.properties`:

```
wrapper.bin.parameters=-mx<size>m
```

`<size>` is the size, in megabytes, of the memory allocation pool. The default value is 1 megabyte of memory. Oracle recommends that you use a size of 128 megabytes. To set the value to 128 megabytes, add the following line:

```
wrapper.bin.parameters=-mx<size>m
```

2. Restart the Web server after this change so that it can take effect.

1.8.38 National Language Support (NLS) Considerations

mod_plsql

When configuring `mod_plsql`, the `NLS_LANG` environment variable is configured on a per Web server instance level and not at the DAD level.

Ensure that you have the correct `NLS_LANG` setting before starting your Oracle9i Application Server instance.

Oracle PSP

For Oracle PSP, the NLS_LANG environment variable must be set before loading PL/SQL Server Pages (PSPs) into the database using the `loadpsp` command.

Using the JDBC OCI8 driver with JServ and OracleJSP

If connecting to Oracle via the JDBC OCI8 driver, the appropriate NLS_LANG setting is required in `jserv.properties`. For example:

```
wrapper.env=NLS_LANG=AMERICAN_AMERICA.UTF8
```

For information on the NLS_LANG environment variable, refer to the *Oracle8i National Language Support Guide*.

1.8.39 NLS Parameters in the `initicache.ora` File

The Oracle9iAS Database Cache installation creates a cache using the same database character set as the origin database. However, it does not set other National Language Support (NLS) features, such as date format or currency symbols.

If the initialization file (`initSID.ora`) of your origin database specifies NLS parameters, you must copy those parameters to the initialization file (`initicache.ora`) of the cache (NLS parameters begin with "NLS_").

For example, if the initialization file of your origin database contains the following parameters, copy them to `initicache.ora`:

```
NLS_LANGUAGE = JAPANESE
NLS_CALENDAR = "Japanese Imperial"
NLS_DATE_FORMAT = "E YY-MM-DD"
```

The `initicache.ora` file is located in the

```
$ORACLE_HOME/admin/icache/pfile directory.
```

1.8.40 NLS Limitations

The following are known NLS bugs in this release:

- Some of the user interface and messages for the Simplified Chinese version of Developer 6i Release 2 will appear in English. There is no workaround.
- In the Reports Availability Calendar feature of Reports Server Security using translated versions of Oracle9iAS Portal 3.0, some of the calendar headings are truncated. You may choose to use the English-language interface instead.

- In the Japanese version of Developer 6i Release 2, the online manual *Deploying Applications* will be the same as the manual used for the 6i initial release, instead of the manual for 6i Release 2. If you require the 6i Release 2 version of the manual and it is not part of your printed manual set, please contact your Oracle Support representative.
- In the Traditional Chinese version of Developer 6i Release 2 Report Builder, the menu item "File > Generate to file > Delimited", the word "Delimited" should be translated but appears garbled. There is no known workaround.

1.8.41 Standard Edition Character Set

The starter database provided as part of the Oracle9i Application Server Standard Edition (SE) installation uses the US7ASCII character set. To change the database character set after installation, connect to the database using sqlplus and issue the statement:

```
SQL> alter database character set <character set>
```

For more information, see the *Oracle8i National Language Support Guide*.

1.8.42 Oracle9iAS Portal Configuration Assistant Language Limitation

In this release, Oracle Portal Configuration Assistant is certified for use in English only.

1.8.43 Oracle XSU Limitations

In this release, the Oracle XML SQL Utility (XSU) does not include the setEncoding method. To download the latest version of XSU that supports encoding functionality, refer to the Oracle Technology Network (OTN) at:

http://technet.oracle.com/tech/xml/oracle_xsu/

1.8.44 Oracle9iAS Wireless: Silent Installation Not Supported

Silent installation for Oracle9iAS Wireless is not supported; it requires entry of information specific to Wireless and manual editing of configuration files.

1.8.45 Oracle9iAS Wireless: JDBC Driver

This release of Oracle9iAS Wireless only supports the classes12.zip JDBC driver. classes11.zip is no longer supported.

1.8.46 Oracle9iAS Wireless: Supported Devices and Gateways

For a list of certified devices and gateways supported by Oracle9iAS Wireless, see the OTN web site at:

<http://otn.oracle.com/products/iaswe>

1.8.47 Oracle9iAS Wireless: Third Party Location Service Providers

To obtain third party files for using location services in Oracle9iAS Wireless, see the OTN web site at:

<http://otn.oracle.com/products/iaswe>

1.8.48 Oracle9iAS Wireless: Database Connections

The default database created by the Oracle8i installation may not be tuned properly for your installation.

The "ORA-00020: maximum number of processes exceeded errors" message may appear. To prevent this, ensure that the `max_processes` database parameter is set high enough, and that the Oracle Net8 dead process detection is configured in your system.

See the Oracle8i documentation for more information on database configuration and performance.

1.8.49 Oracle9iAS Wireless: Notifications

When using Oracle9iAS Wireless notifications (the AQ Daemon process), note that a job is removed from the job queue if it terminates with an error. To continue to use the job, correct the error and reschedule the job.

1.8.50 Oracle9iAS Wireless: Bootstrap Repository Provisioning Service

To use the Provisioning Service in the bootstrap repository, you must first set the input parameters of the master service to be User Customizable.

1.8.51 Oracle9iAS Wireless: SQL Adapter Master Services

Numeric input parameter names are not allowed in the master service PL/SQL code. Also, JDBC connect strings that specify a user name and password are not allowed, for example:

```
jdbc:oracle:thin:user/password@hostname:port:sid
```

The connect string information must be of the form:

```
jdbc:oracle:thin:@hostname:port:sid
```

The user name and password must be specified in the User Name and Password fields in the Service Designer.

1.8.52 Oracle9iAS Wireless: Bookmarks in the Personalization Portal

When creating a bookmark in the Personalization Portal, the `http://` prefix must be included in the URL, for example:

```
http://domain_name.com
```

1.8.53 Oracle9iAS Wireless: Service Designer Folder Contents Display

This release of Oracle9iAS Wireless allows you to limit the number of objects displayed in the Service Designer navigational tree. To enable this feature, set the number of objects you want to display by editing the `ptgsd.properties` file.

1.8.54 Oracle9iAS Wireless: Multibyte Character Set Support

To support multibyte character sets in Oracle9iAS Wireless, apply the following configuration changes to your server. (The Java Virtual Machine (JVM) bundled with Web Integration Developer and Web Integration Server does not contain the `i18n.jar` and `font.properties` files and therefore does not support multibyte character sets.)

On the application server:

1. Download the internationalized (or localized) version of the Java Runtime Environment (JRE) from the JavaSoft Web site.
2. Replace the `font.properties` file of the JVM with `font.properties.<locale>`.

The JVM path for the server is:

```
%ORACLE_HOME%/panama/WebIntegration/Server/jvm/lib
```

3. Edit the `server.sh` file to add the following as a Java command line option:

```
-Dfile.encoding=< encoding>
```

The path for the server script is:

```
%ORACLE_HOME%/panama/WebIntegration/Server/bin/server.sh
```

For example:

```
%JDKDIR%/bin/java -Dfile.encoding=SJIS -ms64M -mx256M classpath %CLASSPATH%
watt.app.server.Main %1 %2 %3 %4 %5 %6 %7 %8 %9
```

1.8.55 Oracle9iAS Wireless: Multibyte Character Set Support on Client

To support multibyte character sets in Oracle9iAS Wireless, apply the following configuration changes to your client installations. (The Java Virtual Machine (JVM) bundled with Web Integration Developer and Web Integration Server does not contain the `il8n.jar` or `font.properties` files and therefore does not support multibyte character sets.)

On the Oracle9iAS Wireless client:

1. Download the internationalized (or localized) version of the Java Runtime Environment (JRE) from the JavaSoft Web site at:

```
http://java.sun.com/products/jdk/1.2/jre
```

2. Install the Java Runtime Environment (JRE) from JavaSoft.
3. Replace the `font.properties` file of the JVM with `font.properties.<locale>`. The JVM path for the client is:

```
%JREDIR%\lib
```

For example:

```
SET JDKDIR=jre1.2\lib
```

4. Extract the `developer.zip` file. The path for the file is:

```
%ORACLE_HOME%\panama\WebIntegration\Developer\lib\developer.zip
```

Extract the file's content to:

```
%ORACLE_HOME%\panama\WebIntegration\Developer\lib\developer\
```

5. Edit the `developer.bat` file. The path for the file is:

```
%ORACLE_HOME%\panama\WebIntegration\Developer\bin\developer.bat
```

- a. Comment out (REM) the following line:

```
SET JDKDIR=C:\OraHome1\panama\WebIntegration\Developer\jvm
```

- b. Point JDKDIR to the new JRE directory where JRE1.2 is installed, for example:**

```
REM SET JDKDIR=C:\OraHome1\panama\WebIntegration\Developer\jvm
SET JDKDIR=jre1.2
```

- c. Comment out (REM) the following line:**

```
SET CLASSPATH=%JDKDIR%\LIB\RT.JAR;%DEVDIR%\LIB\DEVELOPER.ZIP;
%DEVDIR%\packages\wmroot\code\classes"
```

- d. Change DEVELOPER.ZIP to DEVELOPER in the CLASSPATH. For example:**

```
SET CLASSPATH=%JDKDIR%\LIB\RT.JAR;%DEVDIR%\LIB\DEVELOPER;
%DEVDIR%\packages\wmroot\code\classes"
```

- e. Comment out (REM) the following line:**

```
"%JDKDIR%\bin\jre" -ms16M -mx32M -classpath %CLASSPATH%
watt.app.watt.Main -config "%DEVDIR%\config\developer.cnf"
-home "%DEVDIR%" %1 %2 %3 %4 %5 %6 %7 %8 %9
```

- f. Add the following line:**

```
-Dfile.encoding=<encoding>
```

Add the line as a Java command line option, such as:

```
"%JDKDIR%\bin\java" -Dfile.encoding=<encoding> -ms16M
-mx32M -classpath %CLASSPATH% watt.app.watt.Main -config
"%DEVDIR%\config\developer.cnf" -home "%DEVDIR%"
%1 %2 %3 %4 %5 %6 %7 %8 %9
```

For example:

```
"%JDKDIR%\bin\java" -Dfile.encoding=SJIS -ms16M -mx32M
-classpath %CLASSPATH% watt.app.watt.Main -config
"%DEVDIR%\config\developer.cnf" -home "%DEVDIR%"
%1 %2 %3 %4 %5 %6 %7 %8 %9
```

1.8.56 Oracle9iAS Wireless: Images in the Personalization Portal

To display the images from the Personalization Portal properly, the `DISPLAY` environment variable in the `jserv.properties` file must be set properly to configure access to the host on which the server runs.

If the X server runs on the same machine as the Oracle9iAS Wireless server, the DISPLAY environment variable in the `jserv.properties` file is set by the installation as follows:

```
wrapper.env=DISPLAY=localhost:0.0
```

From the X server host machine (`x_server_host_name` in the following example) run the following command:

```
prompt>xhost + <x_server_host_name>
```

If the X server runs on a different machine (`x_server_host_name` in the following example) than the Oracle9iAS Wireless server, set the DISPLAY environment variable in the `jserv.properties` file as follows:

```
wrapper.env=DISPLAY=<x_server_host_name>:0.0
```

From the X server host machine, run the following command using the Oracle9iAS Wireless host (`wireless_edition_host_name` in the following example):

```
prompt>xhost + <wireless_edition_host_name>
```

For both cases, remain logged into the console while the `xhost` commands are executed. Otherwise, properties set through the `xhost` command may be lost and images may not be displayed properly in the Personalization Portal.

1.8.57 Oracle9iAS Wireless Client: Transformer Testing Tool

On Windows NT, with Service Pack 6, the following error may occur when running the Oracle9iAS Wireless Transformer Testing Tool:

```
java.net.SocketException: JVM_SetSockOpt() TCP_NODELAY (code=10055)
```

To resolve this issue, apply Service Pack 6a available from the Microsoft web site. If you still experience this issue with Service Pack 6a installed, try reinstalling Service Pack 6a. If this still does not resolve the issue, add the current Windows NT user to the “Administrators” group.

1.8.58 Oracle9iAS Wireless: Oracle Data Server Support

Oracle9iAS Wireless only supports Oracle 8.1.6 and above.

1.8.59 Oracle9iAS Wireless Web Integration Components and JDK

Web Integration Server requires JDK 1.1. If you experience problems with this component, check the Java settings in the following startup file: %ORACLE_HOME%\panama\WebIntegration\Server\bin\server.bat. In some cases, Oracle 8.1.6 on Windows NT modifies a machine's Java environment. As a result, Oracle9iAS Wireless Web Integration Developer may generate error messages or fail to start. To fix the problem, either restore your original Java environment by reinstalling Java, or verify that the Web Integration Developer starts with the JVM from the 8.1.6 installation. To do this, modify the following file:

```
%ORACLE_HOME%\panama\WebIntegration\Developer\bin\developer.bat
```

Change the line:

```
SET JDKDIR=%ORACLE_HOME%\panama\WebIntegration\Developer\jvm
```

to:

```
SET JDKDIR=%ORACLE_HOME%\jre\1.1.7
```

1.8.60 Oracle9iAS Wireless: New Features

This release of Oracle9iAS Wireless includes many new features. See the Oracle9iAS Wireless Implementation Guide for more information.

1.8.61 Deinstalling Oracle9iAS Database Cache with OUI Removes Dependent Components

If you use Oracle Universal Installer to deinstall Oracle9iAS Database Cache, all services are also deinstalled. To deinstall Oracle Database cache, use the command shown below:

1. Ensure that the cache is started. If necessary, start it with the Cache Manager or the `cachstrt` script in the \$ORACLE_HOME/bin directory.
2. Run the Database Cache Configuration Assistant, specifying the `-deinstall` option:

```
prompt>wtacca -deinstall
```

1.8.62 xhost Command Required for iAS Enterprise Edition for Discoverer

An XWindow display must be available to the Oracle Discoverer servlet for its graphing and charting functions. After you install the Enterprise Edition, you must

grant XWindow permissions to the host named in the DISPLAY environment variable in:

```
$ORACLE_HOME/.../Apache/JServ/etc/jserv.properties
```

By default, the DISPLAY variable is the hostname of the machine running 9iAS. In order for Apache JServ to function properly, you must log in to the console of the host named in the DISPLAY environment variable and issue the xhost command.

For example, if 9iAS is installed on the host london, the DISPLAY environment variable setting in jserv.properties will be:

```
wrapper.env=DISPLAY=london:0.0
```

You must log in to the console of the host london and issue the following command:

```
prompt>/usr/openwin/bin/xhost +london
```

If you change the value of DISPLAY in jserv.properties to a different host, you must log in to the console of that host and grant it the XWindow permissions.

For example, suppose 9iAS is installed on the host called london, but the DISPLAY variable in jserv.properties is changed to the host berlin, as shown below:

```
wrapper.env=DISPLAY=berlin:0.0
```

Before using Apache JServ, you must log into the console of berlin and execute the following command to grant london permission to use berlin as a display:

```
prompt>/usr/openwin/bin/xhost +london
```

Note: Each time the DISPLAY host system is restarted, you must issue the xhost command.

1.8.63 Using Discoverer3i and Oracle9iAS Discoverer Simultaneously

Discoverer3i and Oracle9iAS Discoverer (Discoverer4i) share several common components. To run Discoverer3i and Oracle9iAS Discoverer (Discoverer4i) on the same machine, you must execute the following scripts in the order shown below:

1. <iAS_HOME>/6iserver/discwb4/util/stopall.sh
2. <iAS_HOME>/6iserver/discwb33/util/startoad.sh
3. <iAS_HOME>/6iserver/discwb33/util/startosagent.sh
4. <iAS_HOME>/6iserver/discwb33/util/startlocator.sh

5. `<iAS_HOME>/6iserver/discwb4/util/startlocator.sh`

1.8.64 Oracle9iAS Discoverer Patch

A patch is now available for Oracle9iAS Discoverer. The patch resolves a number of issues and also automates the migration of user preferences from Discoverer3i to Discoverer4i. We strongly advise you to obtain and apply this patch as part of the process of installing and configuring Oracle9iAS Discoverer.

You can obtain the patch from Oracle Metalink at:

<http://metalink.oracle.com/>

or through the usual support channels.

1. Login to MetaLink.
2. Click on the 'Patches' tab in the left-hand navigation bar. Metalink patch areas have changed, so follow the directions below.
3. On the new page, click on the link :

"==> NEW! Click here for ALL Product Patches"

At the time of publication a patch number had not been assigned. You can locate the patches by searching for Oracle Discoverer patches for release 4i or 4.1.

1.8.65 Response File Variable Settings for Oracle9iAS Portal Silent Install

If you wish to perform a silent install of Oracle Portal, you must set the certain variables in the response file. The variables are shown below, with sample values for each component. Note the following exceptions:

- If the Oracle HTTP Server is running on the default port (7777 on UNIX, 80 on Windows NT), then you don't need to specify it.
- If `log_tablespace`, `def_tablespace`, `doc_tablespace`, or `log_tablespace` is `USERS` and `tmp_tablespace` is `TEMP`, then you don't need to specify them.
- You should specify the parameter `b_configurePortal` only if you are performing a standalone installation of Oracle Portal.

```
[oracle.webdb_3.0.8.9.8]
```

```
#Parameter: silent  
#Type: Boolean
```


#Description: This variable is true if silent mode is on. It is passed to the wwv component.
silent=true

#Parameter: b_configurePortal
#Type: Boolean
#Description: This is a public variable. When set it will disable the configuration wizard (OPCA) as well as the dialogs.
b_configurePortal=true

[oracle.webdb.wwv_3.0.8.9.8]

#Parameter: sys_password
#Type: String
#Description: System Password for Portal's OPCA
sys_password="change_on_install"

#Parameter: tmp_tablespace
#Type: String
#Description: Temporary Tablespace for Portal's OPCA
tmp_tablespace="TEMP"

#Parameter: log_tablespace
#Type: String
#Description: Logging tablespace for Portal's OPCA
log_tablespace="USERS"

#Parameter: doc_tablespace
#Type: String
#Description: Document Tablespace for Portal's OPCA
doc_tablespace="USERS"

#Parameter: def_tablespace
#Type: String
#Description: Default Tablespace for Portal's OPCA
def_tablespace="USERS"

[oracle.webdb.apache_1.3.12.0.2b]

#Parameter: port
#Type: String
#Description: This variable holds the value of the port on which the #listener will be started. Default value for apache is 7777 on solaris #and 80 on nt.
port="7777"

```
#Parameter: user_input1
#Type: StringList
#Description: This variable takes the input from the first dialog.
user_input1={"portal30_sso", "portal30_sso", "a816"}

#Parameter: user_input2
#Type: StringList
#Description: This variable holds the input from dialog2.
user_input2={"portal30", "portal30", "a816"}

#Parameter: opca_tnsconnect
#Type: String
#Description: tns connect string which is required by Oracle Portal Config
Assistant. This should be in <machine name>:<port>:<sid> format. opca_
tnsconnect="machine_name:port:sid"
```

1.8.66 Setting up the VNC Server to replace DISPLAY requirement in Oracle Discoverer, Portal, and Reports

The following instructions explain how to install and configure the VNC X-Windows server software to be in conjunction with an iAS 1.0.2.1 installation on Sun Solaris. This is used as a substitute for the requirement of the 'xhost +machinename' command when running Discoverer 4i and Oracle Portal, and allows the software to be run in a more secure mode. This software removes the requirement for the user to execute the 'xhost' command and also eliminates the need to remain logged into the Sun machine. This is because the 'xhost' setting is session dependent, and is therefore lost when the user logs out of the machine on which the command was issued.

Using this VNC software to manage the X-windows sessions in the background, the iAS software is run using this as the VNC Xwindows server, without needing to access the standard X-windows system. The steps to implement this are as follows:

1. Download the VNC software. (You can download pre-built binaries from <http://www.uk.research.att.com/vnc/>, or download the source and build it.)
2. Install the VNC Server.
 - a. Unzip the install files into a directory of your choice.
 - b. Ensure that this directory location is included in the PATH environment variable. The safest option is to create a directory and then add this location to you PATH environment variable (e.g. /private/userhome/VNC).
3. Start the VNC server with the following command:

```
prompt>vncserver :13 -pn -localhost
```

The server starts on display number 13. You can use any display number, as long as it is available and unused by any other software. The default display value is 1.

A password prompt appears (if this is the first time you are starting VNC after installing it).

4. Set a password. Be sure to remember it for future reference.
5. Start the VNC server again:

```
prompt>vncserver :13 -pn -localhost
```

The following message appears (where 'oracle-sun' is the machine name):

```
New 'X' desktop is oracle-sun:13
```

```
Starting applications specified in /private1/oracle/.vnc/xstartup
Log file is /private1/oracle/.vnc/oracle-sun:13.log
```

6. Verify the VNC server started up correctly by entering:

```
prompt>cat /private1/oracle/.vnc/oracle-sun:13.log
```

A listing similar to that below appears:

```
20/02/01 15:37:59 Xvnc version 3.3.3r2
20/02/01 15:37:59 Copyright (C) AT&T Laboratories Cambridge.
20/02/01 15:37:59 All Rights Reserved.
20/02/01 15:37:59 See http://www.uk.research.att.com/vnc for information on
VNC 20/02/01 15:37:59 Desktop name 'X' (oracle-sun:1)
20/02/01 15:37:59 Protocol version supported 3.3
20/02/01 15:37:59 Listening for VNC connections on TCP port 5903
20/02/01 15:37:59 Listening for HTTP connections on TCP port 5803
20/02/01 15:37:59 URL http://oracle-sun:7777
Can't find include file /private1/oracle/.Xresources
```

7. Edit the following lines in the `jserv.properties` file located in:

```
/ $ORACLE_HOMES / Apache / jserv / etc /
```

```
#Oracle Portal
wrapper.env=DISPLAY=oracle-sun:13.0
```

```
#RV adding lines for disco4iv
wrapper.env=DISPLAY=oracle-sun:13.0
```

Ensure that the entries for both Discoverer and Oracle Portal are the same, so that both values point to the VNC Server. The key is the value chosen as part of the install (in this example, the display number 13).

8. Set the DISPLAY environment variable for JServ with the following command:

```
setenv DISPLAY oracle-sun:13.0
```

Note: This is always required before starting the HTTP Server. You must also execute the next step each time you start the server.

9. Set the DISPLAY environment variable for Oracle Reports by performing the following steps:

- a. Edit the Reports configuration file:

```
/$ORACLE_HOME/6iserver/reports60_server
```

- b. Change the line

```
DISPLAY=:0.0
```

to

```
DISPLAY=oracle-sun:13.0
```

10. Set the xhost value for starting the HTTP Server and JServ with the following command:

```
xhost +oracle-sun
```

where oracle-sun is the machine name. You cannot use 'localhost' to refer to the machine name. JServ will not work without the specific machine name.

Note: You need only run this command before starting the Oracle HTTP Server. However, if the HTTP Server is stopped, you must re-execute this command before the HTTP Server is started again. The same is true of the DISPLAY setting.

11. Start the Apache Web Server.

The virtual X display starts. You can log off of the console, and the VNC Server will continue to start X Windows sessions for the Discoverer software when required.

12. (Optional) To stop the VNC server, enter this command:

```
vncserver -kill :13
```

The server stops.

13. (Optional) To restart the server, perform step 3, then steps 5 through 9 (step 4 is excluded because you will not need to set a password). You must perform these steps each time the VNC server, Discoverer, or Portal is re-started.
14. (Optional) If you want to run VNC in a more secure mode, see <http://www.uk.research.att.com/vnc/sshvnc.html> about using VNC with ssh.

1.8.67 Oracle9iAS Web Cache Core Dumps if Capacity Parameter Too Low

If the number of requests processed is much larger than the capacity parameter setting, and most of the requests are made to non-cacheable pages, then the web cache may core dump.

To remedy this, set the capacity parameter to a number close to the number of requests expected. A core dump did not occur in a test with 400 clients requesting a non-cacheable page, with the capacity parameter set to 400. In the same test, with the parameter set to 30 (the default), a core dump occurred.

The capacity parameter setting is located in the Application Web Server section.

1.8.68 Error When Starting Oracle HTTP Server

The following error may occur when you start the HTTP Server after de-installation and re-installation of iAS into the same Oracle home:

```
Syntax error on line 14 of <ORACLE_HOME>Apache/Apache/conf/mod_ose.conf:
AuroraService - directive already in effect for this server
```

To resolve this error:

1. Open the <ORACLE_HOME>Apache/Apache/conf/oracle_apache.conf file.
2. Remove the duplicate of the following line:

```
include "<ORACLE_HOME>Apache/Apache/conf/mod_ose.conf:"
```

3. Re-start the HTTP Server.

1.8.69 High Load on Portal Pages Causes Core Dump

Under high load (in testing with 500 clients), a Portal page causes a core dump in the database. The remedy is to increase the database shared pool size.

1.8.70 Manual Installation of OWA Packages Causes Error

If the OWA packages are installed manually in <\$ORACLE_HOME>Apache/modplsql/owa, a "File not found" error occurs.

To resolve the error:

1. Open the file <\$ORACLE_HOME>Apache/modplsql/owa/owacomm.sql.
2. Change the line

```
spool ../../portal30\admin\plsql\owa\owaldscr.sql  
  
to  
  
spool owaldscr.sql
```

1.8.71 OraInventory Directory Requires Backup Before Migration

Before running the migration process in the Oracle Universal Installer, you must back up the OraInventory directory.

If migration fails or is cancelled in progress, subsequent attempts might also fail because of changes the installer made to the OraInventory directory. After any incomplete migration process, restore the OraInventory directory from your pre-migration backup before attempting migration again.