Oracle9*i*™ Application Server

Installation Guide

Release 1.0.2 for Sun SPARC Solaris

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Oracle9*i* Application Server Installation Guide, Release 1.0.2 for Sun SPARC Solaris

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If you would like a reply, please give your name, address, and telephone number below.

If you have problems with the software, please contact your local Oracle Support Services.

Preface

This chapter contains general documentation information about the Oracle9*i* Application Server, including conventions used in this guide, and contact information at Oracle.

Audience

This installation guide is intended for database administrators and others responsible for installing Oracle products. You should be familiar with client/server relationships and database concepts.

Conventions

This manual uses the following typographical conventions:

Convention	Example	Explanation
bold	**tnsnames.ora** **runInstaller** **www.oracle.com**	Identifies file names, utilities, processes, and URLs
italics	*file1*	Identifies a variable in text; replace this place holder with a specific value or string.
angle brackets	`<filename>`	Identifies a variable in code; replace this place holder with a specific value or string.
courier	`echo $ORACLE_HOME`	Text to be entered exactly as it appears. Also used for functions.

Convention	Example	Explanation
square brackets	`[-c string]`	Identifies an optional item.
	`[on|off]`	Identifies a choice of optional items, each separated by a vertical bar (`|`), any one option can be specified.
braces	`{yes|no}`	Identifies a choice of mandatory items, each separated by a vertical bar (`|`).
ellipses	n,...	Indicates that the preceding item can be repeated any number of times.

The term, Oracle Server, refers to the database server product from Oracle Corporation.

The term, **oracle**, refers to an executable or account by that name.

The term, *oracle*, refers to the owner of the Oracle software.

Oracle Services and Support

A wide range of information about Oracle products and global services is available from:

- **http://www.oracle.com**

The sections below provide URLs for selected services.

Oracle Support Services

Technical Support contact information worldwide is listed at:

- **http://www.oracle.com/support**

Templates are provided to help you prepare information about your problem before you call. You will also need your CSI number (if applicable) or complete contact details, including any special project information.

Product and Documentation

For U.S.A customers, Oracle Store is at:

- **http://store.oracle.com**

Links to Stores in other countries are provided from this site.

Product documentation can be found at:

- **http://docs.oracle.com**

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Training information and worldwide schedules are available from:

- **http://education.oracle.com**

Oracle Technology Network

Register with the Oracle Technology Network (OTN) at:

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OTN delivers technical papers, code samples, product documentation, self-service developer support, and Oracle key developer products to enable rapid development and deployment of application built on Oracle technology.

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Requirements

This chapter provides information about the hardware and software items required for the installation of the Oracle9*i* Application Server, Oracle Portal-to-Go client, and the online documentation.

Contents

Hardware Requirements

The following are the hardware requirements for Oracle9*i* Application Server.

Hardware Items	Required
CPU	A SPARC Processor
Memory	128 MB
Disk Space	■ Oracle HTTP Serverr Only: 606 MB ■ Standard Edition: 1.30 GB ■ Enterprise Edition: 3.30 GB
Swap Space	500 MB

Note for Standard Edition: You will need an additional 425 MB disk space to install the Oracle 8*i* JVM database. The database files do not have to be installed on the same disk as the Oracle9*i* Application Server *ORACLE_HOME*.

Note for Oracle Web Cache (Enterprise Edition only): Memory for Oracle Web Cache should be based on the following formula:

(average HTTP object size) * (maximum number of objects you want to cache).

Thus, if you want to cache 100,000 objects and the average size of the objects is 3 KB, then set the maximum cache size to at least 3 GB.

Software Requirements

The following are the software requirements for Oracle9*i* Application Server.

Software Items	Version
Operating System	Solaris 2.6 ■ Motif Runtime patch: 105284-20 or higher ■ Kernel Jumbo patch: 105181-20 or higher ■ Linker patch: 107733-06 or higher ■ Libthread patch: 105568-16 or higher ■ Libc patch: 105210-27 or higher ■ XIM patch: 106040-13 or higher Solaris 2.7 ■ Libthread patch: 106980-10 or higher ■ Kernal cluster patch106541-09 or higher ■ /kernal/fs/sockfs patch: 109104-01 or higher ■ /usr/lib/fs/fsck patch: 107544-02 or higher ■ Motif Runtime patch: 107081-19 or higher ■ XIM patch: 107636-03 or higher ■ OpenWindows patch: 108376-03 or higher

Certified Software

A complete list of certified software for Oracle9*i* Application Server can be found on Oracle*MetaLink*, which can be accessed from the URL below:

http://metalink.oracle.com

Oracle Portal-to-Go Client Requirements

The following are the requirements for the installation of Oracle Portal-to-Go client. For information and installation instructions regarding Oracle Portal-to-Go client, refer to Appendix B, "Installing Oracle Portal-to-Go Client".

Hardware Items	Required
Operating System	Windows NT 4.0 (with Service Pack 4.0) or higher
CPU	Pentium 266
Memory	At least 64 MB RAM for running both the Oracle Portal-to-Go Service Designer and Portal-to-Go Web Integration Developer; at least 32 MB RAM for running the Portal-to-Go Service Designer.
Disk Space	40 MB for running both the Oracle Portal-to-Go Service Designer and Portal-to-Go Web Integration Developer; at least 20 MB for running the Portal-to-Go Service.
JDK 1.2.2	The client system requires JDK 1.2.2. You can install JDK 1.2.2 for Windows NT from the client CD-ROM. You should ensure that the JDK directory is the first entry in the system environment path.

Online Documentation Requirements

The following are the tools and disk space requirements for the installation of the Oracle9*i* Application Server online documentation. For information and installation instructions regarding the Oracle9*i* Application Server online documentation, refer to Appendix D, "Documentation Library Installation".

Requirement	Items
Online Readers	Requires any one of the following HTML ■ Netscape Navigator 3.0 or higher ■ Microsoft Internet Explorer 3.0 or higher PDF ■ Acrobat Reader 3.0 or higher ■ Acrobat Reader+Search 3.0 or higher ■ Acrobat Exchange 3.0 or higher ■ PDFViewer Web browser plug-in 1.0 or higher
Disk Space	185 MB

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Pre-installation

This chapter guides you through the basic concepts and pre-installation steps for Oracle9*i* Application Server. These include an overview of Oracle9*i* Application Server, environment variables settings, configuration options, and starting Oracle Universal Installer.

Contents

About Oracle9*i* Application Server

Oracle9*i* Application Server is a scalable, secure, middle-tier application server. It enables you to deliver Web content, host Web applications, connect to back-office applications, and access your data on wireless devices. Oracle9*i* Application Server has three installation options:

- **Oracle HTTP Server Only**: suitable for Websites that require a lightweight Web server with minimal application support.
- **Standard Edition**: appropriate for smaller Websites that require minimal support for running transactional applications.
- **Enterprise Edition**: recommended for medium to large-sized Websites that handle a high volume of requests and that require robust support for running transactional applications.

Oracle9*i* Application Server Components

Table 2–1 lists the three installation options of Oracle9*i* Application Server, and the components that are installed with each option. This is followed by a brief description of each component. For detailed information on each component, refer to the *Oracle9i* Application Server *Overview Guide*.

Table 2–1 Oracle9i Application Server Components

Component	Oracle HTTP Server Only	Standard Edition	Enterprise Edition
Oracle 8*i* JVM		x	x
Oracle Advanced Security		x	x
Oracle BC4J	x	x	x
Oracle Database Cache			x
Oracle Database Client Developer's Kit	x	x	x
Oracle Discoverer 3*i* Viewer			x
Oracle Enterprise Manager Client		x	x
Oracle Forms Services			x
Oracle HTTP Server *powered by Apache*	x	x	x
Oracle Internet File System		x	x

Table 2–1 Oracle9i Application Server Components (Cont.)

Component	Oracle HTTP Server Only	Standard Edition	Enterprise Edition
Oracle LDAP Developer's Kit		x	x
Oracle Management Server			x
Oracle Portal	x	x	x
Oracle Portal-to-Go	x	x	x
Oracle Reports Services			x
Oracle Web Cache			x
Oracle XML Developer's Kit	x	x	x

Oracle 8*i* JVM

Oracle 8*i* JVM is an enterprise-class 100% Java-compatible server environment that supports Enterprise JavaBeans, CORBA, and database stored procedures. Oracle 8*i* JVM achieves high scalability through its unique architectural design, which minimizes the burden and complexity of memory management when the number of users increases.

Oracle Advanced Security

Oracle Advanced Security provides a comprehensive suite of security features to protect enterprise networks and securely extend corporate networks to the Internet. It provides a single source of integration with network encryption and authentication solutions, single signon services, and security protocols. By integrating industry standards, it delivers unparalleled security to the Oracle network and beyond.

Oracle BC4J (Business Components for Java)

Oracle Business Components for Java is a 100% Java-compatible, XML-powered framework that enables productive development, portable deployment, and flexible customization of multi-tier, database applications from business components.

Oracle Database Cache

Oracle Database Cache improves the performance and scalability of applications that access Oracle databases by storing frequently used data on middle tier machines. With Oracle Database Cache, your applications can process several times as many requests as their original capacity. In addition, you do not need to modify your existing applications to use Oracle Database Cache and it is transparent to your end users.

Oracle Database Client Developer's Kit

The Oracle Database Client Developer's Kit contains the following client libraries:

- Oracle Java Database Connectivity (JDBC) Drivers
- Oracle Java Messaging Service (JMS) Toolkit
- Oracle SQLJ Translator

Oracle Discoverer 3*i* Viewer

Oracle Discoverer 3*i* Viewer is a query and analysis tool with a 100% thin client, CORBA architecture that makes it easy to deploy, and provides unsurpassed scalability. Using Oracle Discoverer's easy-to-use interface via a Web browser, users can access and analyze database data. Oracle Discoverer 3*i* Viewer scales up easily to support more users as demand on the system increases. It also optimizes for performance and is designed to minimize network traffic.

Oracle Enterprise Manager Client

Oracle Enterprise Manager Client provides an integrated solution for centrally managing your Oracle environment. Combining a graphical console, Oracle Intelligent Agents, common services, and administrative tools, Oracle Enterprise Manager Client provides a comprehensive systems management platform for managing Oracle9*i* Application Server. To use this client, you must have a previously installed Oracle Management Server on your network.

Oracle Forms Services

Oracle Forms Services deploys Forms applications with database access to Java clients in a Web environment. Oracle Forms Services automatically optimizes class downloads, network traffic, and interactions with Oracle RDBMS. Applications are automatically load-balanced across multiple servers and, therefore, can easily scale to service any number of requests.

Oracle HTTP Server *powered by Apache*

Oracle9*i* Application Server uses the Oracle HTTP Server, which is built on Apache Web server technology. Oracle HTTP Server offers scalability, stability, speed, and extensibility. It also supports Java Servlets, JavaServer Pages, Perl, PL/SQL, and CGI applications.

This component also includes the following sub-components:

- Apache Jserv
- mod_jserv
- mod_ose
- mod_plsql
- mod_perl
- mod_ssl
- OracleJSP
- Perl Interpreter

Oracle Internet File System

Oracle Internet File System is a file system and development platform that stores files in an Oracle8*i* database. It provides a mechanism for creating, storing, and managing various types of information, from Web pages to email, from spreadsheets to XML files, in a common repository for users to access and update.

Oracle LDAP Developer's Kit

LDAP (Lightweight Directory Access Protocol) is the emerging Internet standard for directory services. Oracle LDAP Developer's Kit supports client interaction with any LDAP-compliant directory server, for example, Oracle Internet Directory. The toolkit provides tools and development libraries to support client calls to directory services, encrypted connections, and enables you to manage your directory data.

Oracle Management Server

Oracle Management Server provides distributed control between the database and Oracle9*i* Application Server in the network. As a central engine for notifications, it processes all system management tasks and administers the distribution of these tasks across the enterprise. Ensure that you do not have multiple Oracle Management Servers installed on a single machine.

Oracle Portal

Oracle Portal is a complete solution for building, deploying and monitoring Web database applications and content-driven Web sites. Oracle Portal enables you to create and view database objects through an easy-to-use HTML-based interface, and provides tools for creating HTML-based interfaces. It also allows you to resolve performance problems using performance tracking facilities, and enables you to manage database security through its interface.

Oracle Portal-to-Go

Oracle Portal-to-Go is a portal service for delivering information and applications to mobile devices. Using Oracle Portal-to-Go, you can create custom portal sites that use different kinds of content, including Web pages, custom Java applications, and XML-based applications. Portal sites make this diverse information accessible to mobile devices without you having to rewrite the content for each target device platform.

Oracle Reports Services

Oracle Reports Services provides an easy-to-use, scalable, and manageable solution for high-quality database publishing and reporting by creating dynamic reports for the Web and across the enterprise. It enables you to implement a multi-tiered architecture for running your reports.

Oracle Web Cache

Oracle Web Cache is a server accelerator caching service that improves the performance, scalability, and availability of frequently used e-business Web sites that run on Oracle9*i* Application Server and Oracle8*i*. By storing frequently accessed URLs in virtual memory, Oracle Web Cache eliminates the need to repeatedly process requests for those URLs on the Web server, and it caches both static and dynamically-generated HTTP content from one or more applications Web servers.

Oracle XML Developer's Kit

The Oracle XML Developer's Kit (XDK) contains the necessary XML components libraries and utilities to give developers the ability to easily XML-enable applications and Web sites. Oracle XDK supports development in Java, C, C++, and PL/SQL with a collection of libraries, command-line utilities, and tools.

Pre-installation Tasks

The pre-installation tasks for the Oracle9*i* Application Server are divided into the following parts:

- Setting Environment Variables
- Creating UNIX Accounts and Groups
- Completing Pre-installation for Specific Installation Options

Setting Environment Variables

The following environment variables must be set before starting the installer:

Note: Be sure your *PATH*, *LD_LIBRARY_PATH*, and *CLASSPATH* are not too long as that might generate errors such as "Word too long" during installation.

ORACLE_HOME

ORACLE_HOME is the root directory in which Oracle software is installed.

Oracle9*i* Application Server cannot share the same *ORACLE_HOME* with other Oracle products. If you have installed other Oracle products, then Oracle9*i* Application Server must be installed in a different *ORACLE_HOME*. If previously-set *ORACLE_HOMEs* exist on the machine where you are installing Oracle9*i* Application Server on, then refer to "Preventing Conflicts Between ORACLE_HOMEs" below.

Note: Be sure not to install Oracle9*i* Application Server in an *ORACLE_HOME* containing other Oracle products, including the database. Such an installation could overwrite shared components, causing the products to malfunction.

Preventing Conflicts Between ORACLE_HOMEs

To prevent a conflict between the software in an existing *ORACLE_HOME* and Oracle9*i* Application Server, you must remove all references to the existing *ORACLE_HOME*. The following steps describe removing these references.

1. Unset your existing *ORACLE_HOME* variable by using the following command:

C shell	Bourne/Korn shell
`prompt> unsetenv ORACLE_HOME`	`prompt> export ORACLE_HOME=`

2. Edit your *PATH*, *CLASSPATH*, and *LD_LIBRARY_PATH* environment variables so they do not use the existing *ORACLE_HOME* value

Setting ORACLE_HOME

To set *ORACLE_HOME* environment variable, run the following command:

C shell	Bourne/Korn shell
`prompt> setenv ORACLE_HOME <full path>`	`prompt> export ORACLE_HOME=<full path>`

DISPLAY

Setting the DISPLAY environment variable enables you to run the Oracle Universal Installer remotely from a local work station. On the system where you run the Oracle Universal Installer, set DISPLAY to the system name or IP address of your local workstation.

If you get an Xlib error similar to “Failed to connect to server”, “Connection refused by server”, or “Can’t open display” when starting the installer, then run the commands on your local workstations as listed in the table below.

Shell Types	On server where the installer is running	In session on your workstation
C shell	`prompt> setenv DISPLAY hostname:0.0`	`prompt> xhost +server_name`
Borne or Korn shell	`prompt> export DISPLAY=hostname:0.0`	`prompt> xhost +server_name`

TMP

During installation, Oracle Universal Installer uses a temporary directory for swap space. This directory must meet the "Hardware Requirements" listed on page 1-2 before installing Oracle9*i* Application Server. The installation may fail if you do not have sufficient space. The installer checks for the **TMP** environment variable to locate the temporary directory. If this environment variable does not exist, then the installer uses the **/tmp** directory.

The following are instructions for setting the **TMP** environment variable:

C shell	Bourne/Korn shell
`prompt> setenv TMP <full path>`	`prompt> export TMP=<full path>`

Creating UNIX Accounts and Groups

The following UNIX account and groups are required for the installation process.

UNIX Group Name for the Oracle Universal Installer Inventory

Use the **admintool** or **groupadd** utility to create a group named `oinstall`. The `oinstall` group will own Oracle Universal Installer's **oraInventory** directory. The `oracle` user account that runs the installation must have the `oinstall` group as its primary group.

For more information on these utilities, refer to your operating system documentation.

UNIX Account to Own Oracle Software

The `oracle` account is the UNIX account that owns Oracle software for your system. You must run Oracle Universal Installer from this account.

Create an `oracle` account with the properties listed in Table 2–2.

Table 2–2 Oracle Account Properties

Variable	Property
Login Name	Choose any name to access the account. This document refers to the name as the `oracle` account.
Group Identifier	The `oinstall` group.
Home Directory	Choose a home directory consistent with other user home directories, The home directory of the `oracle` account does not have to be the same as the *ORACLE_HOME* directory.
Login Shell	The default shell can be either the C, Bourne, or Korn shell.

Note: Use the `oracle` account only for installing and maintaining Oracle software. Never use it for purposes unrelated to the Oracle Universal Installer. Do not use `root` as the `oracle` account.

UNIX Group Names for Privileged Groups

Two groups, the database operator group and the database administrator group, are required for installation. Oracle documentation refers to these groups as OSOPER and OSDBA, respectively. Databases use these groups for operating system authentication. This is necessary in situations where the database is shutdown and database authentication is unavailable.

The privileges of these groups are given to either a single UNIX group or two corresponding UNIX groups. There are two ways to choose which group(s) get the privileges:

- If the `oracle` account is a member of the `dba` group before starting the installer, then `dba` is given the privileges of both OSOPER and OSDBA.
- If the `oracle` account is not a member of the `dba` group, then the installer will prompt you for the group name(s) that get these privileges.

The following table lists the privileges for the OSOPER and OSDBA groups:

Group	Privileges
OSOPER	Permits the user to perform `STARTUP`, `SHUTDOWN`, `ALTER DATABASE OPEN/MOUNT`, `ALTER DATABASE BACKUP`, `ARCHIVE LOG`, and `RECOVER`, and includes the `RESTRICTED SESSION` privilege.
OSDBA	Contains all system privileges with `ADMIN OPTION`, and the OSOPER role; permits `CREATE DATABASE` and time-based recover.

Completing Pre-installation for Specific Installation Options

After setting the environment variables and creating UNIX accounts and groups, complete the pre-installation tasks for the Oracle9*i* Application Server.

If you are migrating from Oracle Internet Application Server, Release 1.0.0, then you must perform certain migration tasks before performing the pre-installation tasks for Oracle9*i* Application Server, Release 1.0.2. For migration information and tasks, refer to *Migrating from Oracle Internet Application Server 1.0.0*, which is included on your product CD.

The following list directs you to the installation option that you have license to:

- Oracle HTTP Server Only on page 2-14
- Standard Edition on page 2-15
- Enterprise Edition on page 2-22

Oracle HTTP Server Only

Oracle HTTP Server Only installation option does not require any pre-installation tasks.

You have completed the pre-installation tasks for the Oracle9*i* Application Server. Proceed to "About Oracle Universal Installer" on page 2-34 to start the installer.

Standard Edition

The following are the pre-installation steps for the Standard Edition of the Oracle9*i* Application Server.

Oracle Internet File System

Perform the following tasks before installing Oracle Internet File System:

- Configure the Net8 Server for External Procedures
- Set Database Parameters
- Configure the Oracle8i Database for Authentication Encryption

Configure the Net8 Server for External Procedures

Oracle interMedia Text is an optional component that will allow Oracle Internet File System to search on document contents. If interMedia Text is installed, you must verify that it is configured correctly, or Oracle Internet File System will not configure properly. You will need to configure Net8 Server on the database machine for external procedures. This requires configuring the **tnsnames.ora** and **listener.ora** files. By default, these files are located in the following directory:

```
prompt> <ORACLE_HOME>/network/admin
```

For more information on configuring Net8 External Procedures, refer to *Oracle Net8 Administrator's Guide*.

Modify the listener.ora File

Modify your **listener.ora** file as per the following example:

```
LISTENER =
(DESCRIPTION_LIST =
    (DESCRIPTION =
        (ADDRESS_LIST=
            (ADDRESS= (PROTOCOL =TCP) (HOST = <localhost>) (PORT = 1521))
        )
        (ADDRESS_LIST=
            (ADDRESS = (PROTOCOL = IPC) (KEY = oni))
        )
        (ADDRESS_LIST =
            (ADDRESS = (PROTOCOL = IPC) (KEY = EXTPROC))
        )
    )
)

SID_LIST_LISTENER=
    (SID_LIST =
        (SID_DESC =
            (GLOBAL_DBNAME = <mydb>)
            (ORACLE_HOME = /export/home/OraHome1)
            (SID_NAME = oni)
        )
        (SID_DESC =
            (ENVS=LD_LIBRARY_PATH=<ORACLE_HOME>/lib:<ORACLE_HOME>/ctx/lib)
            (SID_NAME = PLSExtProc)
            (ORACLE_HOME = /export/home/OraHome1)
            (PROGRAM = extproc)
        )
    )
```

Modify the tnsnames.ora File

Modify your **tnsnames.ora** file as per the following example:

```
IFS=
    (DESCRIPTION =
        (ADDRESS_LIST=
            (ADDRESS= (PROTOCOL =TCP) (HOST = <localhost>) (PORT = 1521))
        )
        (CONNECT_DATA =
            (SERVICE_NAME =<mydb>)
        )
    )

EXTPROC_CONNECTION_DATA =
    (DESCRIPTION =
        (ADDRESS_LIST=
            (ADDRESS =(PROTOCOL = IPC)(KEY = EXTPROC))
        )
        (CONNECT_DATA =
            (SID = PLSExtProc)
            (PRESENTATION = RO)
        )
    )
```

Set Database Parameters

Installation of Oracle Internet File System requires reconfiguration of specific database parameters on the server machine.

1. Before changing any parameters, shut down the network listener, interMedia Text servers, and the database:

   a. To shut down the network listener:

   ```
   prompt> lsnrctl stop
   ```

   b. To shut down the InterMedia Text Servers:

   ```
   prompt> sqlplus ctxsys/<ctxsys password>

   SQL>exec ctx_adm.shutdown();

   SQL>exit;
   ```

   c. To shut down the database using SQL*Plus:

   ```
   prompt> sqlplus /nolog

   SQL> connect sys/<sys_password> as sysdba;
   Connected.

   SQL> shutdown [immediate] Database shutdown

   SQL> exit
   ```

2. Set the following Oracle Initialization parameters to the values specified. These parameters are contained in the **init<SID>.ora file** in the following directory:

   ```
   <ORACLE_BASE>/admin/<global_database_name>/pfile
   ```

   Note: This configuration file may be located in a different directory depending on how the database was installed.

   a. Set the value for `open_cursors` to at least 255.

   b. Set the value for `shared_pool_size` at least 9M.

   c. Set the value for processes to at least 200.

d. Make sure there is at least one online non-system rollback segment.

To verify that there is at least one online non-system rollback segment, connect to Oracle as the SYS user with SQL*Plus and execute the following SQL statement:

```
SQL> SELECT segment_name, tablespace_name, status
     FROM dba_rollback_segs;
```

This will result in output that looks like the following table:

Table 2–3 dba_rollback_segs Output

SEGMENT_NAME	TABLESPACE_NAME	STATUS
SYSTEM	SYSTEM	ONLINE
PUBLIC_RS	SYSTEM	ONLINE
USERS_RS	USERS	ONLINE

In this example, USERS_RS is an online non-system rollback segment. To ensure that the rollback segment is always online after a database startup, include the following line in the **init<SID>.ora** file:

```
rollback_segments = (rbs_name1, .... , rbs_namex)
```

For more information on how to create an online non-system rollback segment, refer to the *Oracle8i Administrator Guide*.

3. Configure the Solaris environment to accommodate the database. To do this, edit the **/etc/system** file and modify the following variables:

- Set `SEMMSL` to 10 plus the largest PROCESSES parameter of any Oracle database on the system.
- Set `SEMMNS` to the sum of the PROCESSES parameter for each Oracle database, adding the largest one twice, then add an additional 10 for each database.

Note: After modifying the `/etc/system` file, you must restart your Solaris system. Without restarting, the required kernel reconfiguration will not take place.

For more information, refer to *Oracle8i Installation Guide*.

4. Restart the network listener and database:

   a. Start the network listener:

   ```
   prompt> lsnrctl start
   ```

   b. Start the database:

   ```
   prompt> sqlplus /nolog

   SQL> connect sys/<sys password> as sysdba
   Connected.

   SQL> startup
   ```

   c. Execute the following SQL statement:

   ```
   SQL> SELECT name, value FROM v$parameter WHERE name = open_cursors;
   ```

   You should see the `open_cursors` value you entered in the **init<SID>.ora** file in step 2. For more information, refer to *Oracle8i Administration Guide*.

Configure the Oracle8i Database for Authentication Encryption

Before you can install Oracle Internet File System, you must configure authentication encryption.

1. Navigate to the ***ORACLE_HOME*/rdbms/admin** directory:

   ```
   prompt> cd <ORACLE_HOME>/rdbms/admin
   ```

2. Connect to Oracle as the SYS user with SQL*Plus and run `catobtk.sql` from the:

   ```
   prompt> sqlplus sys/<sys password>

   SQL> @catobtk.sql
   ```

3. Execute the following SQL statement:

   ```
   SQL> GRANT EXECUTE ON dbms_obfuscation_toolkit TO PUBLIC;
   ```

Origin Database Connectivity

Oracle9*i* Application Server requires an active database connection. The installer uses this connection to add database objects to the origin database. The origin database is the original and primary storage for your data and is typically located on a database server tier.

Before installing Oracle9*i* Application Server, verify that the origin database and its TNS listener are running.

You have completed the pre-installation tasks for the Oracle9*i* Application Server. Proceed to "About Oracle Universal Installer" on page 2-34 to start the installer.7

Enterprise Edition

The following are the pre-installation steps for the Enterprise Edition of the Oracle9*i* Application Server.

Oracle Web Cache

For TCP/IP performance tuning tips for the computer running Oracle Web Cache, refer to *Oracle HTTP Server powered by Apache Performance Guide*.

Oracle Database Cache

This section guides you through the Oracle Database Cache pre-installation tasks.

- If you are installing Oracle Database Cache on the **same** machine as the origin database, preform the "Pre-installation Tasks"as listed on page C-2.
- If you are installing Oracle Database Cache on a **different** machine, perform the tasks listed below:
  - Synchronize the Origin Database Name with its SID
  - Allow Remote Access to the Origin Database
  - Configure the Listener for External Procedures

Synchronize the Origin Database Name with its SID

To use Oracle Database Cache, the name of your origin database and its System Identifier (SID) must be the same. You can see both the name and SID by executing the following commands in SQL*Plus when logged on as the `sys` user:

```
SQL> select value from v$parameter where name = 'db_name';
SQL> select instance_name from v$instance;
```

If these values are different, then you must perform the following steps on the origin database machine to change the SID:

1. Shut down the origin database and listener. For information on stopping the origin database, refer to *Oracle8i Administrator's Guide*. For information on stopping the origin database listener, refer to *Oracle8i Installation Guide*
2. Change the value of the ORACLE_SID environment variable to the new value. This new value must match the origin database name.
3. Rename the **init***SID***.ora** and **orapw***SID* files to use the new SID.
4. Change the **listener.ora** and **tnsnames.ora** files to use the new SID.

5. Restart the origin database and listener. For information on starting the origin database, refer to *Oracle8i Administrator's Guide*. For information on starting the origin database listener, refer to *Oracle8i Installation Guide*.

Allow Remote Access to the Origin Database

To prepare the origin database, you must allow Oracle Database Cache to access it remotely:

1. Edit the initialization file (**init***SID***.ora**) of the origin database. If the file contains the `REMOTE_LOGIN_PASSWORDFILE` parameter, then make sure that the value equals `SHARED` or `EXCLUSIVE`. If the parameter is already set to either `SHARED` or `EXCLUSIVE`, then you do not need to change the value.

   - **EXCLUSIVE**: The password file can be used by only one database and the password file can contain user names other than SYS and INTERNAL.
   - **SHARED**: The password file can be used by more than one database. However, the only user names recognized by the password file are SYS and INTERNAL.

   If the file does not contain the entry, then add it to the file, specifying either `SHARED` or `EXCLUSIVE` as the value. For example, to specify `EXCLUSIVE`, add the following entry to the file:

   ```
   REMOTE_LOGIN_PASSWORDFILE=EXCLUSIVE
   ```

   init*SID***.ora** is in the ***ORACLE_HOME*/admin/server/pfile** directory for of the Oracle database.

2. For the database, check if a password file exists. The name and location of the file may differ depending on the platform of your database. Refer to your operating system-specific Oracle documentation for the names and locations on your platform.

3. If the file does not exist, create the password file using the **orapwd** utility with the following commands:

   ```
   prompt> orapwd file=<orapwSID> password=<syspw> entries=<maxRemUsers>
   prompt> cd ORACLE_HOME\bin
   prompt> ORAPWD FILE=PWDSID.ORA PASSWORD=sys_password ENTRIES=maxRemUsers
   ```

There are no spaces around the equal sign (=). The parameters have the following meaning:

- **FILE:** The full path name of the password file. The contents of this file are encrypted, and the file is not user-readable. This parameter is mandatory. The types of file names allowed for the password file are operating system specific. Some platforms require the password file to be a specific format and located in a specific directory. Other platforms allow the use of environment variables to specify the name and location of the password file. See your operating system-specific Oracle documentation for the names and locations allowed on your platform.
- **PASSWORD:** The password of the user SYS for the origin database. This parameter sets the password for SYSOPER and SYSDBA. If you issue the ALTER USER statement to change the password after connecting to the origin database, both the password stored in the data dictionary and the password stored in the password file are updated.
- **ENTRIES:** The maximum number of users allowed for remote connections. This value must be greater than the number of Oracle Database Cache nodes that will connect to the origin database.

For information on the **orapwd** utility, refer to *Oracle8i Administrator's Guide*.

4. If you created a password file in the previous step, then shutdown and restart the origin database. This enables the changes made in the previous steps.

For further information about the password file utility and remote login, refer to the *Oracle8i Administrator's Guide*.

Configure the Listener for External Procedures

You must configure the listener for the origin database so that it listens for external procedure calls. To do so, take the following steps:

1. Edit the **tnsnames.ora** file for the origin database by adding an entry that enables you to connect to the listener process (and subsequently, the **extproc** process). For example, add the following entry to the **tnsnames.ora** file:

```
EXTPROC_CONNECTION_DATA.US.ORACLE.COM=
   (DESCRIPTION=
    (ADDRESS_LIST=
        (ADDRESS= (PROTOCOL=IPC) (KEY=EXTPROC0))
     )
    (CONNECT_DATA=
      (SID=PLSExtProc)
      (PRESENTATION= RO)
    )
   )
```

   The entry name `extproc_connection_data` must be entered exactly as it appears here.

2. Edit the **listener.ora** file for the origin database and add the following entries for the external procedure listener:

```
LISTENER=
 (DESCRIPTION_LIST=
   (DESCRIPTION=
    (ADDRESS_LIST=
      (ADDRESS= (PROTOCOL=IPC) (KEY=EXTPROC0))
     )
    )
...
   )

SID_LIST_LISTENER=
   (SID_LIST=
      (SID_DESC=
         (SID_NAME=PLSExtProc)
         (ORACLE_HOME=<oracle_home>)
         (PROGRAM=extproc)
      )
  ...
   )
```

You must specify **extproc** as the program. It must be entered exactly as it appears in this example. The key you specify, in this case **EXTPROC0**, must match the key you specify in the **tnsnames.ora** file.

Additionally, the `sid_name` you specify, in this case **PLSExtProc**, must match the sid entry in **tnsnames.ora** file.

3. The **extproc** process spawned by the listener inherits the operating system privileges of the listener, so Oracle strongly recommends that you restrict the privileges for the separate listener process. The process should not have permission to read or write to database files or the Oracle server address space. Also, the owner of this separate process should not be the `oracle` user (which is the default owner of the server executable and database files). Therefore, you should start the listener from a user account that does not have permission to read or write to database files or the Oracle server address space.

4. Start a separate listener process to exclusively handle external procedures:

   ```
   prompt> lsnrctl start external_procedure_listener
   ```

5. If not already installed, place the **extproc** executable in the **bin** directory under the *ORACLE_HOME* of the origin database.

6. Minimum configuration for **sqlnet.ora**

   ```
   NAMES.DEFAULT_DOMAIN = <your.Domain.Name>

   SQLNET.AUTHENTICATION_SERVICES= (NTS)

   NAMES.DIRECTORY_PATH= (TNSNAMES, ONAMES, HOSTNAME)
   ```

For more information regarding the **listener.ora** file and the **tnsnames.ora** file, refer to the *Net8 Administrator's Guide*.

Oracle Internet File System

Perform the following tasks before installing Oracle Internet File System:

- Configure the Net8 Server for External Procedures
- Set Database Parameters
- Configure the Oracle8i Database for Authentication Encryption

Configure the Net8 Server for External Procedures

Oracle interMedia Text is an optional component that will allow Oracle Internet File System to search on document contents. If interMedia Text is installed, you must verify that it is configured correctly, or Oracle Internet File System will not configure properly. You will need to configure Net8 Server on the database machine for external procedures. This requires configuring the **tnsnames.ora** and **listener.ora** files. By default, these files are located in the following directory:

```
prompt> <ORACLE_HOME>/network/admin
```

For more information on configuring Net8 External Procedures, refer to *Oracle Net8 Administrator's Guide*.

Modify the listener.ora File

Modify your **listener.ora** file as per the following example:

```
LISTENER =
(DESCRIPTION_LIST =
    (DESCRIPTION =
        (ADDRESS_LIST=
            (ADDRESS= (PROTOCOL =TCP) (HOST = <localhost>) (PORT = 1521))
        )
        (ADDRESS_LIST=
            (ADDRESS = (PROTOCOL = IPC) (KEY = oni))
        )
        (ADDRESS_LIST =
            (ADDRESS = (PROTOCOL = IPC) (KEY = EXTPROC))
        )
    )
)

SID_LIST_LISTENER=
    (SID_LIST =
        (SID_DESC =
            (GLOBAL_DBNAME = <mydb>)
            (ORACLE_HOME = /export/home/OraHome1)
            (SID_NAME = oni)
        )
        (SID_DESC =
            (ENVS=LD_LIBRARY_PATH=<ORACLE_HOME>/lib:<ORACLE_HOME>/ctx/lib)
            (SID_NAME = PLSExtProc)
            (ORACLE_HOME = /export/home/OraHome1)
            (PROGRAM = extproc)
        )
    )
```

Modify the tnsnames.ora File

Modify your **tnsnames.ora** file as per the following example:

```
IFS=
    (DESCRIPTION =
        (ADDRESS_LIST=
            (ADDRESS= (PROTOCOL =TCP) (HOST = <localhost>) (PORT = 1521))
        )
        (CONNECT_DATA =
            (SERVICE_NAME =<mydb>)
        )
    )

EXTPROC_CONNECTION_DATA =
    (DESCRIPTION =
        (ADDRESS_LIST=
            (ADDRESS =(PROTOCOL = IPC)(KEY = EXTPROC))
        )
        (CONNECT_DATA =
            (SID = PLSExtProc)
            (PRESENTATION = RO)
        )
    )
```

Set Database Parameters

Installation of Oracle Internet File System requires reconfiguration of specific database parameters on the server machine.

1. Before changing any parameters, shut down the network listener, interMedia Text servers, and the database:

   a. To shut down the network listener:

   ```
   prompt> lsnrctl stop
   ```

   b. To shut down the InterMedia Text Servers:

   ```
   prompt> sqlplus ctxsys/<ctxsys password>

   SQL>exec ctx_adm.shutdown();

   SQL>exit;
   ```

   c. To shut down the database using SQL*Plus:

   ```
   prompt> sqlplus /nolog

   SQL> connect sys/<sys_password> as sysdba;
   Connected.

   SQL> shutdown [immediate] Database shutdown

   SQL> exit
   ```

2. Set the following Oracle Initialization parameters to the values specified. These parameters are contained in the **init<SID>.ora file** in the following directory:

   ```
   <ORACLE_BASE>/admin/<global_database_name>/pfile
   ```

   > **Note:** This configuration file may be located in a different directory depending on how the database was installed.

   a. Set the value for `open_cursors` to at least 255.

   b. Set the value for `shared_pool_size` at least 9M.

   c. Set the value for processes to at least 200.

d. Make sure there is at least one online non-system rollback segment.

To verify that there is at least one online non-system rollback segment, connect to Oracle as the SYS user with SQL*Plus and execute the following SQL statement:

```
SQL> SELECT segment_name, tablespace_name, status
     FROM dba_rollback_segs;
```

This will result in output that looks like the following table:

Table 2–4

SEGMENT_NAME	TABLESPACE_NAME	STATUS
SYSTEM	SYSTEM	ONLINE
PUBLIC_RS	SYSTEM	ONLINE
USERS_RS	USERS	ONLINE

In this example, USERS_RS is an online non-system rollback segment. To ensure that the rollback segment is always online after a database startup, include the following line in the **init<SID>.ora** file:

```
rollback_segments = (rbs_name1, .... , rbs_namex)
```

For more information on how to create an online non-system rollback segment, refer to the *Oracle8i Administrator Guide*.

3. Configure the Solaris environment to accommodate the database. To do this, edit the **/etc/system** file and modify the following variables:

- Set `SEMMSL` to 10 plus the largest PROCESSES parameter of any Oracle database on the system.
- Set `SEMMNS` to the sum of the PROCESSES parameter for each Oracle database, adding the largest one twice, then add an additional 10 for each database.

Note: After modifying the `/etc/system` file, you must restart your Solaris system. Without restarting, the required kernel reconfiguration will not take place.

For more information, refer to *Oracle8i Installation Guide*.

4. Restart the network listener and database:

   a. Start the network listener:

   ```
   prompt> lsnrctl start
   ```

   b. Start the database:

   ```
   prompt> sqlplus /nolog

   SQL> connect sys/<sys password> as sysdba
   Connected.

   SQL> startup
   ```

   c. Execute the following SQL statement:

   ```
   SQL> SELECT name, value FROM v$parameter WHERE name = open_cursors;
   ```

   You should see the `open_cursors` value you entered in the **init<SID>.ora** file in step 2. For more information, refer to *Oracle8i Administration Guide*.

Configure the Oracle8i Database for Authentication Encryption

Before you can install Oracle Internet File System, you must configure authentication encryption.

1. Navigate to the ***ORACLE_HOME*/rdbms/admin** directory:

   ```
   prompt> cd <ORACLE_HOME>/rdbms/admin
   ```

2. Connect to Oracle as the SYS user with SQL*Plus and run `catobtk.sql` from the:

   ```
   prompt> sqlplus sys/<sys password>

   SQL> @catobtk.sql
   ```

3. Execute the following SQL statement:

   ```
   SQL> GRANT EXECUTE ON dbms_obfuscation_toolkit TO PUBLIC;
   ```

Origin Database Connectivity

Oracle9*i* Application Server requires an active database connection. The installer uses this connection to add database objects to the origin database. The origin database is the original and primary storage for your data and is typically located on a database server tier.

Before installing Oracle9*i* Application Server, verify that the origin database and its TNS listener are running.

You have completed the pre-installation tasks for the Oracle9*i* Application Server. Proceed to "About Oracle Universal Installer" on page 2-34 to start the installer.

About Oracle Universal Installer

Oracle9*i* Application Server uses Oracle Universal Installer to configure environment variables and to install components. The installer guides you through each step of the installation process, so you can choose configuration options for a customized product.

The installer includes features that perform the following tasks:

- Explore and provide installation options for products
- Detect pre-set environment variables and configuration settings
- Set environment variables and configuration during installation
- De-install products

oraInventory Directory

The installer creates the **oraInventory** directory the first time it is run on your machine. The **oraInventory** directory keeps an inventory of products that the installer installs on your machine as well as other installation information. If you have previously installed Oracle products, then you may already have an **oraInventory** directory.

- When a UNIX group name is specified, it grants that group the permission to write to the **oraInventory** directory. If another group attempts to run the installer, then they must have permission to write to the **oraInventory** directory. If not, then the installation will fail.
- Be sure the user running the installer has permission to write to the **oraInventory** directory and all its files so that you are allowed to run the installer.
- The location of **oraInventory** is defined in **/var/opt/oracle/oraInst.loc.**
- The latest log file is **oraInventory_location/logs/installActions.log**. Log file names of previous installation sessions take the form **installActions***datetime***.log**.
- Do not delete or manually alter the **oraInventory** directory or its contents. Doing so can prevent the installer from locating products that you have installed on your system.

Starting Oracle Universal Installer

Follow these steps to launch Oracle Universal Installer, which installs Oracle9*i* Application Server:

1. Stop all Oracle processes and services (for example, the Oracle database).
2. Mount the installation CD-ROM.

   The Oracle Product Installation CD-ROM is in RockRidge format. If you are using the Solaris Volume Management software (installed by default in Sun SPARC Solaris), then the CD-ROM is mounted automatically to **cdrom/9i_appserver** when you insert it in the disk drive. To begin installation, insert the CD labelled Disk 1.

   If you are not using the Solaris Volume Management software, then you must mount the CD-ROM manually. To manually mount or unmount the CD-ROM, you must have root privileges. Be sure to unmount the CD-ROM before removing it from the drive.

   To manually mount the CD-ROM, perform the following tasks:

   a. Insert the Oracle9*i* Application Server CD-ROM into the CD-ROM drive.
   b. Log in as the root user.
   c. Create the CD-ROM mount point directory.

      ```
      prompt> mkdir <mount_point>
      ```

   d. Mount the CD-ROM drive on the mount point directory and exit the root account:

      ```
      prompt> mount options <device_name> <mount_point>
      prompt> exit
      ```

   The following example mounts the CD-ROM manually on **/cdrom**, without using the Solaris Volume Management software. Execute the following commands as root user.

   ```
   prompt> mkdir /cdrom
   prompt> mount -r -F hsfs <device_name> /cdrom
   prompt> exit
   ```

3. Run Oracle Universal Installer from the CD-ROM.

   Note: Be sure you are **not** logged in as the root user when you start the Oracle Universal Installer. If you are, then only the root user will have permissions to manage Oracle9*i* Application Server.

   a. Log in as the Oracle9*i* Application Server user.

   b. Start the installer by entering:

   ```
   prompt> <mount_point>/9i_appserver_disk1/runInstaller
   ```

   Note: Do not use `<mount_point>` as your working directory when you start the installer. If you do, then you will not be able to eject Disk 1 during the installation process to insert Disk 2.

This launches Oracle Universal Installer through which you can install Oracle9*i* Application Server.

- For instructions for Oracle HTTP Server Only installation, refer to Chapter 3.
- For instructions for Standard Edition installation, refer to Chapter 4.
- For instructions for Enterprise Edition installation, refer to Chapter 5.
- For instructions for Non-Interactive Installation installation, refer to Chapter 6.

3

Oracle HTTP Server Only

This chapter guides you through the installation steps for the Oracle HTTP Server Only Edition of Oracle9*i* Application Server. It lists basic steps for a quick installation and provides detailed information for reference. This is followed by basic post-installation tasks.

Contents

Installation

The following instructions guide you through the Oracle HTTP Server Only installation option of Oracle9*i* Application Server.

1. Review the Oracle Universal Installer Welcome screen and click **Next**.

Figure 3–1 Welcome Screen

The Welcome screen provides information about the Oracle Universal Installer.

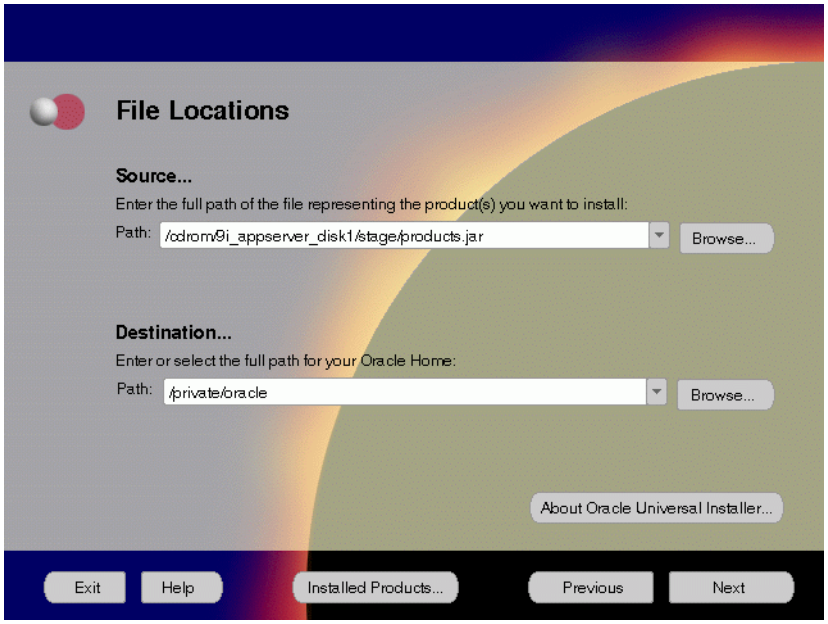
The following function buttons appear on the installation screens.

- **Deinstall Products**: To de-install individual components or the entire product. This button appears only on the Welcome screen.
- **About Oracle Universal Installer**: To view the version number of the installer in use.
- **Exit**: To quit the installation process and exit the installer.
- **Help**: To access detailed information about the functionality of each screen.
- **Installed Products**: To view currently installed products or to de-install the entire product or components.

- **Previous**: To return to the previous screen.
- **Next**: To move to the next screen.

2. Verify the source and destination paths and click **Next**.

Figure 3–2 File Locations Screen



The File Locations screen allows you to enter the full path for the source and destination locations of Oracle9*i* Application Server.

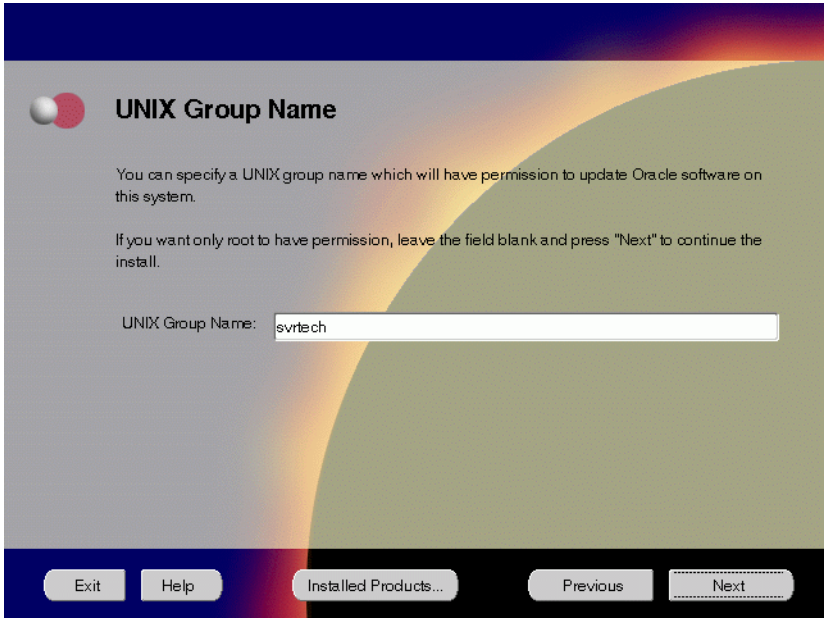
- **Source**: This is the full path to the **products.jar** file from which the product will be installed. The installer detects and uses the default values of the **products.jar** file of the installation program. Do **not** change the path.
- **Destination**: This is the full path to the *ORACLE_HOME* where the product will be installed. The installer defaults to the *ORACLE_HOME* set in the pre-installation chapter.

  Note: There should be no spaces in the *ORACLE_HOME* path.

  For more information regarding *ORACLE_HOME*, refer to "ORACLE_HOME" on page 2-8.
- **Browse**: To navigate through the file system to find source and destination locations.

3. Enter a UNIX group name and click **Next**. This screen appears only the first time you run Oracle Universal Installer on your machine.

Figure 3–3 UNIX Group Name Screen



The UNIX Group Name screen grants permission for the **oraInventory** directory to the group specified. For more information, refer to "UNIX Group Name for the Oracle Universal Installer Inventory" on page 2-11.

UNIX Group Name:

- Enter a UNIX group name for those who have permission to configure all the functionality of Oracle9*i* Application Server. Verify your group name by entering this command from the UNIX prompt the installer was launched from:

  ```
  prompt> id
  ```

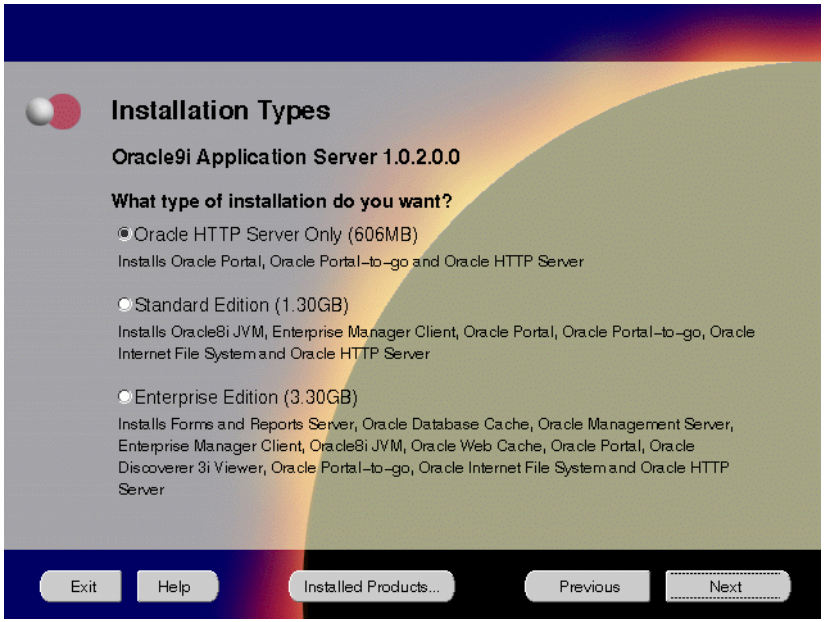
- Run the **orainstRoot.sh** script from your *ORACLE_HOME* to grant permissions to the root user only. You must have root privileges to run this script. The script creates pointers to the components as the installer installs them in the system so that they can be identified later in the installation

procedure. It produces the **/var/opt/oracle/oraInst.loc** file, which provides a pointer to the **oraInventory** directory.

After you have run the script, click **Retry** to continue.

4. Select Oracle HTTP Server only and click **Next**.

Figure 3–4 Installation Types Screen



The Installation Types screen allows you to select the Oracle9*i* Application Server installation option that you are licensed to use. For a complete list of components installed through each installation option, refer to Table 2–1, "Oracle9i Application Server Components" on page 2-2.

The following are the installation options:

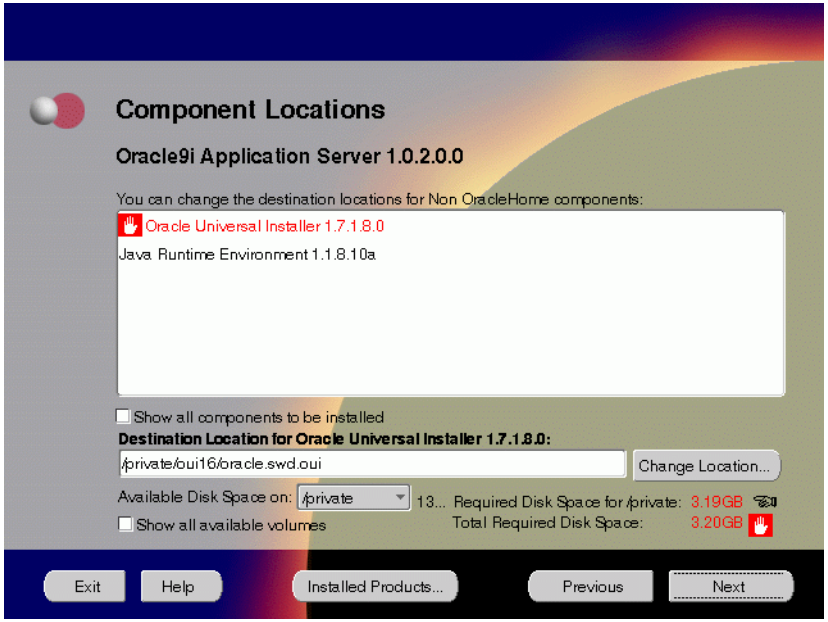
- **Oracle HTTP Server Only**: Installs Oracle Portal, Oracle Portal-to-Go, and Oracle HTTP Server.
- **Standard Edition**: Installs Oracle 8*i* JVM, Oracle Enterprise Manager Client, Oracle Portal, Oracle Portal-to-Go, Oracle Internet File System, and Oracle HTTP Server.
- **Enterprise Edition**: Installs Oracle Forms Services, Oracle Reports Services, Oracle Database Cache, Oracle Management Server, Oracle Enterprise Manager Client, Oracle 8*i* JVM, Oracle Web Cache, Oracle Portal, Oracle Discoverer 3*i* Viewer, Oracle Portal-to-Go, Oracle Internet File System, and Oracle HTTP Server.

5. If needed, verify and change the locations of the components displayed on the screen, and click **Next**.

   This screen appears only under the following condition(s):

   - Oracle Universal Installer is being run on your machine for the first time.
   - Oracle Universal Installer has detected insufficient disk space in the *ORACLE_HOME* directory.

Figure 3–5 Component Locations Screen



The Component Locations screen allows you to select alternative locations for some components.

- **Show all components to be installed**: To view the complete list of components chosen for installation. Select check box to display component list.

Click individual components to view and change destination location path. The installer enables you to change the destination location of the components displayed on the screen.

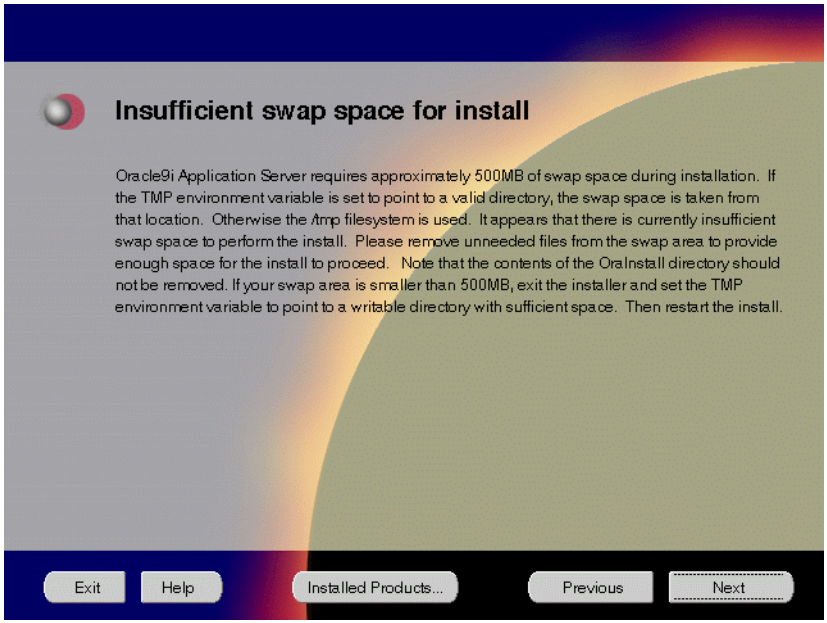
- **Destination Location**: To view the full path of the selected component.
- **Change Location**: To browse for alternate locations for the selected component.
- **Available Disk Space**: To view available disk space in the current directory. The installer also provides information about the total disk space required for the installation of additional components.
- **Required Disk Space for *directory_name***: To view the total disk space required for installation in the selected directory.
- **Total Required Disk Space:** To view the total disk space required for the product to be installed.
- **Show all available volumes**: To browse through file system for available disk space. Select check box to display the file system.

Note: Insufficient disk space is indicated in red with a hand icon next to it.

---

6. Remove unneeded files from the swap directory to provide sufficient space for installation and click **Next**. If your swap space is smaller than 500 MB, click **Exit** and correct the problem.

Figure 3–6 Insufficient Swap Space for Install Screen



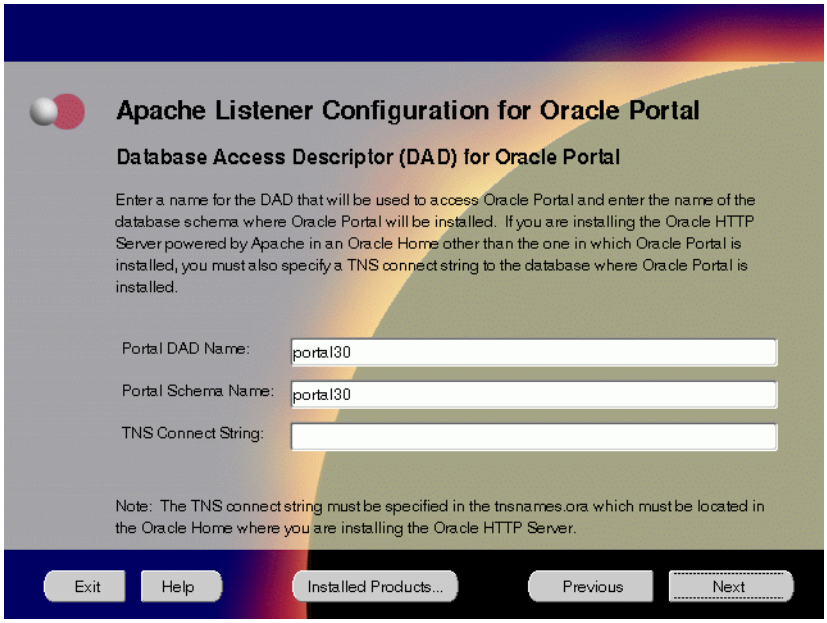
Insufficient Swap Space for Install screen indicated inadequate space in the swap directory. You have two options:

- If you have more than 500 MB swap space, then remove unneeded files from your swap space to create room for installation and click **Next** to proceed.
- If you have less than 500 MB swap space, then **Exit** the installer and set **TMP** environment variable to point to a writable directory with sufficient space.

For detailed information on **TMP** directory, refer "TMP" on page 2-10.

7. Enter or accept the default Portal DAD and Schema names. Also, enter the TNS Connect String, if necessary. Click **Next**.

Figure 3–7 Apache Listener Configuration for Oracle Portal (DAD and Schema name) Screen



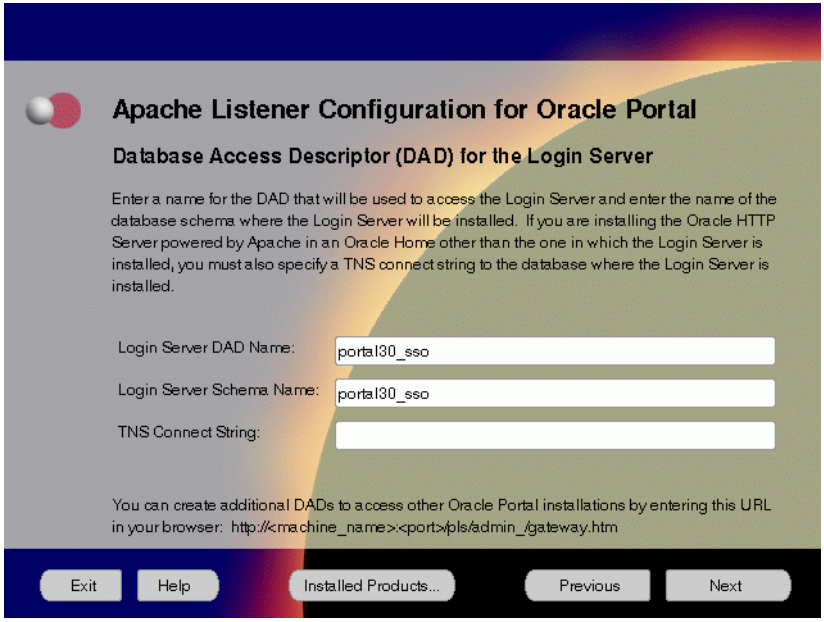
The Apache Listener Configuration for Oracle Portal DAD screen allows you to enter the name of the Database Access Descriptor (DAD) that will be used to access Oracle Portal, and the name of the database schema where Oracle Portal will be installed. It also enables you to enter the TNS connect string if Oracle Portal and Oracle HTTP Server are installed in different Oracle homes. The information you enter here is used to create the PL/SQL Gateway settings which you can access upon installation from the following location: **http://<machine_name>:<port>/pls/admin_/gateway.htm**

- **Portal DAD Name**: Enter the name of the DAD for each instance you installed in the database. A Database Access Descriptor (DAD) is a set of values that specify how the Apache Listener connects to your Oracle database server to fulfill an HTTP request. Based on this DAD name, the installation automatically sets other DAD-related and default settings such as the name and location of the document table. The default DAD name is **portal30**.

- **Portal Schema Name**: Enter the name of the database schema that will contain Oracle Portal. A schema is a collection of components and database objects under the control of a given database user. Each Oracle Portal application maps to an Oracle database schema. The default schema name is **portal30**.
- **TNS Connect String**: Enter the TNS connect string or TNS alias that you have defined for the remote Oracle database. It enables you to install the Portal database objects into a remote database. Since you are installing in a new Oracle home, you will need to enter a TNS connect string before it is actually created. The Net8 Assistant will appear later in the installation process to guide you in the configuration of a new TNS alias. Be sure to note the name of the TNS connect string you enter here, so that you will use the same name when the Net8 Assistant appears later.

8. Enter or accept the default Login Server DAD and Schema names. Also, enter the TNS Connect String, if necessary. Click **Next**.

Figure 3–8 Apache Listener Configuration for Oracle Portal (Login Server) Screen



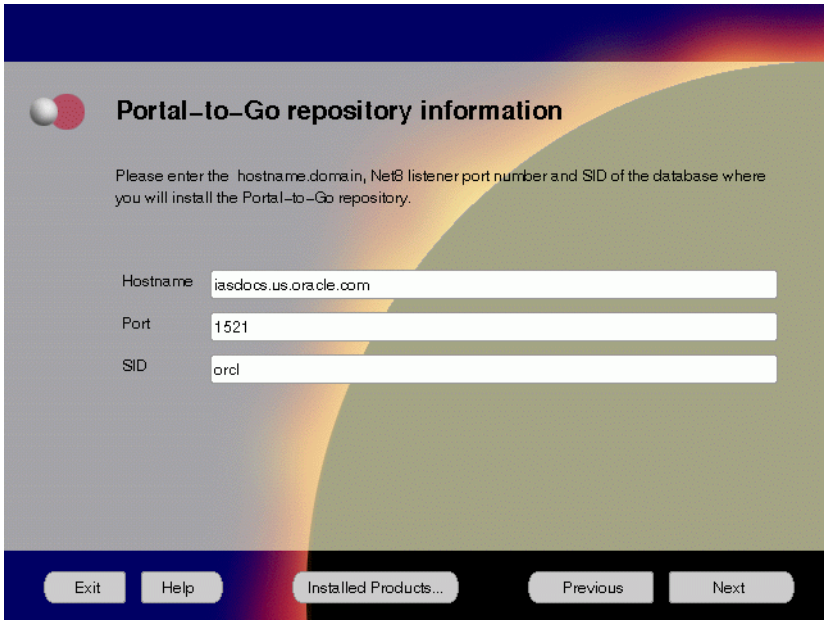
The Apache Listener Configuration for Oracle Portal screen allows you to enter the Login Server DAD and Schema Name, with a `_sso` extension for easy recognition. The Login Server provides an enterprise-wide Single Sign-On (SSO) mechanism that enables an Oracle Portal user to log in securely to Oracle Portal and any partner and external applications using a single user name and password. It also enables you to enter the TNS Connect String if Oracle Portal and Oracle HTTP Server are installed in different Oracle homes.

- **Login Server DAD Name**: Enter the name of the DAD for each instance you installed in the database.The default DAD name is **portal30_sso**.
- **Login Server Schema Name**: Enter the name of the database schema that will contain Oracle Portal.The default schema name is **portal30_sso**.
- **TNS Connect String**: Enter the TNS connect string or TNS alias that you have defined for the remote Oracle database.

  For more information on these fields, refer to the previous screen.

9. Enter the hostname, port number, and SID of the origin database, and click **Next**.

Figure 3–9 Portal-to-Go Repository Information Screen

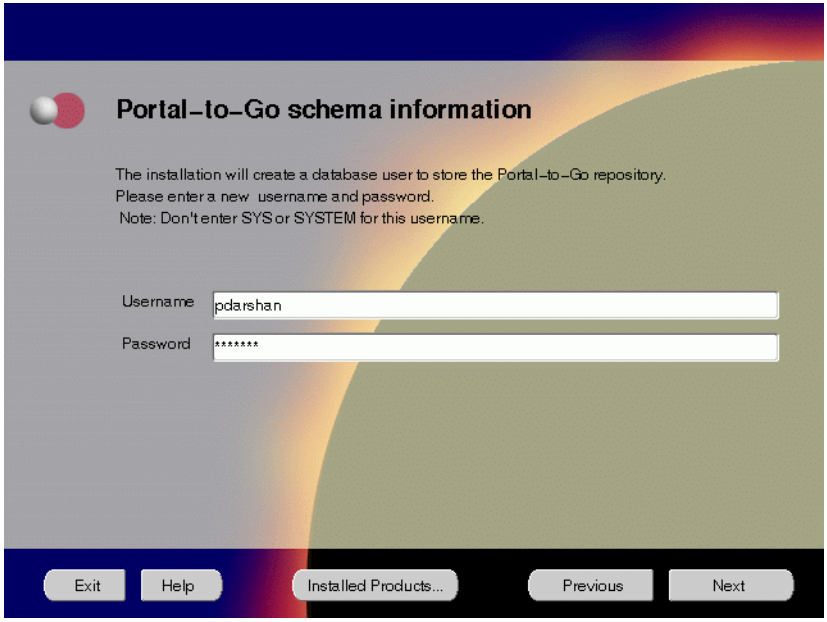


The Portal-to-Go Repository Information screen allows you to enter the hostname, Net8 Listener port number, and SID of the database where you will install the Portal-to-Go repository.

- **Hostname**: Enter the hostname.domain of the origin database.
- **Port**: Enter the Net8 Listener port number.
- **SID**: Enter the System Identifier (SID) of the origin database.

10. Enter the new username and password for the database user to store the Portal-to-Go repository.

Figure 3–10 Portal-to-Go Schema Information Screen



Portal-to-Go Schema Information screen allows you to create a database user to store the Portal-to-Go repository.

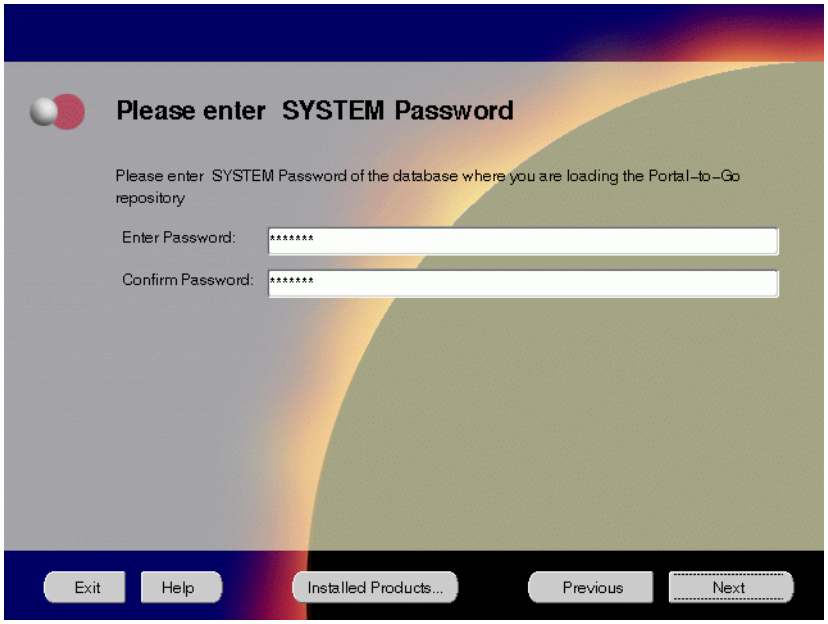
- **Username**: Enter a new user name for the database user to store the Portal-to-Go repository.
- **Password**: Enter a password for the database user.

Note: Do not enter SYS or SYSTEM as the username.

---

11. Enter and confirm the SYSTEM password of the database, and click **Next**.

Figure 3–11 System Password Screen

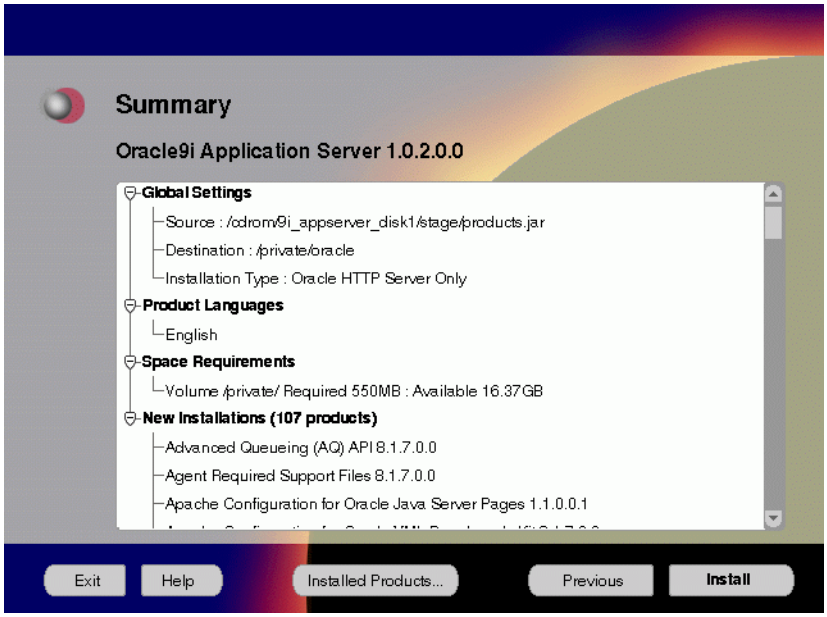


System Password screen allows you to enter and confirm the SYSTEM password of the database where you are loading the Portal-to-Go repository.

- **Enter Password**: Enter the SYSTEM password of the origin database.
- **Confirm Password**: Re-enter the SYSTEM password as entered above for verification.

12. Review the summary and click **Install** to begin the installation process.

Figure 3–12 Summary Screen



The Summary screen allows you to review all the settings before the actual installation process. These settings include source, destination, installation type, product language, space requirements, and a list of components.

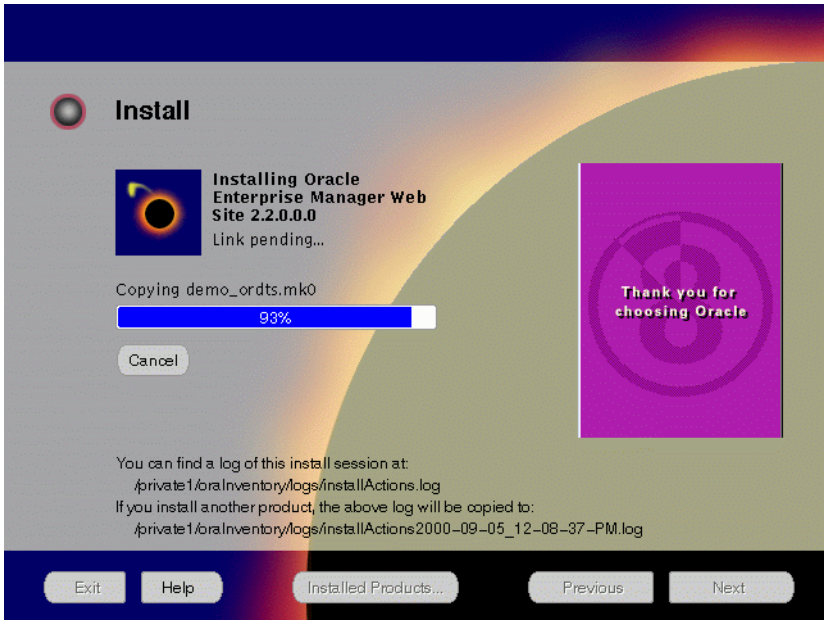
- To make changes to any of these settings, click **Previous** to return to the respective screens.

Note: Insufficient disk space is indicated in red under **Space Requirements**.

When you click **Install**, the installation process begins.

13. Monitor the installation process and after the installer finishes, click **Next**.

Figure 3–13 Install Screen



The Install screen appears while the product is installing. Installation operations include executing actions such as file copy and linking, and executing decision points and calculations. It also displays the full path of the installation log.

- **Cancel**: To discontinue the installation process. You can then choose to stop the installation of an individual component or the entire product.

For more information about installation log, refer to "oraInventory Directory" on page 2-34.

Changing Disks

During installation, the installer prompts you to switch between Disks 1, 2 and 3. Use these steps to change disks and continue the installation process.

Figure 3–14 Changing Disks Dialog

a. Eject and unmount the current disk.

If you are using Solaris Volume Management software and Disk1 was automatically mounted, then this can be done with the following command:

```
prompt> eject cdrom
```

If you are not using Solaris Volume Management software, then you must manually eject and unmount the disk. For further instructions, refer to your operating system documentation

b. Insert the nest disk into the CD-ROM drive and mount it.

If you are using the Solaris Volume Management software, then the next disk will be automatically mounted.

If you are not using Solaris Volume Management software, then you must manually mount the disk. For further instructions, refer to "Starting Oracle Universal Installer" on page 2-35.

c. Click the **Browse** button on the changing disks dialog, and navigate to **/cdrom/9i_appserver_disk*x***. This directory may be different depending on where the original disk was mounted.

Figure 3–15 Updated Changing Disks Dialog

d. Click OK to continue the installation process.

Running root.sh

After installation is completed, the installer prompts you to run **root.sh** script. Use these steps to run the **root.sh** script.

a. Log on as the root user.

b. Go to the *ORACLE_HOME* directory.

```
prompt> cd ORACLE_HOME
```

c. Run the **root.sh** script.

```
prompt> ./root.sh
```

d. Exit root user.

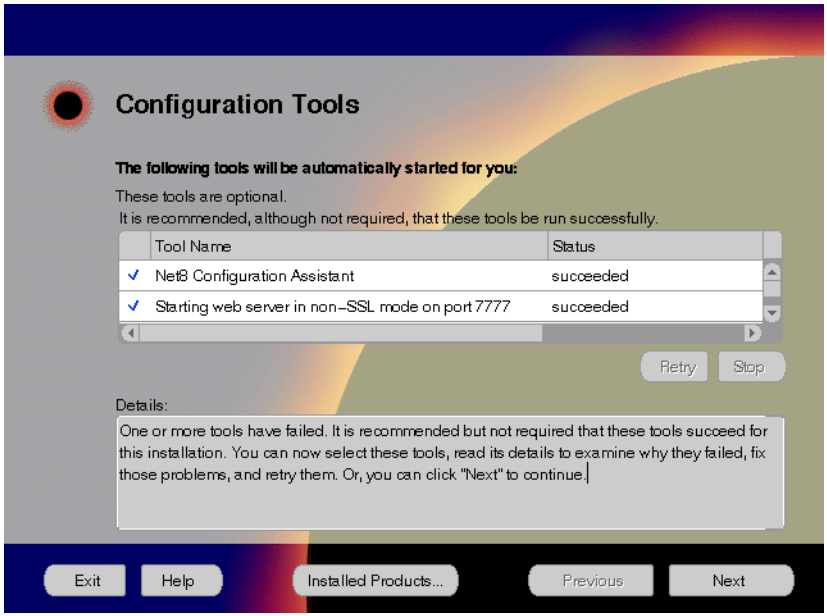
Once you see "Finished running generic part of the root.sh script" and "Now product-specific root actions will be performed," exit root user and return to the Install screen.

The **root.sh** script detects:

- Settings of *ORACLE_OWNER*, *ORACLE_HOME* and *ORACLE_SID* environment variables.
- Full path of local bin directory. You can accept the default or change to a different local bin directory.

14. Verify the list of configuration tools and click **Next**.

Figure 3–16 Configuration Tools Screen



The Configuration Tools screen lists the configuration tools for all installed components.

Scroll down the list to review the configuration status of each tool. The status changes as each component is configured.

The installer performs the following functions in this screen:

- Executes a configuration tool for each component selected previously in the Available Product Component screen.
- Displays all the configuration settings in the display window below as it executes a configuration tool for each component.
- Enables you to view configuration settings after all configuration tools are executed. Click on each component to review all the changes made.
- Allows you to view data for failed executions in the display window. You can either fix the error and click **Retry** to execute the configuration tool again, or ignore the error and click **Next** to proceed to the next screen.

- Automatically starts the components.
- **Retry**: To re-execute the configuration script if the configuration of a component fails.
- **Stop**: To quit the configuration process.

Configuration Tools

This installation option launches the following configuration tools:

Net8 Configuration Assistant - It enables you to connect and configure the Oracle client/server network environment.

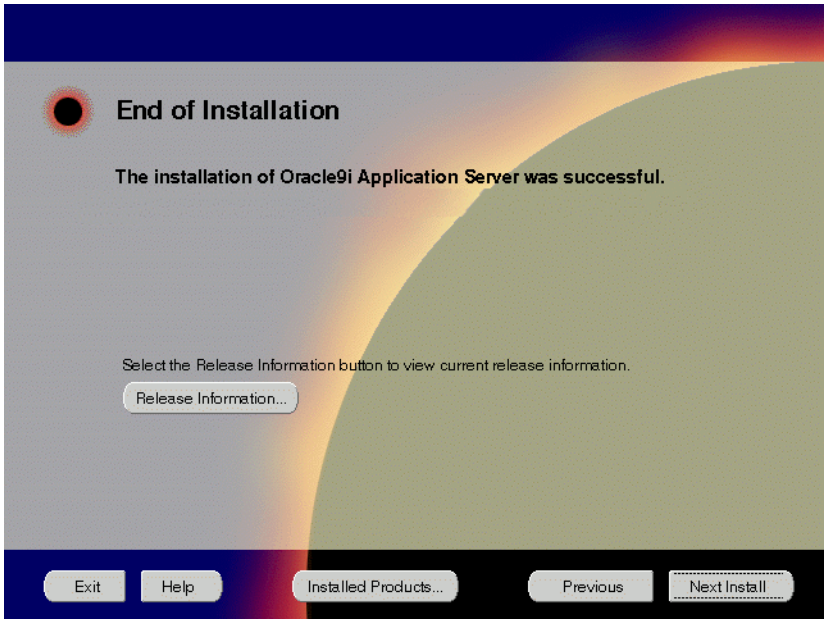
For more information on Net8 Configuration Assistant, refer to the *Net8 Administration's Guide* in the Oracle database documentation set.

Starting Web Server in Non-SSL mode on port 7777 - This starts Oracle HTTP Server.

Oracle Portal Configuration Assistant - It loads necessary database objects for Oracle Portal to run. For instructions on running the Oracle Portal Configuration Assistant, refer to "Oracle Portal" on page A-20.

15. Ensure that the installation was successful. Click **Exit** to quit the installer.

Figure 3–17 End of Installation Screen



The End of Installation screen appears at the end of the installation process. It notifies you whether the installation was successful or unsuccessful.

- **Release Information**: To view the latest release information.

You have successfully installed the Oracle HTTP Server Only installation option of the Oracle9*i* Application Server. Proceed to Post-installation on page 3-24 to complete the installation process.

Post-installation

The following instructions guide you through the basic post-installation tasks for Oracle9*i* Application Server. Before performing these tasks, be sure to install Oracle Portal-to-Go client from the Oracle9*i* Application Server Administrative and Development Client CD included in the Oracle9*i* Application Server CD pack. For installation instructions, refer to Appendix B, "Installing Oracle Portal-to-Go Client".

The post-installation contains the following sections:

- Environment Variables
- Starting and Stopping Oracle HTTP Server
- Component Port Numbers
- Component-specific Tasks
- Additional Documentation

Environment Variables

Table 3–1 lists the environment variables that must be set for Oracle HTTP Server Only installation option:

Table 3–1 Environment Variables

Environment Variable	Must Be or Include
ORACLE_HOME	The *ORACLE_HOME* used for installing Oracle9*i* Application Server.
PATH	<ORACLE_HOME>/bin <ORACLE_HOME>/Apache/Apache/bin
LD_LIBRARY_PATH	<ORACLE_HOME>/lib <ORACLE_HOME>/Apache/Apache/libexec

Starting and Stopping Oracle HTTP Server

Table 3–2 lists the commands needed to start and stop Oracle HTTP Server.

Table 3–2 Starting and Stopping Components

Component	Function	Command
Oracle HTTP Server	Start	`prompt> ./apachectl start`
	Stop	`prompt> ./apachectl stop`
Oracle HTTP Server (SSL-enabled)	Start	`prompt> ./apachectl startssl`
	Stop	`prompt> ./apachectl stop`

Note: To start or stop SSL-enabled Oracle HTTP Server, you must log in as the root user.

Component Port Numbers

Table 3–3 lists the default port numbers on which requests are received for each component.

Table 3–3 Port Numbers

Components	Port Number
Oracle HTTP Server Oracle HTTP Server (SSL-enabled)	7777 80, 443
Oracle Portal	Oracle Portal uses the same port number as Oracle HTTP Server
Oracle Portal-to-Go	Oracle Portal-to-Go uses the same port number as Oracle HTTP Server

Component-specific Tasks

Oracle Portal-to-Go

The following section describes post-installation configuration instructions for Oracle Portal-to-Go:

- Oracle Portal-to-Go Web Integration Server Configuration
- Oracle Portal-to-Go Configuration Parameters
- Oracle Portal-to-Go Configuration Verification

Oracle Portal-to-Go Web Integration Server Configuration

Oracle Portal-to-Go Web Integration Server hosts services that applications can use to exchange data and information sources via the Web. The Web Integration Server is installed with the Oracle Portal-to-Go components.

Note: The Web Integration Developer, the development environment for creating and testing Web Integration services written in Web Interface Definition Language (WIDL), is installed as part of the Oracle Portal-to-Go client. For more information, refer to Appendix B, "Installing Oracle Portal-to-Go Client" on page B-1.

The following steps guide you through the configuration process of the Web Integration Server:

1. Run the Web Integration Server.

   From the ***ORACLE_HOME*/panama/WebIntergration/Server/bin** directory, type:

   ```
   prompt> server.sh &
   ```

2. From a browser, go to the Web Integration Server URL:

   http://*host_name.domain*:5555

3. Log in to the Web Integration Server with the user name **Administrator**, and password **manage**, which is the default password.
4. Select **Settings**. The server settings appear. Click **Edit**.
5. Enter the Proxy (HTTP) and Secure Proxy (HTTPS) settings for your environment.

6. Click **Submit**.
7. Click **Logout**.

Oracle Portal-to-Go Configuration Parameters

1. Configure the **httpd.conf** file.

   The **httpd.conf** file is in the ***ORACLE_HOME*/Apache/Apache/conf** directory.

   Create a Personalization Portal (papz) alias. This is needed so that the application server can find the **http://*hostname*/papz/login.jsp** URL. Add a line at the end of the Alias section:

   ```
   # PTG Start
   Alias /papz/ "<ORACLE_HOME>/panama/server/papz/"
   # PTG End
   ```

2. Configure the **jserv.conf** file.

   The **jserv.conf** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   In the ApJServMount section, add the Oracle Portal-to-Go specific mount point:

   ```
   # PTG Start
   ApJServMount /ptg /root
   # PTG End
   ```

3. Configure the **jserv.properties** file.

   The **jserv.properties** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   Next to the other "`wrapper.classpath`" entries, add all the required Oracle Portal-to-Go files to the classpath.

   ```
   # PTG Start
   wrapper.classpath=<ORACLE_HOME>/panama/server/classes
   wrapper.classpath=<ORACLE_HOME>/panama/lib/panama_core.zip
   wrapper.classpath=<ORACLE_HOME>/panama/lib/panama_papz.zip
   wrapper.classpath=<ORACLE_HOME>/panama/lib/client.zip
   wrapper.classpath=<ORACLE_HOME>/panama/lib/server.zip
   # PTG End
   ```

4. Configure the **zone.properties** file.

   The **zone.properties** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   a. In the List of Repositories section, add the Oracle Portal-to-Go specific repository to the existing repository line with a comma (,) separator:

   ```
   # PTG Start
   repositories=<ORACLE_HOME>/Apache/Jserv/servlets,<ORACLE_
   HOME>/panama/server/papz
   # PTG End
   ```

   b. In the Startup Servlets section, add the Oracle Portal-to-Go specific servlets:

   ```
   # PTG Start
   servlets.startup=oracle.panama.ParmImpl
   # PTG End
   ```

   c. In the Servlet Aliases section, add the Oracle Portal-to-Go specific servlets:

   ```
   # PTG Start
   servlet.rm.code=oracle.panama.ParmImpl
   # PTG End
   ```

Oracle Portal-to-Go Configuration Verification

After installation, you can verify that individual Oracle Portal-to-Go components are properly configured:

1. Test the sample Java Servlet at the following URL:

   http://host_name.domain:7777/papz/test.jsp

   "Hello World" should appear on the screen.

2. Test whether the Personalization Portal is working properly by accessing the following URL:

   http://host_name.domain:7777/papz/login.jsp

   The login page should appear. The Personalization Portal prompts you to enter a user name and a password. You can log in using "Administrator" as the user name and "manager" as the password.

3. Run the Oracle Portal-to-Go Request Manager by accessing the following URL:

   http://host_name.domain:7777/ptg/rm

Additional Documentation

For more information regarding the post-installation tasks and configuration, refer to component-specific documentation in "Documentation Library Titles" on page D-2.

4

Standard Edition

This chapter guides you through the installation steps for the Standard Edition of Oracle9*i* Application Server. It lists basic steps for a quick installation and provides detailed information for reference. This is followed by basic post-installation tasks.

Contents

Installation

The following instructions guide you through the Standard Edition installation option of Oracle9*i* Application Server.

1. Review the Oracle Universal Installer Welcome screen and click **Next**.

Figure 4–1 Welcome Screen

The Welcome screen provides information about the Oracle Universal Installer.

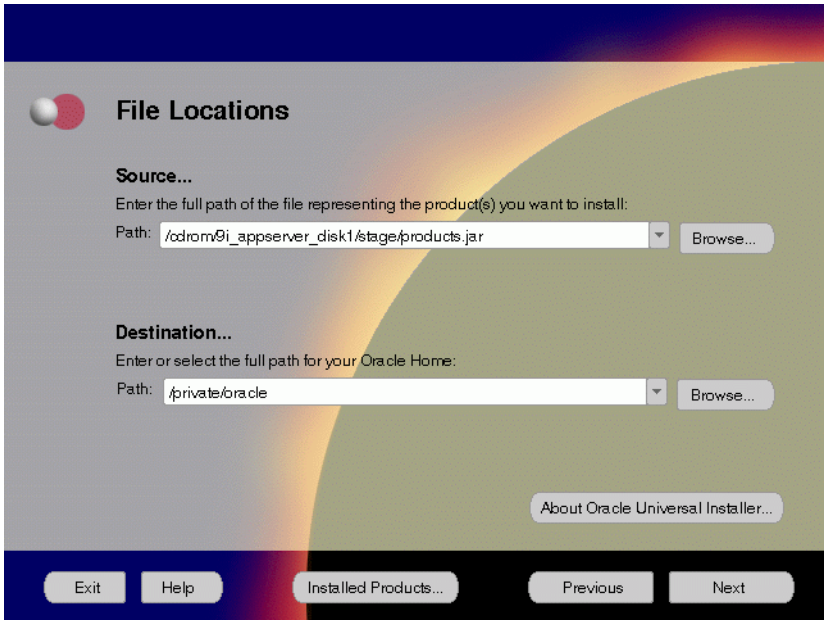
The following function buttons appear on the installation screens.

- **Deinstall Products**: To de-install individual components or the entire product. This button appears only on the Welcome screen.
- **About Oracle Universal Installer**: To view the version number of the installer in use.
- **Exit**: To quit the installation process and exit the installer.
- **Help**: To access detailed information about the functionality of each screen.
- **Installed Products**: To view currently installed products or to de-install the entire product or components.

- **Previous**: To return to the previous screen.
- **Next**: To move to the next screen.

2. Verify the source and destination paths and click **Next**.

Figure 4–2 File Locations Screen



The File Locations screen allows you to enter the full path for the source and destination locations of Oracle9*i* Application Server.

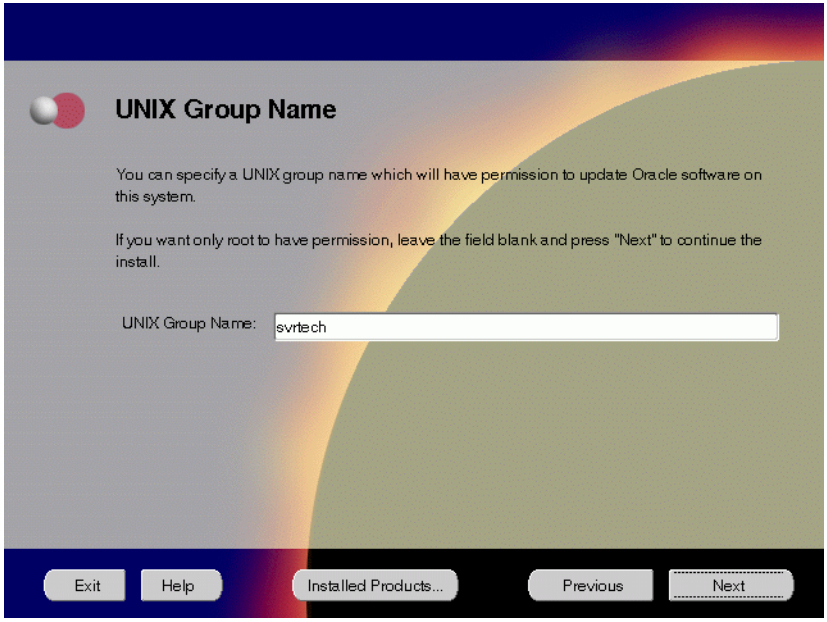
- **Source**: This is the full path to the **products.jar** file from which the product will be installed. The installer detects and uses the default values of the **products.jar** file of the installation program. Do not change the path.
- **Destination**: This is the full path to the *ORACLE_HOME* where the product will be installed. The installer defaults to the *ORACLE_HOME* set in the pre-installation chapter.

  Note: There should be no spaces in the *ORACLE_HOME* path.

  For more information regarding *ORACLE_HOME*, refer to "ORACLE_HOME" on page 2-8.
- **Browse**: To navigate through the file system to find source and destination locations.

3. Enter a UNIX group name and click **Next**. This screen appears only the first time you run Oracle Universal Installer on your machine.

Figure 4–3 UNIX Group Name Screen



The UNIX Group Name screen grants permission for the **oraInventory** directory to the group specified. For more information, refer to "UNIX Group Name for the Oracle Universal Installer Inventory" on page 2-9.

UNIX Group Name:

- Enter a UNIX group name for those who have permission to configure all the functionality of Oracle9*i* Application Server. Verify your group name by entering this command from the UNIX prompt the installer was launched from:

  ```
  prompt> id
  ```

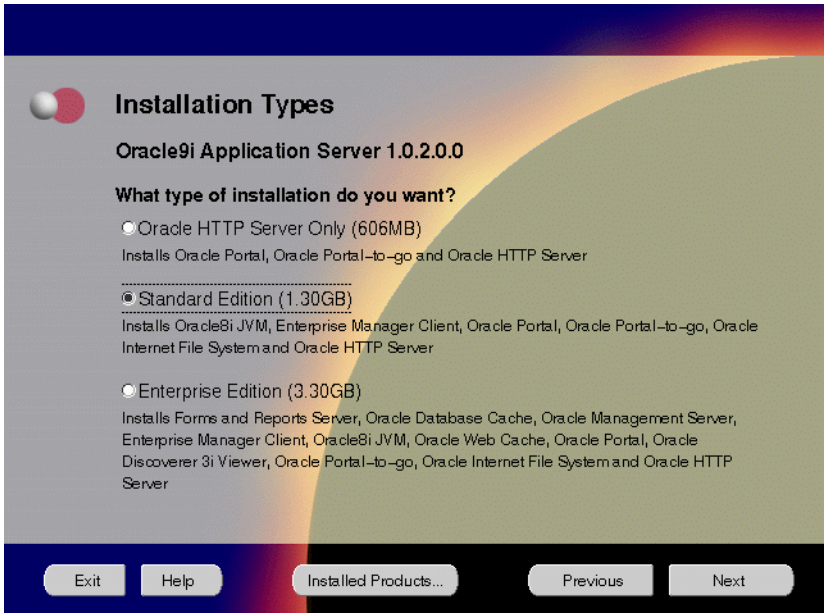
- Run the **orainstRoot.sh** script from your *ORACLE_HOME* to grant permissions to the root user only. You must have root privileges to run this script. The script creates pointers to the components as the installer installs them in the system so that they can be identified later in the installation

procedure. It produces the **/var/opt/oracle/oraInst.loc** file, which provides a pointer to the **oraInventory** directory.

After you have run the script, click **Retry** to continue.

4. Select Standard Edition and click **Next**.

Figure 4–4 Installation Types Screen



The Installation Types screen allows you to select the Oracle9*i* Application Server installation option that you are licensed to use. For a complete list of components installed through each installation option, refer to Table 2–1, "Oracle9i Application Server Components" on page 2-2.

The following are the installation options:

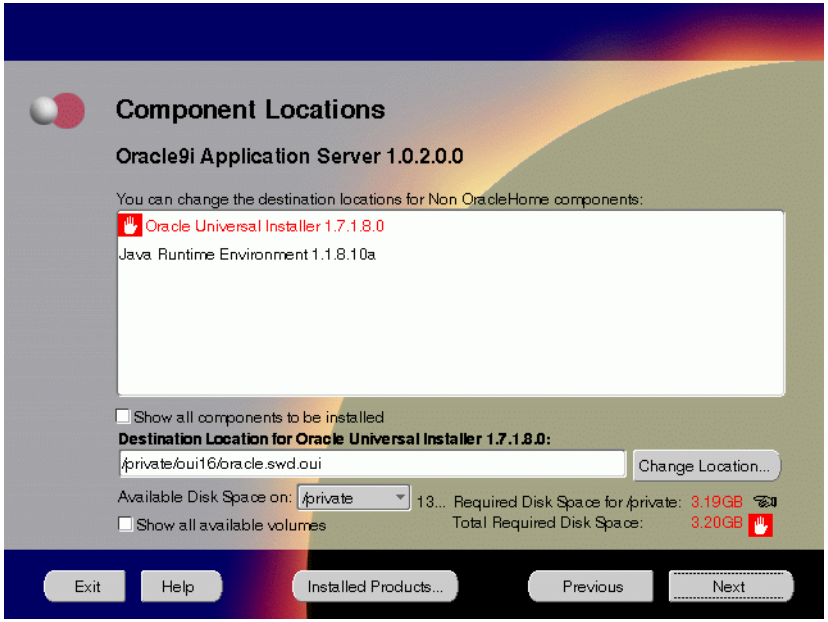
- **Oracle HTTP Server Only**: Installs Oracle Portal, Oracle Portal-to-Go, and Oracle HTTP Server.
- **Standard Edition**: Installs Oracle 8*i* JVM, Oracle Enterprise Manager Client, Oracle Portal, Oracle Portal-to-Go, Oracle Internet File System, and Oracle HTTP Server.
- **Enterprise Edition**: Installs Oracle Forms Services, Oracle Reports Services, Oracle Database Cache, Oracle Management Server, Oracle Enterprise Manager Client, Oracle 8*i* JVM, Oracle Web Cache, Oracle Portal, Oracle Discoverer 3*i* Viewer, Oracle Portal-to-Go, Oracle Internet File System, and Oracle HTTP Server.

5. If needed, verify and change the locations of the components displayed on the screen, and click **Next**.

   This screen appears only under the following condition(s):

   - Oracle Universal Installer is being run on your machine for the first time.
   - Oracle Universal Installer has detected insufficient disk space in the *ORACLE_HOME* directory.

Figure 4–5 Component Locations Screen



The Component Locations screen allows you to select alternative locations for some components.

- **Show all components to be installed**: To view the complete list of components chosen for installation. Select check box to display component list.

Click individual components to view and change destination location path. The installer enables you to change the destination location of the components displayed on the screen.

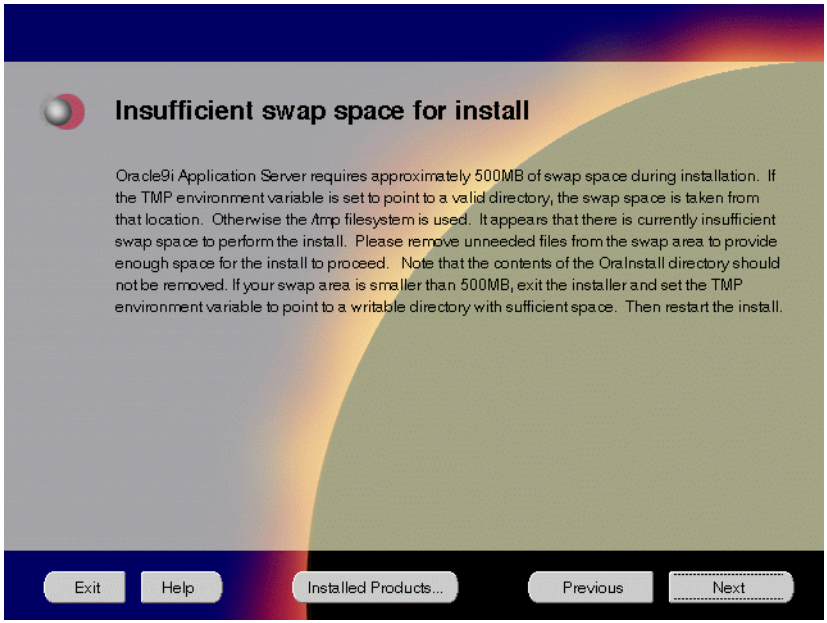
- **Destination Location**: To view the full path of the selected component.
- **Change Location**: To browse for alternate locations for the selected component.
- **Available Disk Space**: To view available disk space in the current directory. The installer also provides information about the total disk space required for the installation of additional components.
- **Required Disk Space for *directory_name***: To view the total disk space required for installation in the selected directory.
- **Total Required Disk Space:** To view the total disk space required for the product to be installed.
- **Show all available volumes**: To browse through file system for available disk space. Select check box to display the file system.

Note: Insufficient disk space is indicated in red with a hand icon next to it.

---

6. Remove unneeded files from the swap directory to provide sufficient space for installation and click **Next**. If your swap space is smaller than 500 MB, click **Exit** and correct the problem.

Figure 4–6 Insufficient Swap Space for Install Screen



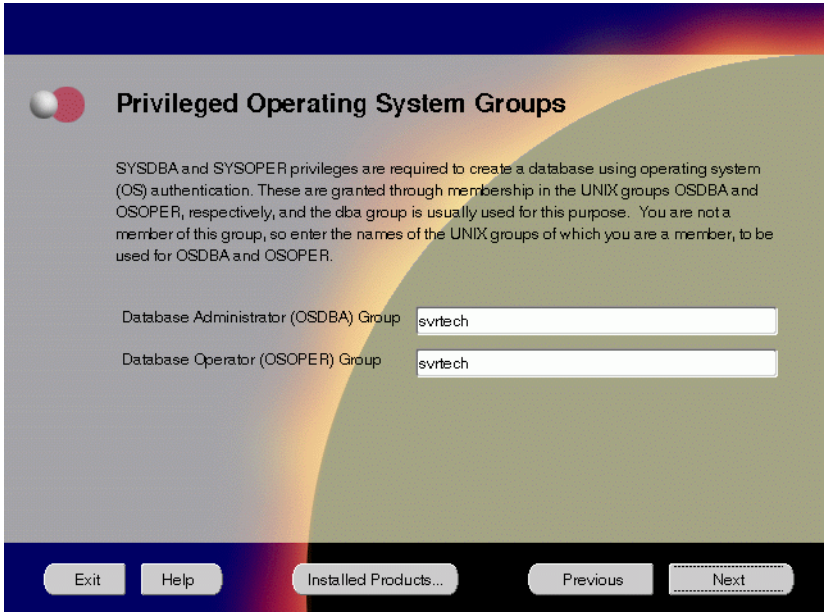
Insufficient Swap Space for Install screen indicated inadequate space in the swap directory. You have two options:

- If you have more than 500 MB swap space, then remove unneeded files from your swap space to create room for installation and click **Next** to proceed.
- If you have less than 500 MB swap space, then **Exit** the installer and set **TMP** environment variable to point to a writable directory with sufficient space.

For detailed information on **TMP** directory, refer "TMP" on page 2-10.

7. Enter the database administrator and operator group name and click **Next**. This screen appears only if the `oracle` account is not a member of the `dba` group.

Figure 4–7 Privileged Operating System Groups Screen

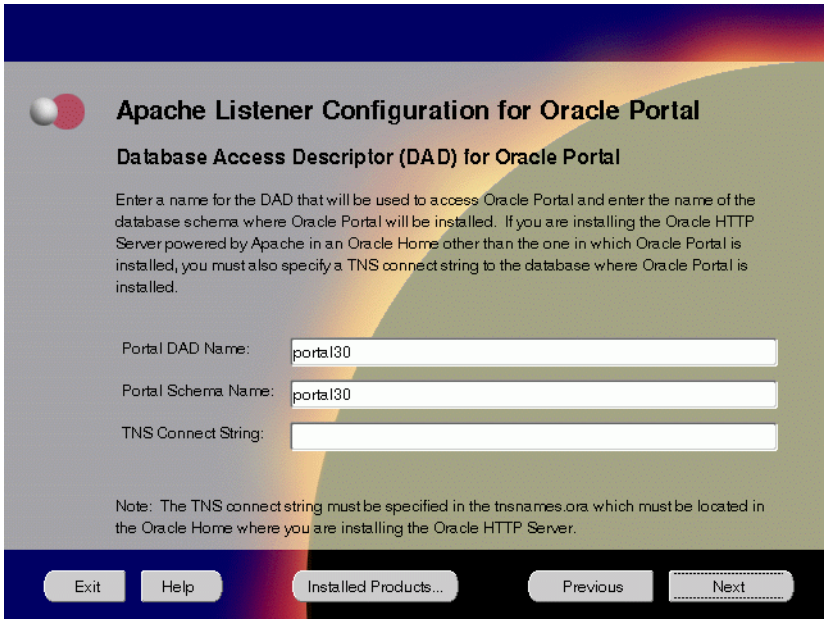


The Privileged Operating System Groups screen allows you to enter the database administrator and operator group name. For more information regarding privileged group names, refer to "UNIX Group Names for Privileged Groups" on page 2-12. The installer detects and defaults to the user's OS group.

- **Database Administrator (OSDBA) Group**: The UNIX group that has database administrator privileges.
- **Database Operator (OSOPER) Group**: The UNIX group that has database operator privileges.

8. Enter or accept the default Portal DAD and Schema names. Also, enter the TNS Connect String, if necessary. Click **Next**.

Figure 4–8 Apache Listener Configuration for Oracle Portal (DAD and Schema name) Screen



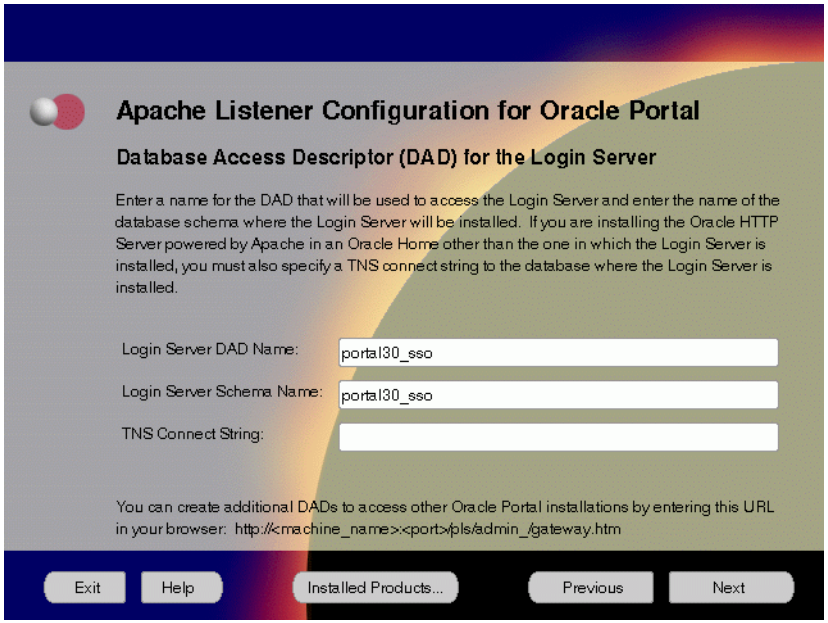
The Apache Listener Configuration for Oracle Portal DAD screen allows you to enter the name of the Database Access Descriptor (DAD) that will be used to access Oracle Portal, and the name of the database schema where Oracle Portal will be installed. It also enables you to enter the TNS connect string if Oracle Portal and Oracle HTTP Server are installed in different Oracle homes. The information you enter here is used to create the PL/SQL Gateway settings which you can access upon installation from the following location: **http://<machine_name>:<port>/pls/admin_/gateway.htm**

- **Portal DAD Name**: Enter the name of the DAD for each instance you installed in the database. A Database Access Descriptor (DAD) is a set of values that specify how the Apache Listener connects to your Oracle database server to fulfill an HTTP request. Based on this DAD name, the installation automatically sets other DAD-related and default settings such as the name and location of the document table. The default DAD name is **portal30**.

- **Portal Schema Name**: Enter the name of the database schema that will contain Oracle Portal. A schema is a collection of components and database objects under the control of a given database user. Each Oracle Portal application maps to an Oracle database schema. The default schema name is **portal30**.
- **TNS Connect String**: Enter the TNS connect string or TNS alias that you have defined for the remote Oracle database. It enables you to install the Portal database objects into a remote database. Since you are installing in a new Oracle home, you will need to enter a TNS connect string before it is actually created. The Net8 Assistant will appear later in the installation process to guide you in the configuration of a new TNS alias. Be sure to note the name of the TNS connect string you enter here, so that you will use the same name when the Net8 Assistant appears later.

9. Enter or accept the default Login Server DAD and Schema names. Also, enter the TNS Connect String, if necessary. Click **Next**.

Figure 4–9 Apache Listener Configuration for Oracle Portal Screen



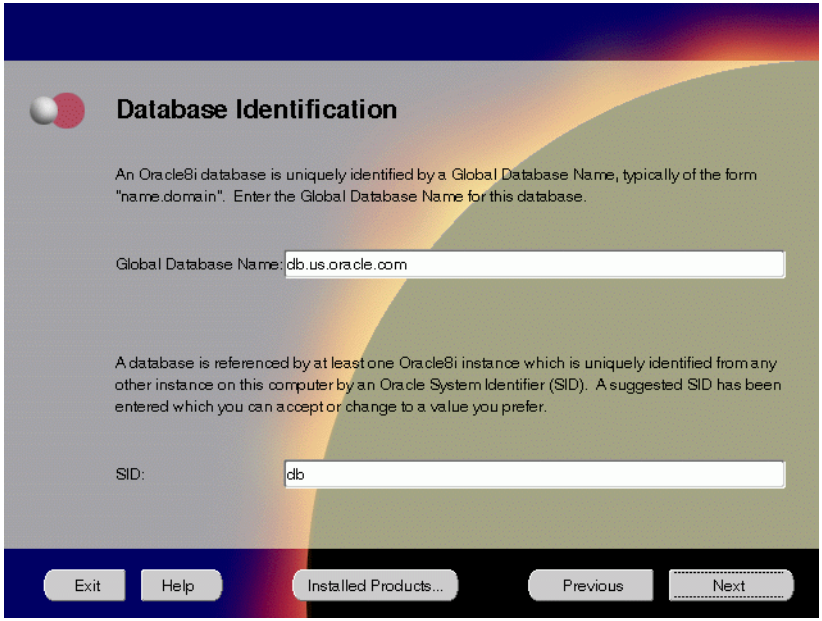
The Apache Listener Configuration for Oracle Portal screen allows you to enter the Login Server DAD and Schema Name, with a `_sso` extension for easy recognition. The Login Server provides an enterprise-wide Single Sign-On (SSO) mechanism that enables an Oracle Portal user to log in securely to Oracle Portal and any partner and external applications using a single user name and password. It also enables you to enter the TNS Connect String if Oracle Portal and Oracle HTTP Server are installed in different Oracle homes.

- **Login Server DAD Name**: Enter the name of the DAD for each instance you installed in the database.The default DAD name is **portal30_sso**.
- **Login Server Schema Name**: Enter the name of the database schema that will contain Oracle Portal.The default schema name is **portal30_sso**.
- **TNS Connect String**: Enter the TNS connect string or TNS alias that you have defined for the remote Oracle database.

  For more information on these fields, refer to the previous screen.

10. Enter the Global Database Name and System Identifier (SID) and click **Next**.

Figure 4–10 Database Identification Screen



The Database Identification screen allows you to enter the Global Database name and SID of the database.

- **Global Database Name**: This is the full database name that distinguishes it from any other database in your network domain. For example:

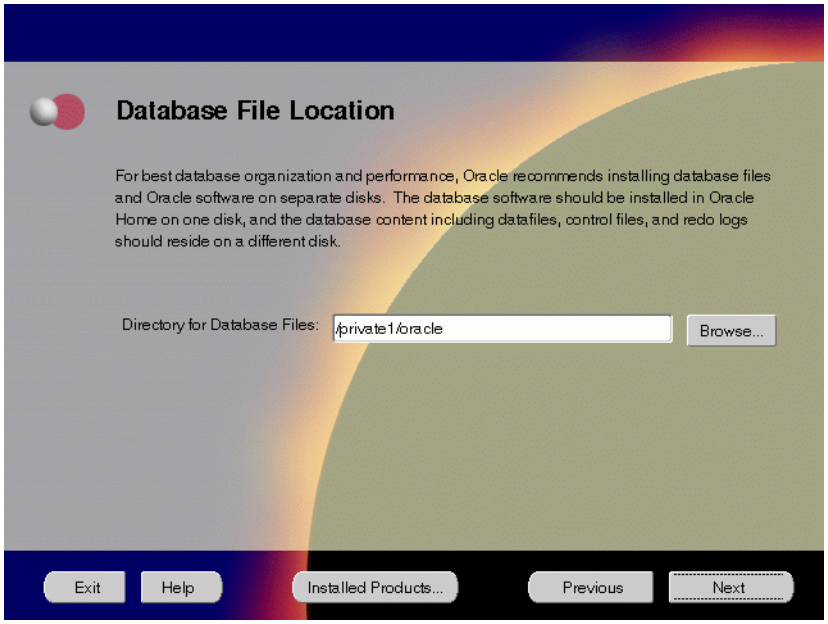
  `db.us.oracle.com`

  Where `db` is the name of the database and `us.oracle.com` is the network domain in which the database is located.

- **SID (System Identifier)**: This is the database instance name that distinguishes it from any other database on your system. For any database, there is at least one instance associated with the database. The SID field defaults to the database name portion of the Global Database Name. (For example: `db`). You can accept or change the default value.

11. Enter the location for the database files and click **Next**.

Figure 4–11 Database File Location Screen



The Database File Location screen allows you to enter the directory name for the database files. Oracle recommends installing the database software and the database content, including files, on separate disks.

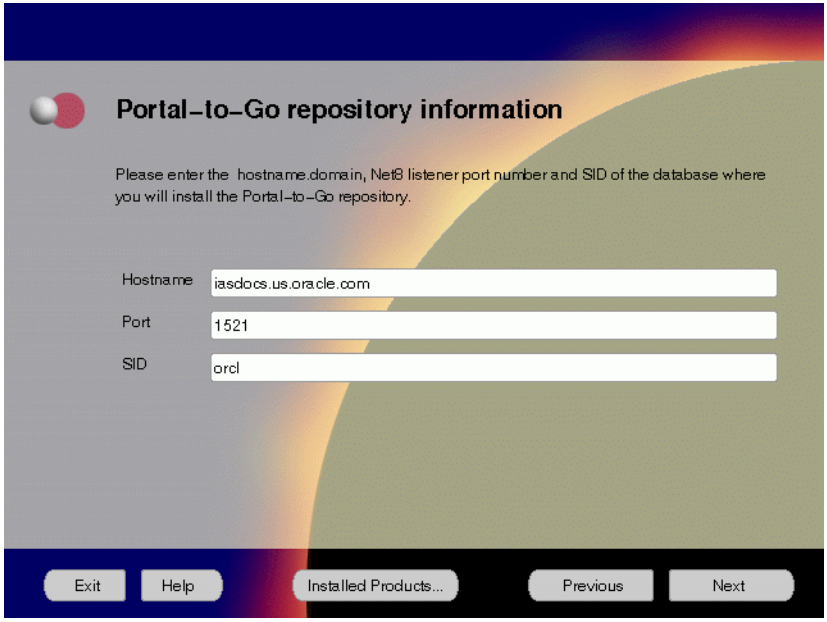
- **Directory of Database Files**: This is the directory that contains your data, control, and log files. For example, if you enter **/dbmount**, then the database file locations will be:

File Type	Path Name
Data Files	/dbmount/oradata/*SID*/*.dbf
Control Files	/dbmount/oradata/*SID*/*.ctl
Log Files	/dbmount/oradata/*SID*/*.log

- **Browse**: To navigate the directory structure.

12. Enter the hostname, port number, and SID of the origin database, and click **Next**.

Figure 4–12 Portal-to-Go Repository Information Screen

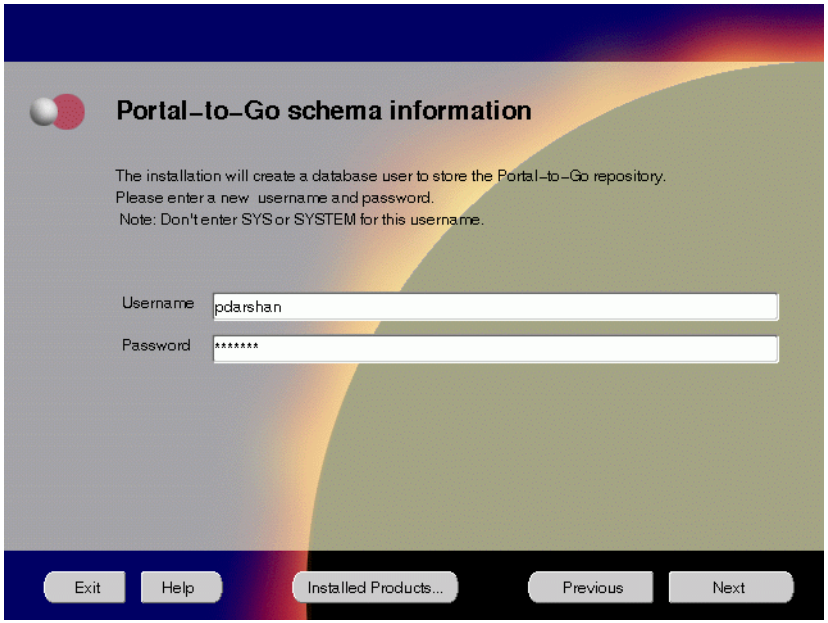


The Portal-to-Go Repository Information screen allows you to enter the hostname, Net8 Listener port number, and SID of the database where you will install the Portal-to-Go repository.

- **Hostname**: Enter the hostname.domain of the origin database.
- **Port**: Enter the Net8 Listener port number.
- **SID**: Enter the System Identifier (SID) of the origin database.

13. Enter the new username and password for the database user to store the Portal-to-Go repository.

Figure 4–13 Portal-to-Go Schema Information Screen



Portal-to-Go Schema Information screen allows you to create a database user to store the Portal-to-Go repository.

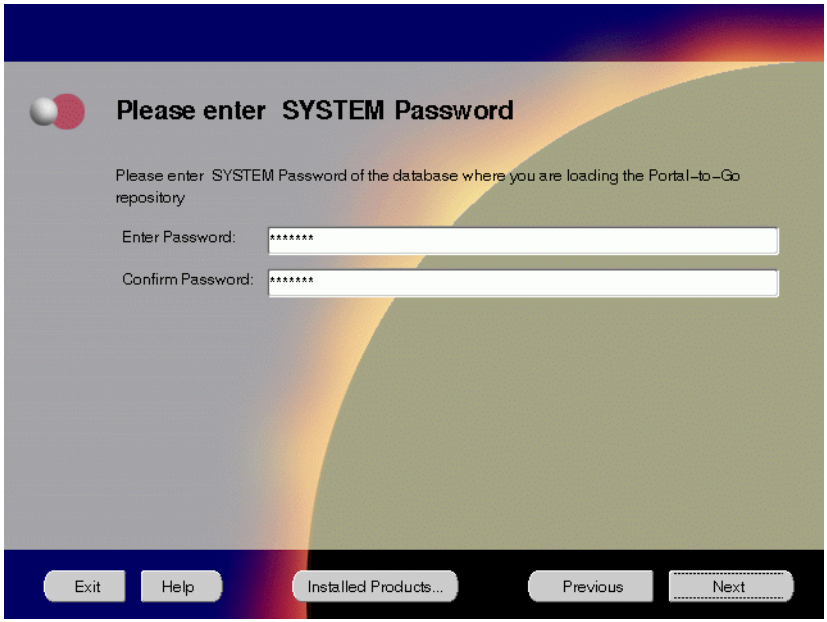
- **Username**: Enter a new user name for the database user to store the Portal-to-Go repository.
- **Password**: Enter a password for the database user.

Note: Do not enter SYS or SYSTEM as the username.

---

14. Enter and confirm the SYSTEM password of the database, and click **Next**.

Figure 4–14 System Password Screen

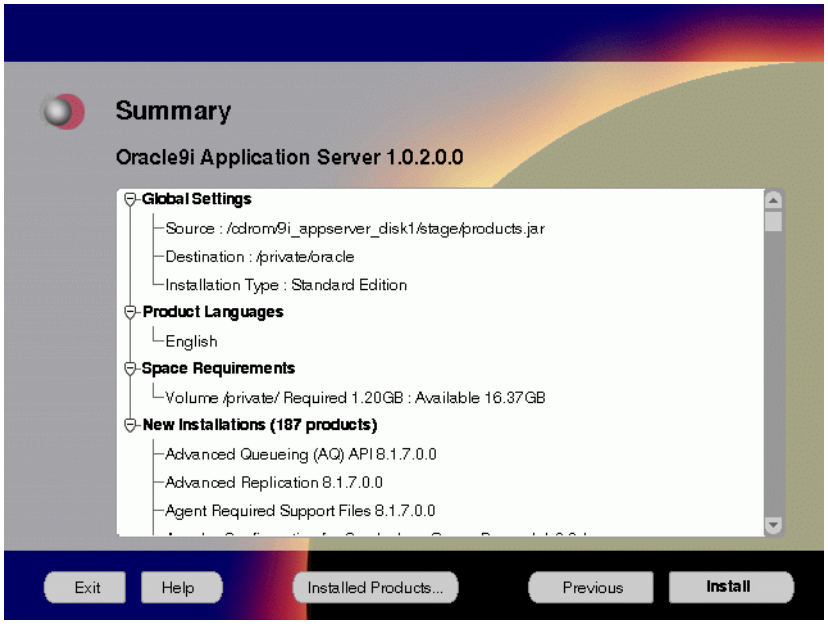


System Password screen allows you to enter and confirm the SYSTEM password of the database where you are loading the Portal-to-Go repository.

- **Enter Password**: Enter the SYSTEM password of the origin database.
- **Confirm Password**: Re-enter the SYSTEM password as entered above for verification.

15. Review the summary and click **Install** to begin the installation process.

Figure 4–15 Summary Screen



The Summary screen allows you to review all the settings before the actual installation process. These settings include source, destination, installation type, product language, space requirements, and a list of components.

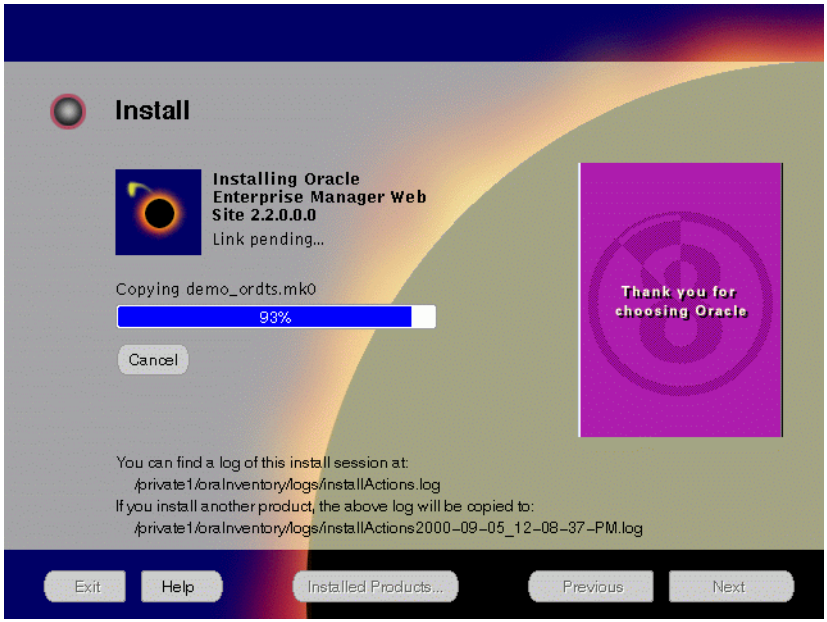
- To make changes to any of these settings, click **Previous** to return to the respective screens.

Note: Insufficient disk space is indicated in red under **Space Requirements**.

When you click **Install**, the installation process begins.

16. Monitor the installation process and after the installer finishes, click **Next**.

Figure 4–16 Install Screen



The Install screen appears while the product is installing. Installation operations include executing actions such as file copy and linking, and executing decision points and calculations. It also displays the full path of the installation log.

- **Cancel**: To discontinue the installation process. You can then choose to stop the installation of an individual component or the entire product.

For more information about installation log, refer to "oraInventory Directory" on page 2-34.

Changing Disks

During installation, the installer prompts you to switch between Disks 1, 2 and 3. Use these steps to change disks and continue the installation process.

Figure 4–17 Changing Disks Dialog

a. Eject and unmount the current disk.

If you are using Solaris Volume Management software and Disk1 was automatically mounted, then this can be done with the following command:

```
prompt> eject cdrom
```

If you are not using Solaris Volume Management software, then you must manually eject and unmount the disk. For further instructions, refer to your operating system documentation

b. Insert the nest disk into the CD-ROM drive and mount it.

If you are using the Solaris Volume Management software, then the next disk will be automatically mounted.

If you are not using Solaris Volume Management software, then you must manually mount the disk. For further instructions, refer to "Starting Oracle Universal Installer" on page 2-35.

c. Click the **Browse** button on the changing disks dialog, and navigate to **/cdrom/9i_appserver_disk*x***. This directory may be different depending on where the original disk was mounted.

Figure 4–18 Updated Changing Disks Dialog

d. Click OK to continue the installation process.

Running root.sh

After installation is completed, the installer prompts you to run **root.sh** script. Use these steps to run the **root.sh** script.

a. Log on as the root user.

b. Go to the *ORACLE_HOME* directory.

```
prompt> cd $ORACLE_HOME
```

c. Run the **root.sh** script.

```
prompt> ./root.sh
```

d. Exit root user.

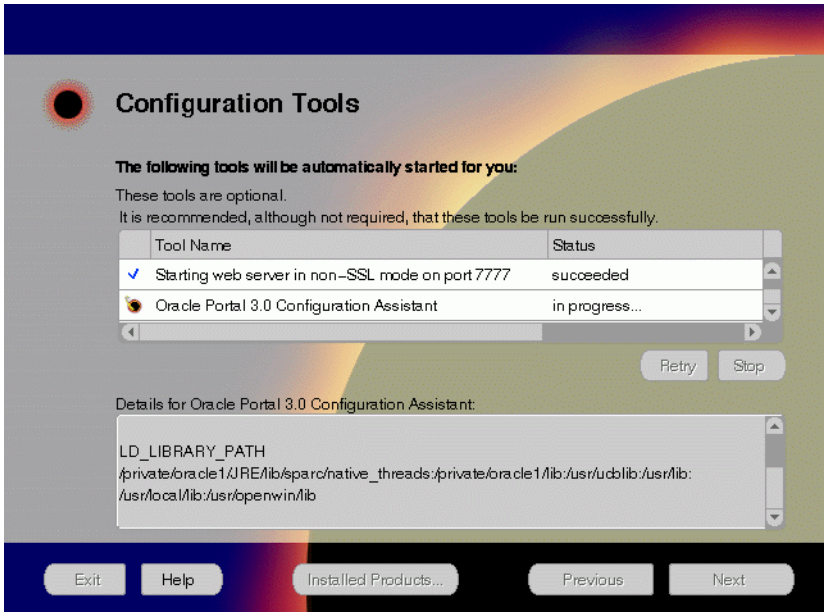
Once you see "Finished running generic part of the root.sh script" and "Now product-specific root actions will be performed," exit root user and return to the Install screen.

The **root.sh** script detects:

- Settings of *ORACLE_OWNER*, *ORACLE_HOME* and *ORACLE_SID* environment variables.
- Full path of local bin directory. You can accept the default or change to a different local bin directory.

17. Verify the list of configuration tools and click **Next**.

Figure 4–19 Configuration Tools Screen



The Configuration Tools screen lists the configuration tools for all installed components.

Scroll down the list to review the configuration status of each tool. The status changes as each component is configured.

The installer performs the following functions in this screen:

- Executes a configuration tool for each component selected previously in the Available Product Component screen.
- Displays all the configuration settings in the display window below as it executes a configuration tool for each component.
- Enables you to view configuration settings after all configuration tools are executed. Click on each component to review all the changes made.
- Allows you to view data for failed executions in the display window. You can either fix the error and click **Retry** to execute the configuration tool again, or ignore the error and click **Next** to proceed to the next screen.

- Automatically starts the components.
- **Retry**: To re-execute the configuration script if the configuration of a component fails.
- **Stop**: To quit the configuration process.

Configuration Tools

This installation option launches the following configuration tools:

Net8 Configuration Assistant - It enables you to connect and configure the Oracle client/server network environment.

For more information on Net8 Configuration Assistant, refer to the *Net8 Administration's Guide* in the Oracle database documentation set.

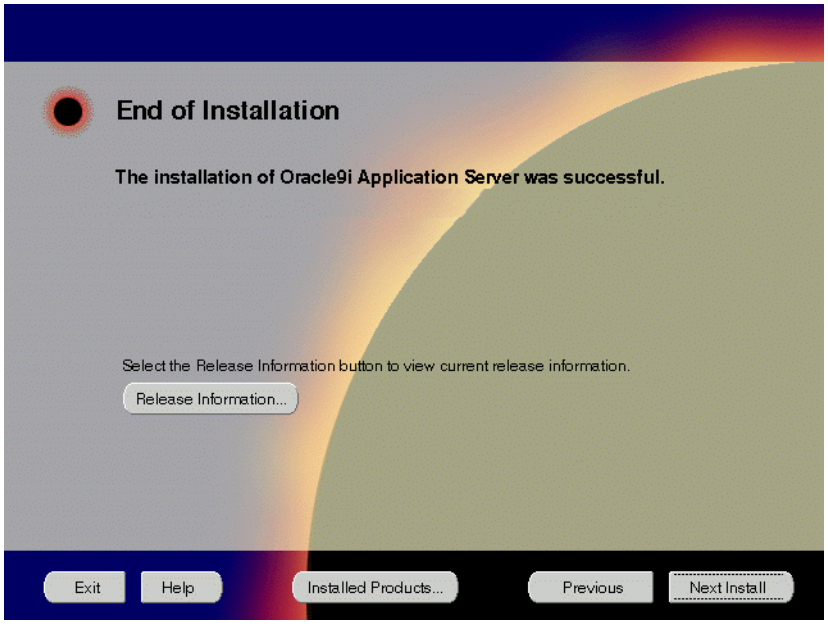
Oracle Database Configuration Assistant - It configures the database for Oracle8*i* JVM. For instructions on running the Oracle Database Configuration Assistant, refer to "Oracle Database" on page A-35.

Starting Web Server in Non-SSL mode on port 7777 - This starts Oracle HTTP Server.

Oracle Portal Configuration Assistant - It loads necessary database objects for Oracle Portal to run. For instructions on running the Oracle Portal Configuration Assistant, refer to "Oracle Portal" on page A-20.

18. Ensure that the installation was successful. Click **Exit** to quit the installer.

Figure 4–20 End of Installation Screen



The End of Installation screen appears at the end of the installation process. It notifies you whether the installation was successful or unsuccessful.

- **Release Information**: To view the latest release information.

You have successfully installed the Standard Edition installation option of the Oracle9*i* Application Server. Proceed to Post-installation on page 4-27 to complete the installation process.

Post-installation

The following instructions guide you through the basic post-installation tasks for Oracle9*i* Application Server. Before performing these tasks, be sure to install Oracle Portal-to-Go client from the Oracle9*i* Application Server Administrative and Development Client CD included in the Oracle9*i* Application Server CD pack. For installation instructions, refer to Appendix B, "Installing Oracle Portal-to-Go Client".

The post-installation contains the following sections:

- Environment Variables
- Starting and Stopping Components
- Component Port Numbers
- Component-specific Tasks
- Additional Documentation

Environment Variables

Table 4–1 lists the environment variables that must be set for Standard Edition installation option:

Table 4–1 Environment Variables

Environment Variable	Must Be or Include
ORACLE_HOME	The *ORACLE_HOME* used for installing Oracle9*i* Application Server.
PATH	<ORACLE_HOME>/bin <ORACLE_HOME>/Apache/Apache/bin <ORACLE_HOME>/ifs1.1/bin
LD_LIBRARY_PATH	<ORACLE_HOME>/lib <ORACLE_HOME>/Apache/Apache/libexec <ORACLE_HOME>/ifs1.1/lib
ORACLE_SID	The same as the system identifier of the origin database. It should be set to the same value as entered during installation.

Starting and Stopping Components

Table 4–2 lists the commands needed to start and stop the components.

Table 4–2 Starting and Stopping Components

Component	Function	Command
Oracle HTTP Server	Start	`prompt> ./apachectl start`
	Stop	`prompt> ./apachectl stop`
Oracle HTTP Server (SSL-enabled)	Start	`prompt> ./apachectl startssl`
	Stop	`prompt> ./apachectl stop`
Oracle Internet File System	Start	`prompt> ./ifsstart`
	Stop	`prompt> ./ifsstop`

Note: To start or stop SSL-enabled Oracle HTTP Server, you must log in as the root user.

Component Port Numbers

Table 4–3 lists the default port numbers on which requests are received for each component.

Table 4–3 Port Numbers

Components	Port Number
Oracle HTTP Server	7777
Oracle HTTP Server (SSL-enabled)	80, 443
Oracle Portal	Oracle Portal uses the same port number as Oracle HTTP Server
Oracle Portal-to-Go	Oracle Portal-to-Go uses the same port number as Oracle HTTP Server
Oracle Internet File System	80

Component-specific Tasks

This section contains post-installation tasks for the following components:

- Oracle Internet File System
- Oracle Portal-to-Go

Oracle Internet File System

You must run the Oracle Internet File System configuration assistant to configure Oracle Internet File System. For configuration instruction, refer to "Oracle Internet File System" on page A-8.

Oracle Portal-to-Go

The following section describes post-installation configuration instructions for Oracle Portal-to-Go:

- Oracle Portal-to-Go Web Integration Server Configuration
- Oracle Portal-to-Go Configuration Parameters
- Oracle Portal-to-Go Configuration Verification

Oracle Portal-to-Go Web Integration Server Configuration

Oracle Portal-to-Go Web Integration Server hosts services that applications can use to exchange data and information sources via the Web. The Web Integration Server is installed with the Oracle Portal-to-Go components.

> **Note:** The Web Integration Developer, the development environment for creating and testing Web Integration services written in Web Interface Definition Language (WIDL), is installed as part of the Oracle Portal-to-Go client. For more information, refer to Appendix B, "Installing Oracle Portal-to-Go Client" on page B-1.

The following steps guide you through the configuration process of the Web Integration Server:

1. Run the Web Integration Server.

   From the ***ORACLE_HOME*/panama/WebIntergration/Server/bin** directory, type:

   ```
   prompt> ./server.sh &
   ```

2. From a browser, go to the Web Integration Server URL:

   http://*host_name.domain*:5555

3. Log in to the Web Integration Server with the user name **Administrator**, and password **manage**, which is the default password.
4. Select **Settings**. The server settings appear. Click **Edit**.
5. Enter the Proxy (HTTP) and Secure Proxy (HTTPS) settings for your environment.
6. Click **Submit**.
7. Click **Logout**.

Oracle Portal-to-Go Configuration Parameters

1. Configure the **httpd.conf** file.

   The **httpd.conf** file is in the ***ORACLE_HOME*/Apache/Apache/conf** directory.

   Create a Personalization Portal (papz) alias. This is needed so that the application server can find the **http://*hostname*/papz/login.jsp** URL. Add a line at the end of the Alias section:

   ```
   # PTG Start
   Alias /papz/ "<ORACLE_HOME>/panama/server/papz/"
   # PTG End
   ```

2. Configure the **jserv.conf** file.

   The **jserv.conf** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   In the ApJServMount section, add the Oracle Portal-to-Go specific mount point:

   ```
   # PTG Start
   ApJServMount /ptg /root
   # PTG End
   ```

3. Configure the **jserv.properties** file.

   The **jserv.properties** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   Next to the other "`wrapper.classpath`" entries, add all the required Oracle Portal-to-Go files to the classpath.

```
# PTG Start
wrapper.classpath=<ORACLE_HOME>/panama/server/classes
wrapper.classpath=<ORACLE_HOME>/panama/lib/panama_core.zip
wrapper.classpath=<ORACLE_HOME>/panama/lib/panama_papz.zip
wrapper.classpath=<ORACLE_HOME>/panama/lib/client.zip
wrapper.classpath=<ORACLE_HOME>/panama/lib/server.zip
# PTG End
```

4. Configure the **zone.properties** file.

   The **zone.properties** file is in the **ORACLE_HOME/Apache/Jserv/etc** directory.

   a. In the List of Repositories section, add the Oracle Portal-to-Go specific repository to the existing repository line with a comma (,) separator:

```
# PTG Start
repositories=<ORACLE_HOME>/Apache/Jserv/servlets,<ORACLE_
HOME>/panama/server/papz
# PTG End
```

   b. In the Startup Servlets section, add the Oracle Portal-to-Go specific servlets:

```
# PTG Start
servlets.startup=oracle.panama.ParmImpl
# PTG End
```

   c. In the Servlet Aliases section, add the Oracle Portal-to-Go specific servlets:

```
# PTG Start
servlet.rm.code=oracle.panama.ParmImpl
# PTG End
```

Oracle Portal-to-Go Configuration Verification

After installation, you can verify that individual Oracle Portal-to-Go components are properly configured:

1. Test the sample Java Servlet at the following URL:

   http://*host_name.domain*:7777/papz/test.jsp

   "Hello World" should appear on the screen.

2. Test whether the Personalization Portal is working properly by accessing the following URL:

   http://*host_name.domain*:7777/papz/login.jsp

   The login page should appear. The Personalization Portal prompts you to enter a user name and a password. You can log in using "Administrator" as the user name and "manager" as the password.

3. Run the Oracle Portal-to-Go Request Manager by accessing the following URL:

   http://*host_name.domain*:7777/ptg/rm

Additional Documentation

For more information regarding the post-installation tasks and configuration, refer to component-specific documentation in "Documentation Library Titles" on page D-2.

5

Enterprise Edition

This chapter guides you through the installation steps for the Enterprise Edition of Oracle9*i* Application Server. It lists basic steps for a quick installation and provides detailed information for reference. This is followed by basic post-installation tasks.

Contents

Installation

The following instructions guide you through the Enterprise Edition installation option of Oracle9*i* Application Server.

1. Review the Oracle Universal Installer Welcome screen and click **Next**.

Figure 5–1 Welcome Screen

The Welcome screen provides information about the Oracle Universal Installer.

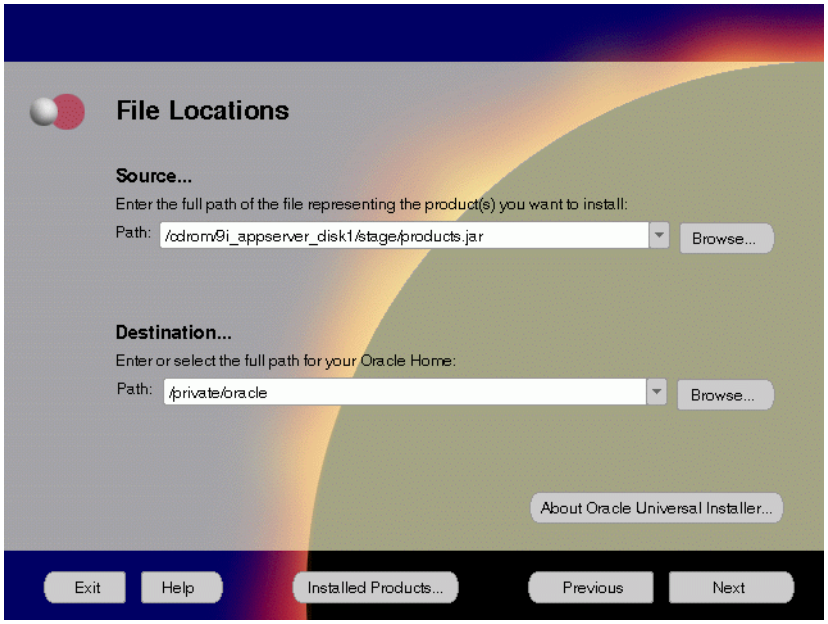
The following function buttons appear on the installation screens.

- **Deinstall Products**: To de-install individual components or the entire product. This button appears only on the Welcome screen.
- **About Oracle Universal Installer**: To view the version number of the installer in use.
- **Exit**: To quit the installation process and exit the installer.
- **Help**: To access detailed information about the functionality of each screen.
- **Installed Products**: To view currently installed products or to de-install the entire product or components.

- **Previous**: To return to the previous screen.
- **Next**: To move to the next screen.

2. Verify the source and destination paths and click **Next**.

Figure 5–2 File Locations Screen



The File Locations screen allows you to enter the full path for the source and destination locations of Oracle9*i* Application Server.

- **Source**: This is the full path to the **products.jar** file from which the product will be installed. The installer detects and uses the default values of the **products.jar** file of the installation program. Do not change the path.
- **Destination**: This is the full path to the *ORACLE_HOME* where the product will be installed. The installer defaults to the *ORACLE_HOME* set in the pre-installation chapter.

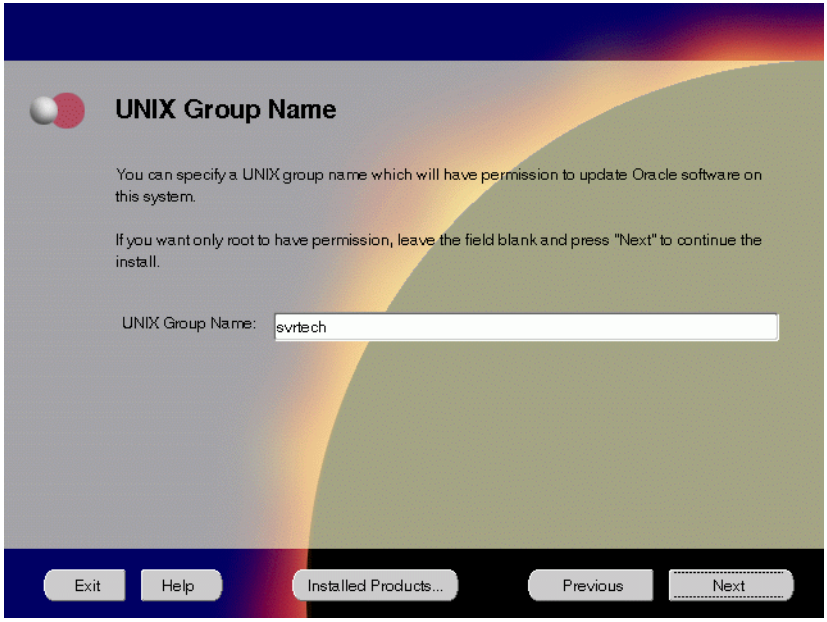
  Note: There should be no spaces in the *ORACLE_HOME* path.

  For more information regarding *ORACLE_HOME*, refer to "ORACLE_HOME" on page 2-8.

- **Browse**: To navigate through the file system to find source and destination locations.

3. Enter a UNIX group name and click **Next**. This screen appears only the first time you run Oracle Universal Installer on your machine.

Figure 5–3 UNIX Group Name Screen



The UNIX Group Name screen grants permission for the **oraInventory** directory to the group specified. For more information, refer to "UNIX Group Name for the Oracle Universal Installer Inventory" on page 2-11.

UNIX Group Name:

- Enter a UNIX group name for those who have permission to configure all the functionality of Oracle9*i* Application Server. Verify your group name by entering this command from the UNIX prompt the installer was launched from:

  ```
  prompt> id
  ```

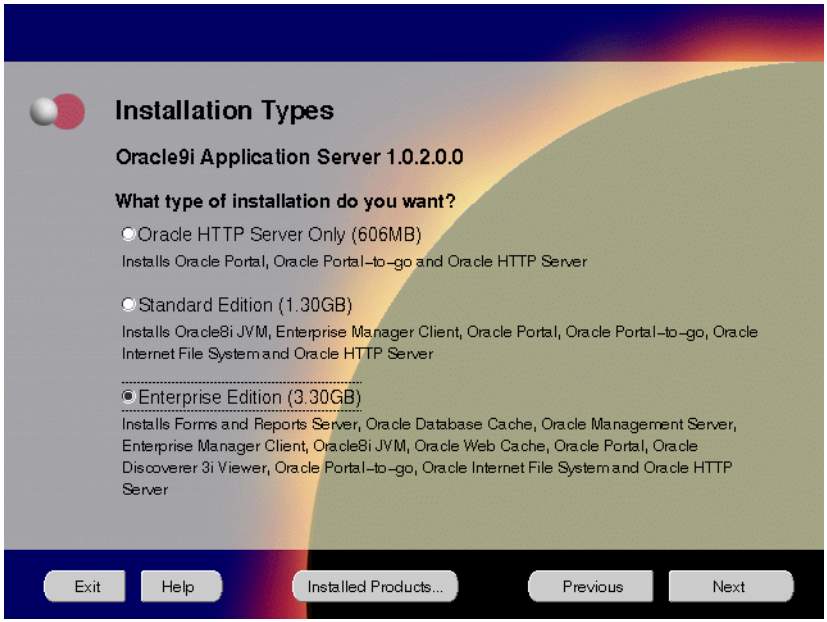
- Run the **orainstRoot.sh** script from your *ORACLE_HOME* to grant permissions to the root user only. You must have root privileges to run this script. The script creates pointers to the components as the installer installs them in the system so that they can be identified later in the installation

procedure. It produces the **/var/opt/oracle/oraInst.loc** file, which provides a pointer to the **oraInventory** directory.

After you have run the script, click **Retry** to continue.

4. Select Enterprise Edition and click **Next**.

Figure 5–4 Installation Types Screen



The Installation Types screen allows you to select the Oracle9*i* Application Server installation option that you are licensed to use. For a complete list of components installed through each installation option, refer to Table 2–1, "Oracle9i Application Server Components" on page 2-2.

The following are the installation options:

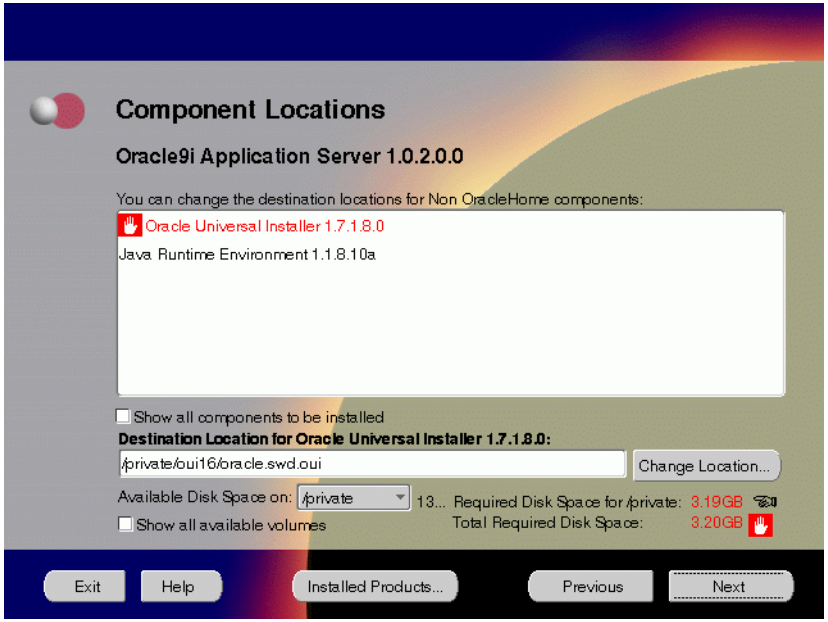
- **Oracle HTTP Server Only**: Installs Oracle Portal, Oracle Portal-to-Go, and Oracle HTTP Server.
- **Standard Edition**: Installs Oracle 8*i* JVM, Oracle Enterprise Manager Client, Oracle Portal, Oracle Portal-to-Go, Oracle Internet File System, and Oracle HTTP Server.
- **Enterprise Edition**: Installs Oracle Forms Services, Oracle Reports Services, Oracle Database Cache, Oracle Management Server, Oracle Enterprise Manager Client, Oracle 8*i* JVM, Oracle Web Cache, Oracle Portal, Oracle Discoverer 3*i* Viewer, Oracle Portal-to-Go, Oracle Internet File System, and Oracle HTTP Server.

5. If needed, verify and change the locations of the components displayed on the screen, and click **Next**.

   This screen appears only under the following condition(s):

   - Oracle Universal Installer is being run on your machine for the first time.
   - Oracle Universal Installer has detected insufficient disk space in the *ORACLE_HOME* directory.

Figure 5–5 Component Locations Screen



The Component Locations screen allows you to select alternative locations for some components.

- **Show all components to be installed**: To view the complete list of components chosen for installation. Select check box to display component list.

Click individual components to view and change destination location path. The installer enables you to change the destination location of the components displayed on the screen.

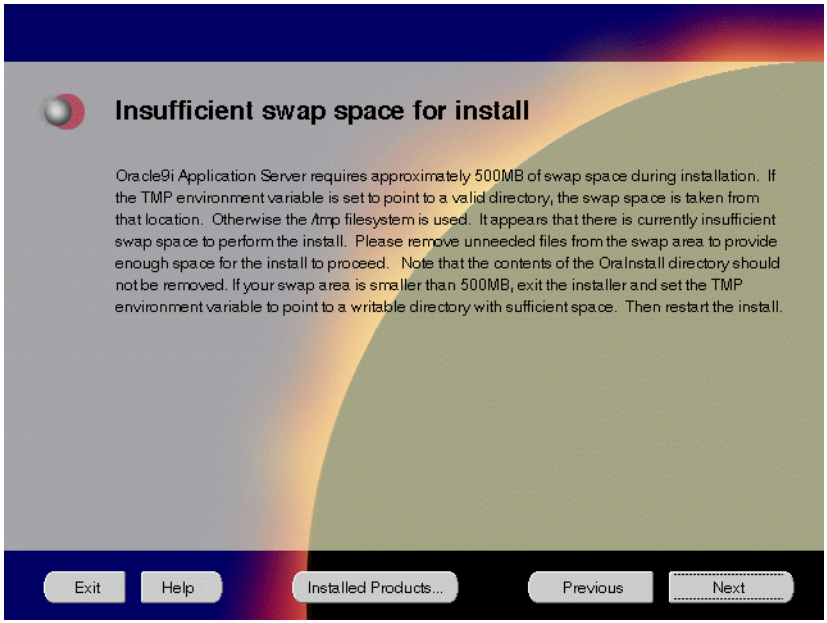
- **Destination Location**: To view the full path of the selected component.
- **Change Location**: To browse for alternate locations for the selected component.
- **Available Disk Space**: To view available disk space in the current directory. The installer also provides information about the total disk space required for the installation of additional components.
- **Required Disk Space for *directory_name***: To view the total disk space required for installation in the selected directory.
- **Total Required Disk Space:** To view the total disk space required for the product to be installed.
- **Show all available volumes**: To browse through file system for available disk space. Select check box to display the file system.

Note: Insufficient disk space is indicated in red with a hand icon next to it.

---

6. Remove unneeded files from the swap directory to provide sufficient space for installation and click **Next**. If your swap space is smaller than 500 MB, click **Exit** and correct the problem.

Figure 5–6 Insufficient Swap Space for Install Screen



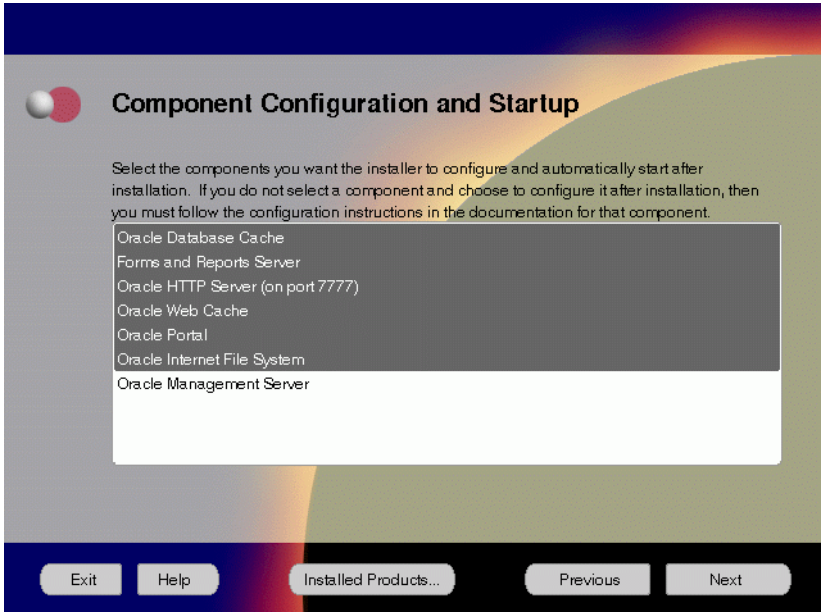
Insufficient Swap Space for Install screen indicated inadequate space in the swap directory. You have two options:

- If you have more than 500 MB swap space, then remove unneeded files from your swap space to create room for installation and click **Next** to proceed.
- If you have less than 500 MB swap space, then **Exit** the installer and set **TMP** environment variable to point to a writable directory with sufficient space.

For detailed information on **TMP** directory, refer "TMP" on page 2-10.

7. Select the components for automatic configuration and startup after installation and click **Next**.

Figure 5–7 Component Configuration and Startup Screen



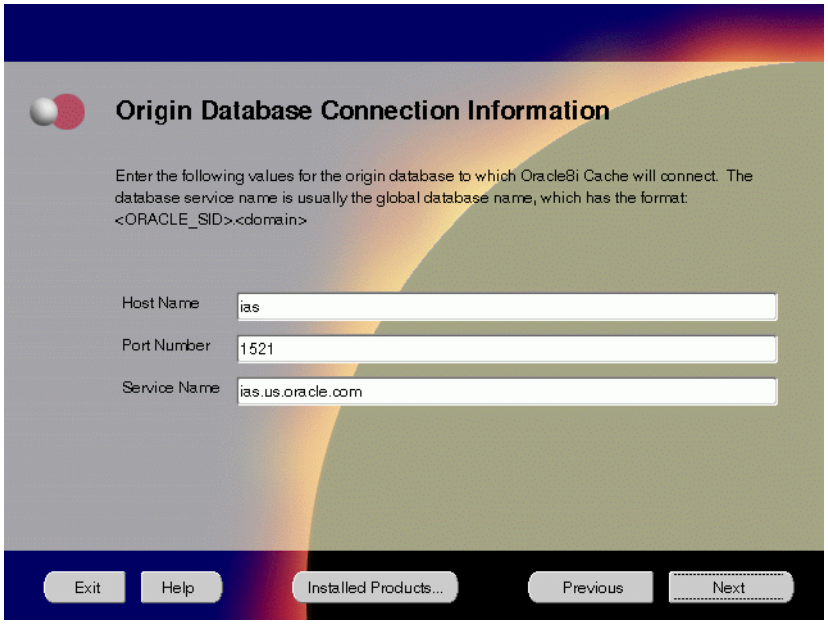
The Component Configuration and Startup screen allows you to select the components that you want the installer to configure and automatically start after installation. This screen offers two configuration options:

- If you select a component here, then the installer prompts you for any or all configuration information required by that component. After installation, the installer automatically starts that component.
- If you de-select a component here, then the installer installs it, but does not configure or automatically start it. After installation, if you decide to use that component, then refer to Appendix A, "Configuration Tools" on page A-1 for instructions on manually launching the configuration assistant to configure that component.

You can select or de-select multiple components by holding down the Control key while clicking on the component name.

8. Enter the host name, port number, and service name of the origin database and click **Next**. This screen will appear only if you selected Oracle Database Cache in the Component Configuration and Startup screen.

Figure 5–8 Origin Database Connection Information



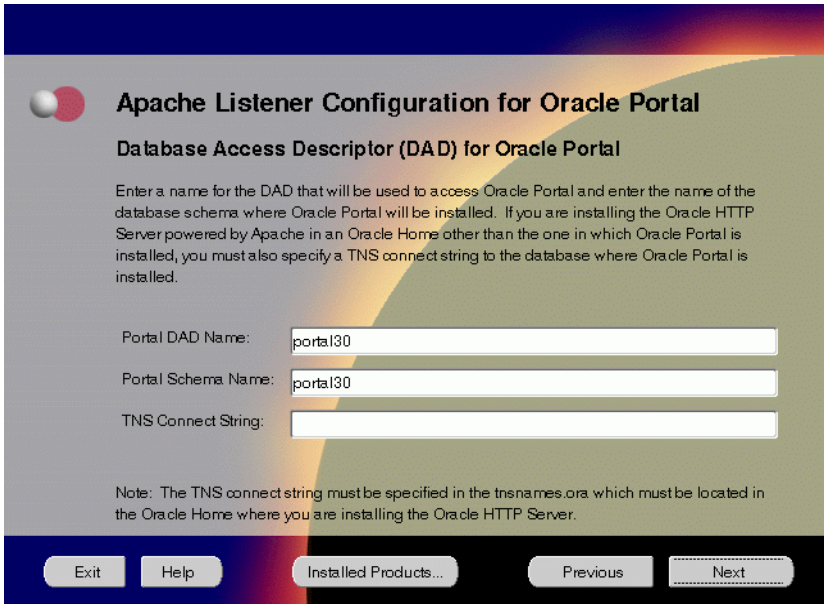
The Origin Database Connection Information screen enables you to identify the origin database for the middle-tier cache.

- **Host Name**: The name of the machine where the origin database is located.
- **Port Number**: The port number of the listener for the origin database. The default port number is 1521.
- **Service Name**: The database service name is the global database name. The global database name uniquely distinguishes the database from other databases in your network domain. The installation procedure uses this name to create an entry in the **tnsnames.ora** file on the local cache node.

  For example, if `ias` is the database name and `us.oracle.com` is the network domain in which the database is located, then the service name is `ias.us.oracle.com`.

9. Enter or accept the default Portal DAD and Schema names. Also, enter the TNS Connect String, if necessary. Click **Next**. This screen will appear only if you selected Oracle Portal in the Component Configuration and Startup screen.

Figure 5–9 Apache Listener Configuration for Oracle Portal (DAD and Schema name) Screen



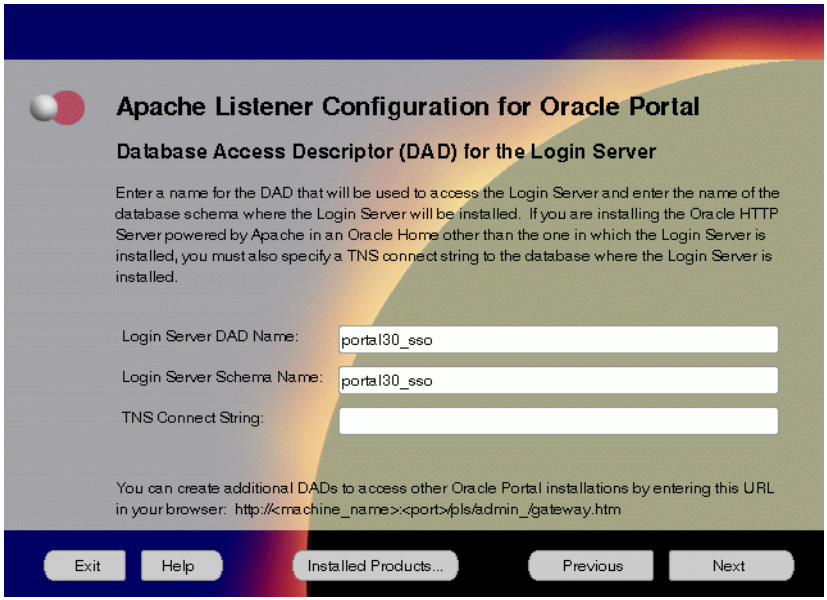
The Apache Listener Configuration for Oracle Portal DAD screen allows you to enter the name of the Database Access Descriptor (DAD) that will be used to access Oracle Portal, and the name of the database schema where Oracle Portal will be installed. It also enables you to enter the TNS connect string if Oracle Portal and Oracle HTTP Server are installed in different Oracle homes. The information you enter here is used to create the PL/SQL Gateway settings which you can access upon installation from the following location: **http://<machine_name>:<port>/pls/admin_/gateway.htm**

- **Portal DAD Name**: Enter the name of the DAD for each instance you installed in the database. A Database Access Descriptor (DAD) is a set of values that specify how the Apache Listener connects to your Oracle database server to fulfill an HTTP request. Based on this DAD name, the installation automatically sets other DAD-related and default settings such as the name and location of the document table. The default DAD name is **portal30**.

- **Portal Schema Name**: Enter the name of the database schema that will contain Oracle Portal. A schema is a collection of components and database objects under the control of a given database user. Each Oracle Portal application maps to an Oracle database schema. The default schema name is **portal30**.
- **TNS Connect String**: Enter the TNS connect string or TNS alias that you have defined for the remote Oracle database. It enables you to install the Portal database objects into a remote database. Since you are installing in a new Oracle home, you will need to enter a TNS connect string before it is actually created. The Net8 Assistant will appear later in the installation process to guide you in the configuration of a new TNS alias. Be sure to note the name of the TNS connect string you enter here, so that you will use the same name when the Net8 Assistant appears later.

10. Enter or accept the default Login Server DAD and Schema names. Also, enter the TNS Connect String, if necessary. Click **Next**. This screen will appear only if you selected Oracle Portal in the Component Configuration and Startup screen.

Figure 5–10 Apache Listener Configuration for Oracle Portal (Login Server) Screen



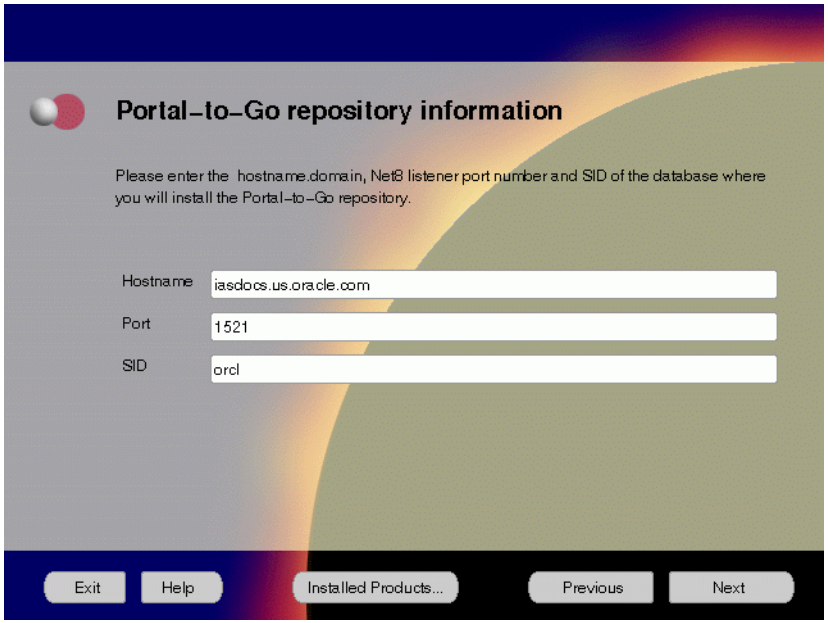
The Apache Listener Configuration for Oracle Portal screen allows you to enter the Login Server DAD and Schema Name, with a `_sso` extension for easy recognition. The Login Server provides an enterprise-wide Single Sign-On (SSO) mechanism that enables an Oracle Portal user to log in securely to Oracle Portal and any partner and external applications using a single user name and password. It also enables you to enter the TNS Connect String if Oracle Portal and Oracle HTTP Server are installed in different Oracle homes.

- **Login Server DAD Name**: Enter the name of the DAD for each instance you installed in the database.The default DAD name is **portal30_sso**.
- **Login Server Schema Name**: Enter the name of the database schema that will contain Oracle Portal.The default schema name is **portal30_sso**.
- **TNS Connect String**: Enter the TNS connect string or TNS alias that you have defined for the remote Oracle database.

  For more information on these fields, refer to the previous screen.

11. Enter the hostname, port number, and SID of the origin database, and click **Next**.

Figure 5–11 Portal-to-Go Repository Information Screen

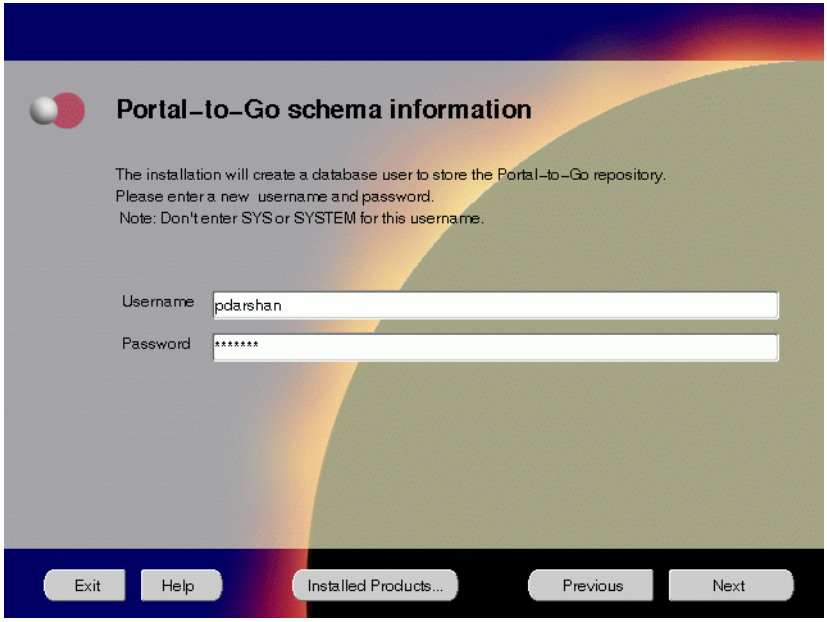


The Portal-to-Go Repository Information screen allows you to enter the hostname, Net8 Listener port number, and SID of the database where you will install the Portal-to-Go repository.

- **Hostname**: Enter the hostname.domain of the origin database.
- **Port**: Enter the Net8 Listener port number.
- **SID**: Enter the System Identifier (SID) of the origin database.

12. Enter the new username and password for the database user to store the Portal-to-Go repository.

Figure 5–12 Portal-to-Go Schema Information Screen



Portal-to-Go Schema Information screen allows you to create a database user to store the Portal-to-Go repository.

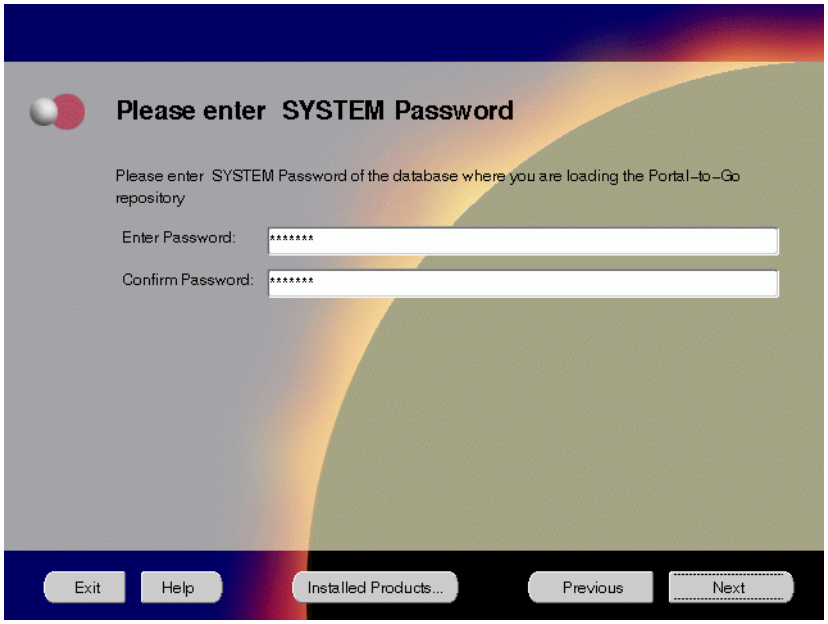
- **Username**: Enter a new user name for the database user to store the Portal-to-Go repository.
- **Password**: Enter a password for the database user.

Note: Do not enter SYS or SYSTEM as the username.

---

13. Enter and confirm the SYSTEM password of the database, and click **Next**.

Figure 5–13 System Password Screen

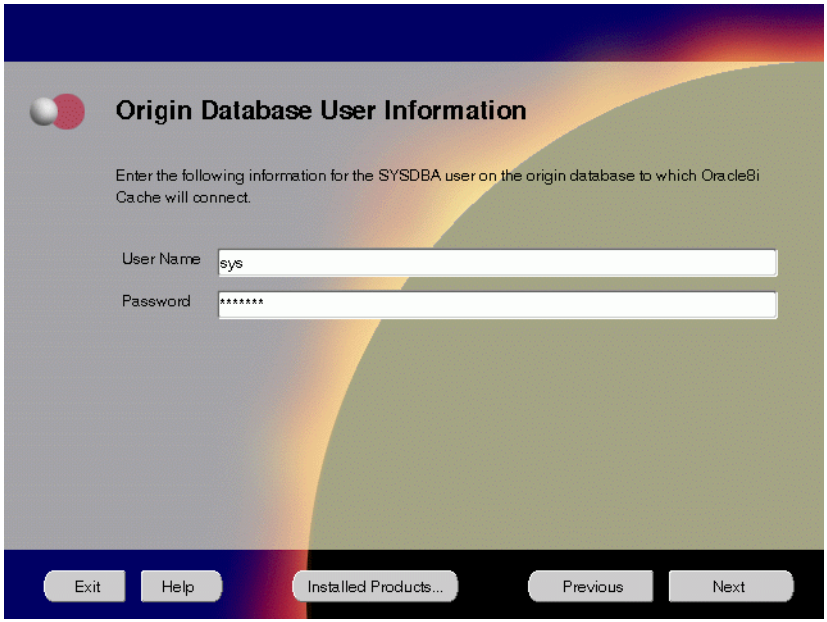


System Password screen allows you to enter and confirm the SYSTEM password of the database where you are loading the Portal-to-Go repository.

- **Enter Password**: Enter the SYSTEM password of the origin database.
- **Confirm Password**: Re-enter the SYSTEM password as entered above for verification.

14. Enter the SYSDBA name and password and click **Next**. This screen will appear only if you have selected Oracle Database Cache in the Component Configuration and Startup screen.

Figure 5–14 Origin Database User Information Screen

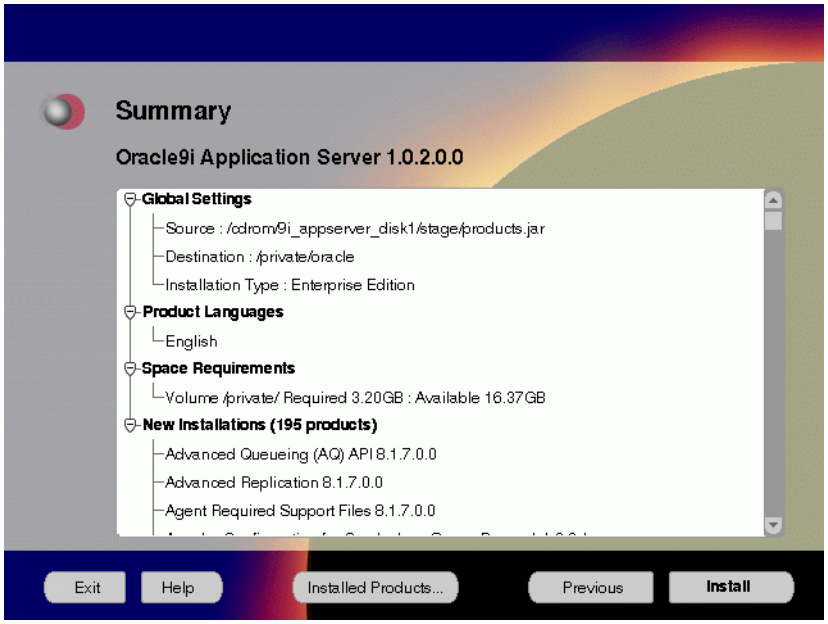


The Origin Database User Information screen allows you to enter the SYSDBA information created for the origin database.

- **User Name**: The SYSDBA user name for the origin database that the installer detects and defaults. You can change the name or accept the default.
- **Password**: The password for the SYSDBA user.

15. Review the summary and click **Install** to begin the installation process.

Figure 5–15 Summary Screen



The Summary screen allows you to review all the settings before the actual installation process. These settings include source, destination, installation type, product language, space requirements, and a list of components.

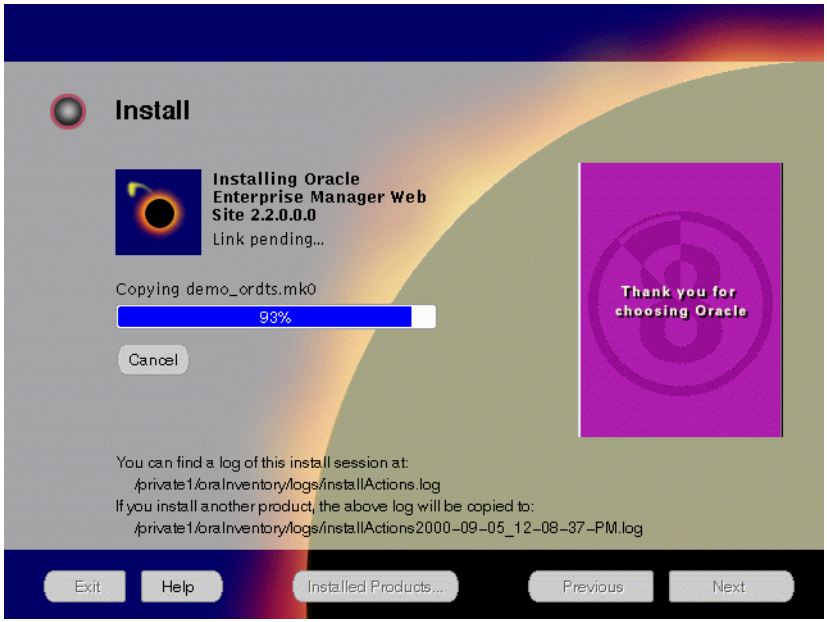
- To make changes to any of these settings, click **Previous** to return to the respective screens.

Note: Insufficient disk space is indicated in red under **Space Requirements**.

When you click **Install**, the installation process begins.

16. Monitor the installation process and after the installer finishes, click **Next**.

Figure 5–16 Install Screen



The Install screen appears while the product is installing. Installation operations include executing actions such as file copy and linking, and executing decision points and calculations. It also displays the full path of the installation log.

- **Cancel**: To discontinue the installation process. You can then choose to stop the installation of an individual component or the entire product.

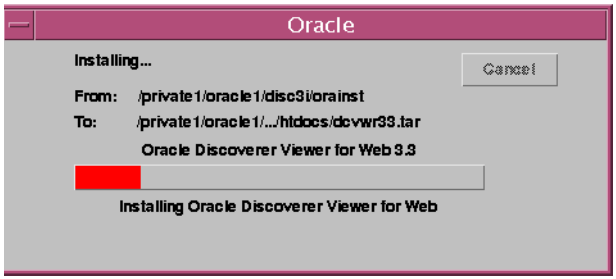
For more information about installation log, refer to "oraInventory Directory" on page 2-34.

Oracle Discoverer 3*i* Viewer Installation

After the installer finishes installing the files, the Oracle Installer appears and installs Oracle Discoverer 3*i* Viewer. Oracle Discoverer 3*i* Viewer installation does not require any user input.

You will get the following screen indicating that Oracle Discoverer 3*i* Viewer is being installed:

Figure 5–17 Oracle Discoverer 3i Viewer Installation Screen



Changing Disks

During installation, the installer prompts you to switch between Disks 1, 2 and 3. Use these steps to change disks and continue the installation process.

Figure 5–18 Changing Disks Dialog

a. Eject and unmount the current disk.

If you are using Solaris Volume Management software and Disk1 was automatically mounted, then this can be done with the following command:

```
prompt> eject cdrom
```

If you are not using Solaris Volume Management software, then you must manually eject and unmount the disk. For further instructions, refer to your operating system documentation

b. Insert the nest disk into the CD-ROM drive and mount it.

If you are using the Solaris Volume Management software, then the next disk will be automatically mounted.

If you are not using Solaris Volume Management software, then you must manually mount the disk. For further instructions, refer to "Starting Oracle Universal Installer" on page 2-35.

c. Click the **Browse** button on the changing disks dialog, and navigate to **/cdrom/9i_appserver_disk*x***. This directory may be different depending on where the original disk was mounted.

Figure 5–19 Updated Changing Disks Dialog

d. Click OK to continue the installation process.

Running root.sh

After installation is completed, the installer prompts you to run **root.sh** script. Use these steps to run the **root.sh** script.

a. Log on as the root user.

b. Go to the *ORACLE_HOME* directory.

```
prompt> cd $ORACLE_HOME
```

c. Run the **root.sh** script.

```
prompt> ./root.sh
```

d. Exit root user.

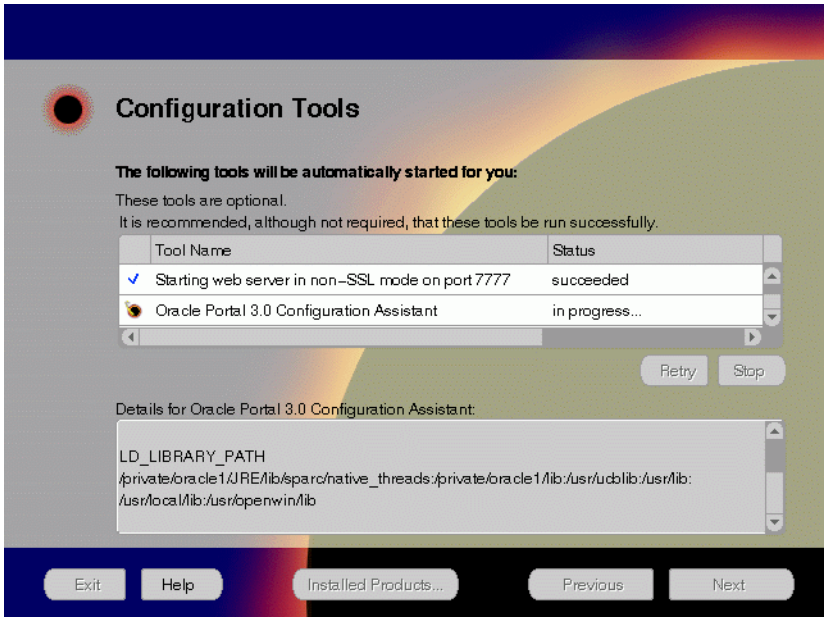
Once you see "Finished running generic part of the root.sh script" and "Now product-specific root actions will be performed," exit root user and return to the Install screen.

The **root.sh** script detects:

- Settings of *ORACLE_OWNER*, *ORACLE_HOME* and *ORACLE_SID* environment variables.
- Full path of local bin directory. You can accept the default or change to a different local bin directory.

17. Verify the list of configuration tools and click **Next**. This screen appears only if you select components to configure and start automatically in the Components Configuration and Startup screen.

Figure 5–20 Configuration Tools Screen



The Configuration Tools screen lists the configuration tools for all installed components.

Scroll down the list to review the configuration status of each tool. The status changes as each component is configured.

The installer performs the following functions in this screen:

- Executes a configuration tool for each component selected previously in the Available Product Component screen.
- Displays all the configuration settings in the display window below as it executes a configuration tool for each component.
- Enables you to view configuration settings after all configuration tools are executed. Click on each component to review all the changes made.

- Allows you to view data for failed executions in the display window. You can either fix the error and click **Retry** to execute the configuration tool again, or ignore the error and click **Next** to proceed to the next screen.
- Automatically starts the components.
- **Retry**: To re-execute the configuration script if the configuration of a component fails.
- **Stop**: To quit the configuration process.

Configuration Tools

Depending on the components you select in the Configuration and Startup screen, the following configuration tools launch:

Oracle Web Cache Configuration Assistant - This launches the service to start Oracle Web Cache. Oracle Web Cache service starts up automatically by default. If you choose not to use Oracle Web Cache, you will need to stop the service manually. For more information, refer to "Starting and Stopping Components" on page 5-30.

Oracle Database Cache Configuration Assistant - It enables you to configure your middle-tier caches. For instructions on running the Oracle Database Cache Configuration Assistant, refer to "Oracle Database Cache" on page A-3.

Note: If you are installing Oracle Database Cache on the same machine as the origin database, then be sure to follow the instructions as listed in "Installation and Post-installation Tasks" on page C-3.

Starting Web Server in Non-SSL mode on port 7777 - This starts Oracle HTTP Server.

Starting Forms Server - This starts Oracle Forms Services.

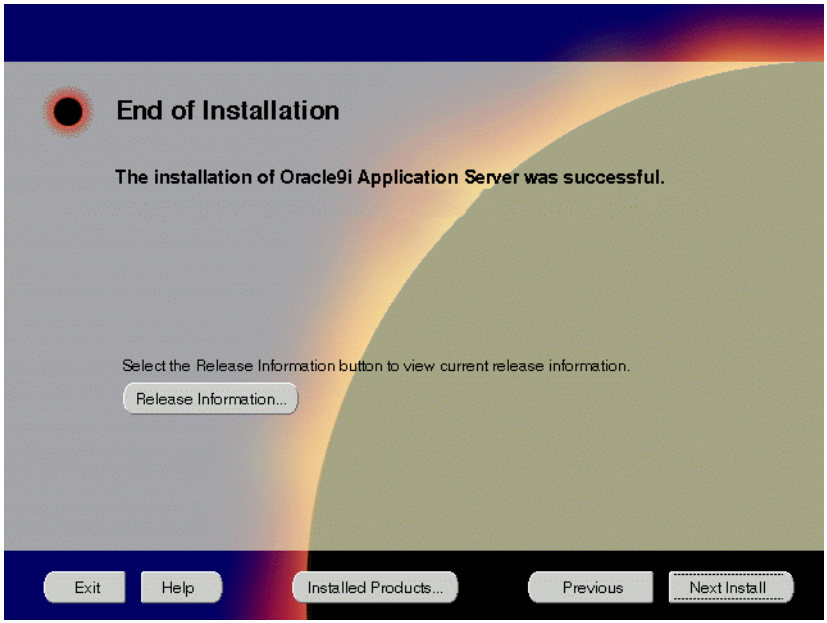
Starting Reports Server - This starts Oracle Reports Services.

Starting Oracle Discoverer 3*i* Viewer Server - This starts Oracle Discoverer 3*i* Viewer

Oracle Portal Configuration Assistant - It loads necessary database objects for Oracle Portal to run. For instructions on running the Oracle Portal Configuration Assistant, refer to "Oracle Portal" on page A-20.

18. Ensure that the installation was successful. Click **Exit** to quit the installer.

Figure 5–21 End of Installation Screen



The End of Installation screen appears at the end of the installation process. It notifies you whether the installation was successful or unsuccessful.

- **Release Information**: To view the latest release information.

You have successfully installed the Enterprise Edition installation option of the Oracle9*i* Application Server. Proceed to Post-installation on page 5-28 to complete the installation process.

Post-installation

The following instructions guide you through the basic post-installation tasks for Oracle9*i* Application Server. Before performing these tasks, be sure to install Oracle Portal-to-Go client from the Oracle9*i* Application Server Administrative and Development Client CD included in the Oracle9*i* Application Server CD pack. For installation instructions, refer to Appendix B, "Installing Oracle Portal-to-Go Client".

The post-installation contains the following sections:

- Environment Variables
- Starting and Stopping Components
- Component Port Numbers
- Component-specific Tasks
- Additional Documentation

Environment Variables

Table 5–1 lists the environment variables that must be set for Enterprise Edition installation option:

Table 5–1 Environment Variables

Environment Variable	Must Be or Include
ORACLE_ HOME	The *ORACLE_HOME* used for installing Oracle9*i* Application Server.
PATH	<ORACLE_HOME>/bin <ORACLE_HOME>/Apache/Apache/bin <ORACLE_HOME>/6iserver <ORACLE_HOME>/ifs1.1/bin <ORACLE_HOME>/6iserver/discwb33/util <ORACLE_HOME>/calypso/bin
LD_LIBRARY_ PATH	<ORACLE_HOME>/lib <ORACLE_HOME>/Apache/Apache/libexec <ORACLE_HOME>/icache/lib <ORACLE_HOME>/6iserver/reports60/lib <ORACLE_HOME>/6iserver/forms60/lib <ORACLE_HOME>/6iserver/network/jre11/lib/sparc/native_threads <ORACLE_HOME>/ifs1.1/lib <ORACLE_HOME>/6iserver/discwb33/lib <ORACLE_HOME>/panama/lib
ORACLE_SID	The same as the system identifier of the origin database. It should be set to the same value as entered during installation.

Starting and Stopping Components

Table 5–2 lists the commands needed to start and stop the components.

Table 5–2 Starting and Stopping Components

Component	Function	Command
Oracle HTTP Server	Start	`prompt> ./apachectl start`
	Stop	`prompt> ./apachectl stop`
Oracle HTTP Server (SSL-enabled)	Start	`prompt> ./apachectl startssl`
	Stop	`prompt> ./apachectl stop`
Oracle Database Cache	Start	`prompt> ./cachstrt`
	Stop	`prompt> ./cachshut`
Oracle Forms Services	Start	`prompt> ./forms60_server start`
	Stop	`prompt> ./forms60_server stop`
Oracle Reports Services	Start	`prompt> ./reports60_server start`
	Stop	`prompt> ./reports60_server stop`
Oracle Internet File System	Start	`prompt> ./ifsstart`
	Stop	`prompt> ./ifsstop`

Oracle Discoverer 3*i* Viewer	Start	`prompt> ./startlocator.sh`
		`prompt> ./startoad.sh`
		`prompt> ./startosagent.sh`

	Stop	`prompt> ./stoplocator.sh`
		`prompt> ./stopoad.sh`
		`prompt> ./stoposagent.sh`

Oracle Management Server	Start	`prompt> ./oemctrl start oms &`
	Stop	`prompt> ./oemctrl stop oms &`
Oracle Web Cache	Start	`prompt> ./webcachectl start`
	Stop	`prompt> ./webcachectl stop`

Note: To start or stop SSL-enabled Oracle HTTP Server, you must log in as the root user.

Component Port Numbers

Table 5–3 lists the default port numbers on which requests are received for each component.

Table 5–3 Port Numbers

Components	Port Number
Oracle Web Cache Oracle Web Cache Administration Port Oracle Web Cache Invalidation Port Oracle Web Cache Statistics Port	1100 4000 4001 4002
Oracle HTTP Server Oracle HTTP Server (SSL-enabled)	7777 80, 443
Oracle Database Cache	51719
Oracle Forms Services Load Balancer Client Load Balancer Server	9001 9011 9021
Oracle Reports Services	1950
Oracle Discoverer 3*i* Viewer	Oracle Discoverer 3*i* Viewer uses the same port number as Oracle HTTP Server
Oracle Internet File System	80
Oracle Portal	Oracle Portal uses the same port number as Oracle HTTP Server
Oracle Portal-to-Go	Oracle Portal-to-Go uses the same port number as Oracle HTTP Server

Component-specific Tasks

This section contains post-installation tasks for the following components:

- Oracle Internet File System
- Oracle Management Server
- Oracle Database Cache
- Oracle Portal-to-Go

Oracle Internet File System

You must run the Oracle Internet File System Configuration Assistant to configure Oracle Internet File System. For configuration instruction, refer to "Oracle Internet File System" on page A-8.

Oracle Management Server

You must run the Oracle Enterprise Manager Configuration Assistant to configure Oracle Management Server. For configuration instruction, refer to "Oracle Management Server" on page A-29.

Oracle Database Cache

Be sure to perform the following post-installation steps to configure Oracle Database Cache:

- Setting Up the Oracle Database Cache Environment for Your Applications
- Using the Oracle Database Cache Home
- Using a Previous Oracle8i Release 8.1.6 Oracle Home
- Relinking Applications That Use Releases Previous to Release 8.1.6
- Modify the initicache.ora File

Setting Up the Oracle Database Cache Environment for Your Applications

When you install Oracle Database Cache, the installation procedure installs files that are specific to Oracle Database Cache and files that are updates to Oracle8*i* Server or Client release 8.1.6.1. These files contain the Oracle Database Cache functionality, as well as bug fixes to files usually installed with the Oracle8*i* Server or Client.

To use Oracle Database Cache, you must make sure that your applications are using the files and libraries installed for Oracle Database Cache. You can do this in the following ways:

- Run your application from the Oracle home in which you installed Oracle Database Cache. This is the supported method. See "Using the Oracle Database Cache Home" for a description of the steps you must take.
- If you have multiple Oracle homes and you need to run your application from the Oracle home for Oracle8*i* Server or Client release 8.1.6 or 8.1.6.1, you must copy files from the Oracle Database Cache Oracle home to the Oracle8*i* Server or Client Oracle home. See "Using a Previous Oracle8i Release 8.1.6 Oracle Home" on page 5-34 for a description of the steps you must take.
- If your application was compiled and linked using a release prior to Oracle8i Server or Client release 8.1.6, you must relink your application using the OCI libraries that are installed by Oracle Database Cache. See "Relinking Applications That Use Releases Previous to Release 8.1.6" on page 5-35 for more information.

Using the Oracle Database Cache Home

To run your application from the Oracle home in which you installed Oracle Database Cache, you must take the following steps:

1. From the process in which you will run your application, set the following environment variables:
   - Set *ORACLE_HOME* to the Oracle home in which you have installed Oracle Database Cache.
   - Set LD_LIBRARY_PATH so that the Oracle Database Cache library directory (***ORACLE_HOME*/lib**) precedes library directories from other Oracle homes.
   - Set ORA_OCI_CACHE to “1” so that all applications started from the process will use the cache. (Alternatively, you can use parameters within OCI applications to control which applications or statements use the cache. See the *Oracle Database Cache Concepts and Administration Guide* for more information.)
   - If you use the environment variable TNS_ADMIN, make sure that it is set to the ***ORACLE_HOME*/network/admin** directory in the Oracle home for Oracle Database Cache.

2. If your application was running previously on the node on which you installed Oracle Database Cache and the application connected to the origin database by using an entry in an existing **tnsnames.ora** file, you must copy that entry to the **tnsnames.ora** file used by Oracle Database Cache.

   The **tnsnames.ora** file is located in the ***ORACLE_HOME*/network/admin** directory. Copy the entry from the file in the previously existing Oracle home to the **tnsnames.ora** file in the Oracle home in which you installed Oracle Database Cache.

   Note that the Oracle Database Cache installation creates an entry for the origin database in the **tnsnames.ora** file on the local cache node. It assigns the alias ora_icache_ origin. Do not modify or delete the ora_icache_origin entry. To assign a different alias for another purpose, edit the **tnsnames.ora** file and add another entry. The Oracle Database Cache installation also creates an entry, `ora_icache`, for the cache. Do not modify or delete this entry.

Using a Previous Oracle8*i* Release 8.1.6 Oracle Home

If you previously ran your application from the Oracle home for Oracle8*i* Server or Client release 8.1.6 or 8.1.6.1 and you continue to need to run your application from that Oracle home, you must take the following steps:

> **Note:** Use this method only if you cannot use the Oracle home for Oracle Database Cache. Do not use this method if your application ran from a release later than 8.1.6.1. Instead, refer to "Using the Oracle Database Cache Home" on page 5-33 for the recommended method.

1. Copy the following library files from the Oracle home in which you installed Oracle Database Cache to the Oracle home for the Oracle8*i* server or client that your application uses:
   - `<ORACLE_HOME>/lib/libclient8.a`
   - `<ORACLE_HOME>/lib/libgeneric8.a` (not required for 8.1.6.1)
   - `<ORACLE_HOME>/lib/libwtc8.so`
   - `<ORACLE_HOME>/lib/libwtc8.a`

2. Set the following environment variables to the Oracle home for the Oracle8*i* server or client that your applications uses:
   - Set *ORACLE_HOME* to the Oracle home.
   - Set *LD_LIBRARY_PATH* to ***ORACLE_HOME*/lib**.
   - Set *PATH* to include ***ORACLE_HOME*/bin**.
3. From the Oracle home for the Oracle8*i* server or client that your application uses, run the executable file **genclntsh**, which is located in the ***ORACLE_HOME*/bin** directory.
4. Copy the SQL*Plus executable file from the Oracle home in which you installed Oracle Database Cache to the Oracle home for the Oracle8i server or client that your application uses.
5. Set the value of the environment variable ORA_OCI_CACHE to "1" so that all applications started from the process will use the cache. (Alternatively, you can use parameters within OCI applications to control which applications or statements use the cache.)
6. If you use the environment variable or registry parameter TNS_ADMIN, make sure it points to the Oracle home that your application uses.
7. Copy the entries in the **tnsnames.ora** file from the Oracle home in which you installed Oracle Database Cache to the **tnsnames.ora** file in the Oracle home for the Oracle8*i* server or client that your application uses.

Relinking Applications That Use Releases Previous to Release 8.1.6

If your application was compiled and linked using a release prior to Oracle8*i* Server or Client release 8.1.6, you must relink your application using the OCI libraries that are installed by Oracle8*i* Cache.

For information about relinking applications, see *Oracle Call Interface Programmers Guide* and *Oracle8i Administrator s Reference* in the database documentation.

Then, you must take the steps described in "Using the Oracle Database Cache Home" on page 5-33.

Modify the initicache.ora File

The Oracle 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 (**init*SID*.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 file **initicache.ora** is located in the following directory:

***ORACLE_HOME*/admin/icache/pfile**

For information about setting up your caches and additional information about configuring your application environment, see the *Oracle Database Cache Concepts and Administration Guide*.

SSL Authentication Method Configuration

This section guides you through configuring Oracle Database Cache to use SSL and Oracle 8*i* JVM.

These steps guide you through the SSL configuration for the following:

Oracle Database Cache

To configure Oracle Database Cache to use SSL, remove the comment characters (#) from the following entry in the **listener.ora** file:

For secure connections over SSL, uncomment the following lines:

```
#  (DESCRIPTION = # Secure TCP connections
#      (ADDRESS =
#         (PROTOCOL = TCPS) (HOST = <host_name>) (PORT = 2484)
#      )
#  )
```

The listener will listen for all SSL requests.

Oracle Servlets Engine for Java

To configure Oracle Servlets for Java to use SSL, (in addition to removing the comment characters from the appropriate line in the initialization file) you must remove the comment characters (#) from the following entry in the **tnsnames.ora** file:

```
# Support for mod_ose over TCP with SSL connections.
# inst1_https =
#   (DESCRIPTION =
#      (ADDRESS =
#         (PROTOCOL=TCPS)
#         (HOST=<host_name>)
#         (PORT=2484)
#      )
#      (CONNECT_DATA=
#         (SERVICE_NAME=MODOSE)
#         (SERVER=shared)
#         (PRESENTATION=http://admin)
#      )
#   )
```

Distributed CORBA Applications and Enterprise Java Beans

To configure distributed CORBA application and Enterprise Java Beans to use SSL, (in addition to removing the comment characters from the appropriate line in the initialization file) you must remove the comment characters (#) from the following entry in the **listener.ora** file:

#For secure IIOP connections over SSL, uncomment the following lines:

```
# (DESCRIPTION = # Secure IIOP Connections
#    (PROTOCOL_STACK =
#       (PRESENTATION=GIOP)
#       (SESSION=RAW)
#     )
#    (ADDRESS=(PROTOCOL=TCPS)(HOST=% s_host_name%)(PORT=2482))
#  )
```

Multi-threaded Server Configuration

These steps guide you through configuring Oracle Database Cache as a Multi-threaded server for the following applications:

Oracle Servlets Engine for Java

To configure Oracle Database Cache as a multi-threaded server (MTS) for Oracle Servlets Engine for Java, you must make one or both of the following changes to your initialization file (**inst<SID>.ora**):

- For standard connections, remove the comment character (#) from the following line:

  ```
  # mts_dispatcher = "(PROTOCOL=TCP)(SERV=MODOSE)"
  ```

- To use the secure socket layer (SSL) authentication method, remove the comment character (#) from the following line:

  ```
  # mts_dispatcher = "(PROTOCOL=TCPS)(SERV=MODOSE)"
  ```

Distributed CORBA Applications and Enterprise Java Beans

To configure Oracle Database Cache as a multi-threaded server (MTS) for distributed CORBA applications and Enterprise Java Beans, you must make the following changes in your initialization file (**init<SID>.ora**):

- Remove the comment character (#) from the following line:

  ```
  # mts_dispatcher = "(PROTOCOL=TCP)(PRE=oracle.aurora.server.SGiopServer)"
  ```

- To use the secure socket layer (SSL) authentication method, remove the comment character (#) from the following line:

  ```
  # mts_dispatcher = "(PROTOCOL=TCPS)(SERV=oracle.aurora.server.SGiopServer)"
  ```

Oracle Portal-to-Go

The following section describes post-installation configuration instructions for Oracle Portal-to-Go:

- Oracle Portal-to-Go Web Integration Server Configuration
- Oracle Portal-to-Go Configuration Parameters
- Oracle Portal-to-Go Configuration Verification

Oracle Portal-to-Go Web Integration Server Configuration

Oracle Portal-to-Go Web Integration Server hosts services that applications can use to exchange data and information sources via the Web. The Web Integration Server is installed with the Oracle Portal-to-Go components.

Note: The Web Integration Developer, the development environment for creating and testing Web Integration services written in Web Interface Definition Language (WIDL), is installed as part of the Oracle Portal-to-Go client. For more information, refer to Appendix B, "Installing Oracle Portal-to-Go Client" on page B-1.

The following steps guide you through the configuration process of the Web Integration Server:

1. Run the Web Integration Server.

   From the ***ORACLE_HOME*/panama/WebIntergration/Server/bin** directory, type:

   ```
   prompt> ./server.sh &
   ```

2. From a browser, go to the Web Integration Server URL:

   http://*host_name.domain*:5555

3. Log in to the Web Integration Server with the user name **Administrator**, and password **manage**, which is the default password.
4. Select **Settings**. The server settings appear. Click **Edit**.
5. Enter the Proxy (HTTP) and Secure Proxy (HTTPS) settings for your environment.
6. Click **Submit**.
7. Click **Logout**.

Oracle Portal-to-Go Configuration Parameters

1. Configure the **httpd.conf** file.

   The **httpd.conf** file is in the ***ORACLE_HOME*/Apache/Apache/conf** directory.

   Create a Personalization Portal (papz) alias. This is needed so that the application server can find the **http://*hostname*/papz/login.jsp** URL. Add a line at the end of the Alias section:

   ```
   # PTG Start
   Alias /papz/ "<ORACLE_HOME>/panama/server/papz/"
   # PTG End
   ```

2. Configure the **jserv.conf** file.

   The **jserv.conf** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   In the ApJServMount section, add the Oracle Portal-to-Go specific mount point:

   ```
   # PTG Start
   ApJServMount /ptg /root
   # PTG End
   ```

3. Configure the **jserv.properties** file.

   The **jserv.properties** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   Next to the other "`wrapper.classpath`" entries, add all the required Oracle Portal-to-Go files to the classpath.

```
# PTG Start
wrapper.classpath=<ORACLE_HOME>/panama/server/classes
wrapper.classpath=<ORACLE_HOME>/panama/lib/panama_core.zip
wrapper.classpath=<ORACLE_HOME>/panama/lib/panama_papz.zip
wrapper.classpath=<ORACLE_HOME>/panama/lib/client.zip
wrapper.classpath=<ORACLE_HOME>/panama/lib/server.zip
# PTG End
```

4. Configure the **zone.properties** file.

   The **zone.properties** file is in the ***ORACLE_HOME*/Apache/Jserv/etc** directory.

   a. In the List of Repositories section, add the Oracle Portal-to-Go specific repository to the existing repository line with a comma (,) separator:

```
# PTG Start
repositories=<ORACLE_HOME>/Apache/Jserv/servlets,<ORACLE_HOME>/panama/se
rver/papz
# PTG End
```

   b. In the Startup Servlets section, add the Oracle Portal-to-Go specific servlets:

```
# PTG Start
servlets.startup=oracle.panama.ParmImpl
# PTG End
```

   c. In the Servlet Aliases section, add the Oracle Portal-to-Go specific servlets:

```
# PTG Start
servlet.rm.code=oracle.panama.ParmImpl
# PTG End
```

Oracle Portal-to-Go Configuration Verification

After installation, you can verify that individual Oracle Portal-to-Go components are properly configured:

1. Test the sample Java Servlet at the following URL:

   http://*host_name.domain*:7777/papz/test.jsp

   "Hello World" should appear on the screen.

2. Test whether the Personalization Portal is working properly by accessing the following URL:

   http://*host_name.domain*:7777/papz/login.jsp

   The login page should appear. The Personalization Portal prompts you to enter a user name and a password. You can log in using "Administrator" as the user name and "manager" as the password.

3. Run the Oracle Portal-to-Go Request Manager by accessing the following URL:

   http://*host_name.domain*:7777/ptg/rm

Additional Documentation

For more information regarding the post-installation tasks and configuration, refer to component-specific documentation in "Documentation Library Titles" on page D-2.

For additional Oracle Web Cache configuration instructions, you can access *Oracle Web Cache Administration and Deployment Guide* through the following URL:

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

6

Non-Interactive Installation

This chapter guides you through the non-interactive installation of Oracle9*i* Application Server.

You can perform a non-interactive installation of Oracle9*i* Application Server by supplying the Oracle Universal Installer with a *response file*. The installer uses the variables and values contained in this text file to provide answers to some or all of the installer user prompts. If you include responses for all of the installer prompts in the response file, then you can run a "silent" installation that displays no graphical output.

Contents

Setting a Response File

There are three Oracle Universal Installer response files, one for each installation type, included on the Oracle9*i* Application Server, Release 1.0.2 CD-ROM. You will need to edit the response file to suit your environment.

To use a response file, copy the response file from the Oracle9*i* Application Server CD-ROM to a drive mounted on your system. For example:

```
prompt> cd <mount_point>/Disk1/stage/Response/
prompt> cp oracle.iappserver.iapptop.Enterprise.rsp local_directory
```

Edit the response file you want to use with any text editor to include information specific to your system. Each file contains instructions for properly configuring the response file. Table 6–1 lists the response files included on the Oracle9*i* Application Server CD-ROM.

Table 6–1 Response Files

Oracle9*i* Application Server installation option	File Name
Oracle HTTP Server Only	`oracle.iappserver.iapptop.WebServerOnly.rsp`
Standard Edition	`oracle.iappserver.iapptop.Standard.rsp`
Enterprise Edition	`oracle.iappserver.iapptop.Enterprise.rsp`

Specifying a Response File

To make the installer use the response file at install time, follow the same steps as described in the section "About Oracle Universal Installer" on page 2-34, but specify the location of the response file that you wish to use as a parameter when starting the installer. To make a configuration assistant use a response file, invoke it at the command line using the same parameters.

```
prompt> ./runInstaller [-silent] -responseFile <absolute_path_and_filename>
```

To perform a completely silent installation or configuration session, use the `-silent` parameter.

To run Oracle Enterprise Manger Configuration Assistant in non-interactive mode, you must use both the `-silent` and `-responseFile` parameters.

For Oracle9*i* Application Server, Enterprise Edition installation, if you select Oracle Database Cache to start up automatically after installation, then Oracle Database Cache Configuration Assistant appears. The Oracle Database Cache Configuration Assistant does not run in silent mode so you will have to run it manually to have a successful installation.

The success or failure of the installation is logged in the **installActions.log** and **silentInstall.log** file. The log files are created in the **oraInventory** directory during installation. For more information, refer to "oraInventory Directory" on page 2-34.

> **Note:** The installer or configuration assistant will fail if you attempt a non-interactive session without appropriately configuring a response file.

Error Handling

Values for variables that are of the wrong context, format, or type are treated as if no value were specified. Variables which are outside any section are ignored.

A non-interactive installation fails if no response file is specified, or if you attempt a silent installation with an incorrect or incomplete response file. If you attempt a silent installation and the installer encounters an error, such as insufficient disk space, then the installation fails. The results of your non-interactive installation is recorded in the installation session log file. For more information, refer to "oraInventory Directory" on page 2-34.

Validation of Values from Response File

The installer or configuration assistant performs calculation and validation of the response file at runtime. Failure of the validation process ends the installation or configuration.

7

De-installation and Re-installation

This chapter guides you through the de-installation process and re-installation options for Oracle9*i* Application Server. It lists basic steps for a quick de-installation process and provides detailed information for reference.

Contents

De-installation

The following steps guide you through the de-installation process of Oracle9*i* Application Server. This process is divided into three parts:

- De-installing Oracle Discoverer 3i Viewer
- De-installing Oracle Database Cache (only if you have installed Enterprise Edition)
- De-installing Oracle9i Application Server

De-installing Oracle Discoverer 3*i* Viewer

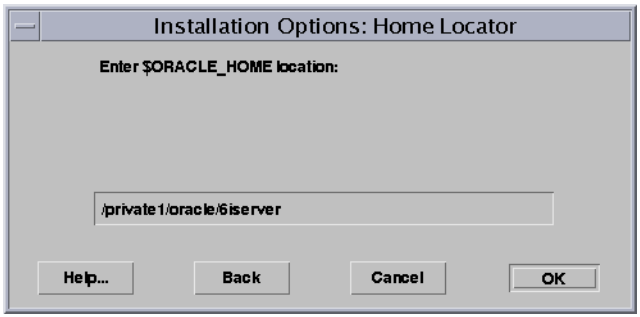
Follow the instructions below to deinstall Oracle Discoverer 3*i* Viewer.

1. Launch Oracle Installer from the following command:

```
prompt> cd <ORACLE_HOME>/6iserver/orainst
prompt> ./orainst /m
```

2. Enter the Oracle home location and click **Next**.

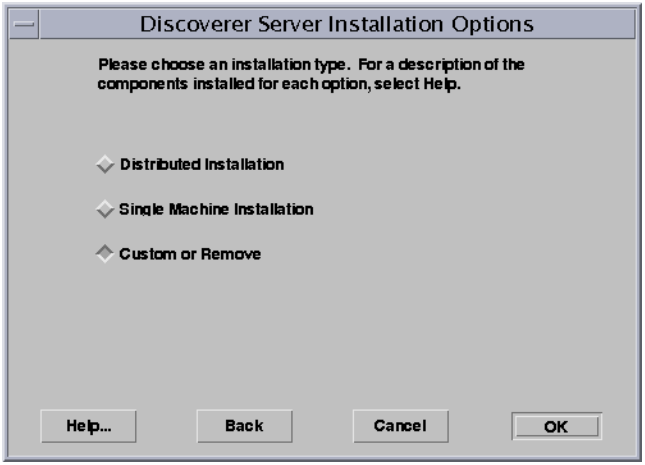
Figure 7–1 Oracle Home Location Screen



Oracle Home Location screen allows you to enter the Oracle home location of Oracle Discoverer 3*i* Viewer. Be sure to enter ***ORACLE_HOME*/6iserver** in the field.

3. Select **Custom or Remove**, and click **Next**.

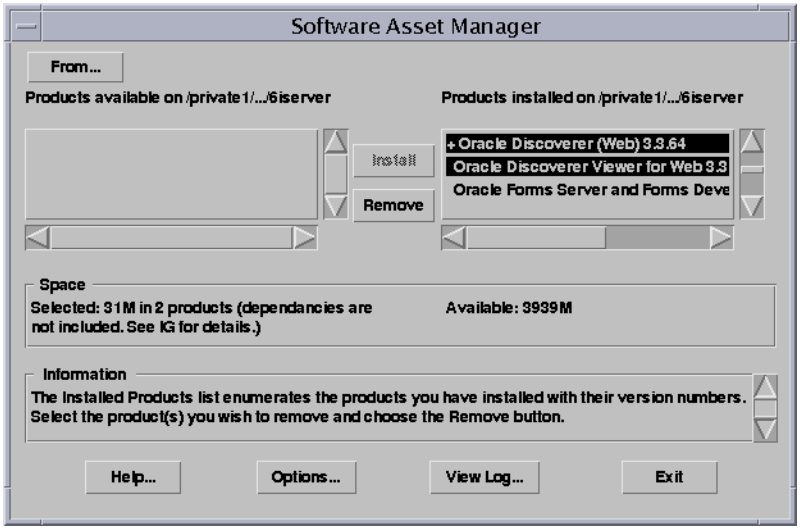
Figure 7–2 Discoverer Server Installation Options Screen



Discoverer Server Installation Options screen provides you with installation and deinstallation options. Select **Custom or Remove**.

4. Select Oracle Discoverer (Web), and Oracle Discoverer Viewer for Web, and click **Remove**.

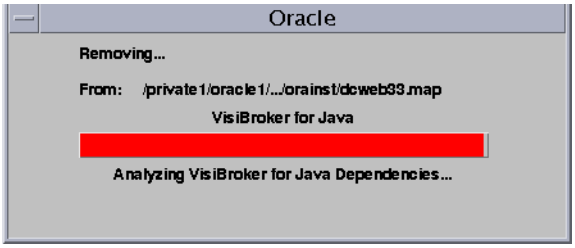
Figure 7–3 Software Asset Manager Screen



Software Asset Manager screen allows you to select the components you wish to deinstall. Scroll down the list and select Oracle Discoverer (Web), and Oracle Discoverer Viewer for Web. Do **not** select any other components. When you click on **Remove**, you will get a confirmation screen asking if you wish to remove the selected components. Click **Yes**.

5. Monitor the deinstallation process.

Figure 7–4 Deinstallation Progress Bar Screen



6. Once the deinstallation process concludes, quit the installer by clicking **Exit**.

You have successfully deinstalled Oracle Discoverer 3*i* Viewer. Continue the deinstallation process:

- If you installed Enterprise Edition, proceed to "De-installing Oracle Database Cache" on page 7-7.
- If you installed Oracle HTTP Server Only or Standard Edition, proceed to "De-installing Oracle9i Application Server" on page 7-8.

De-installing Oracle Database Cache

If you have installed the Enterprise Edition of Oracle9*i* Application Server, then you must perform the following steps. If you have installed any other edition of Oracle9*i* Application Server, then proceed directly to De-installing Oracle9i Application Server.

1. Make sure the cache is started. If it is not, then start the cache using the Cache Manager or the **cachstrt** script, which is located in ***ORACLE_HOME*/bin** directory.
2. Run the Configuration Assistant, specifying the **-deinstal**l option:

   ```
   prompt> wtacca -deinstall
   ```

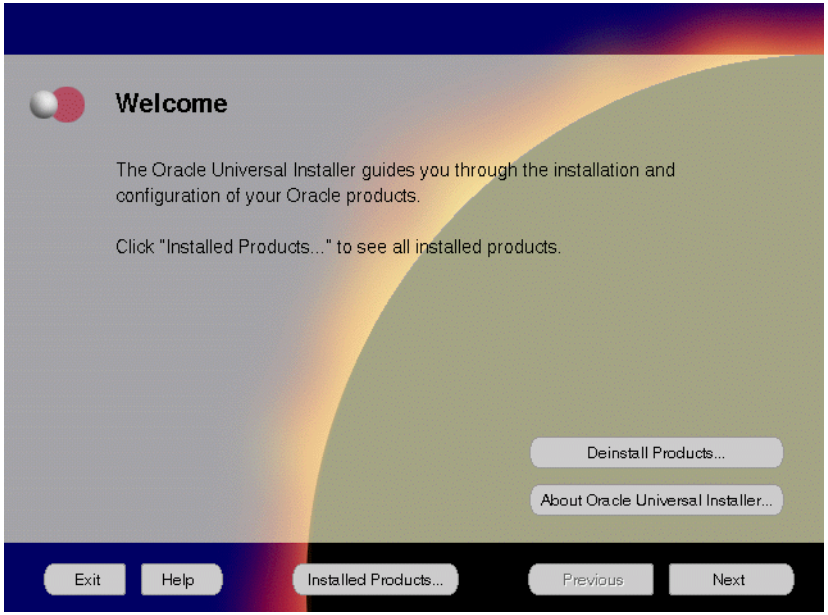
3. Proceed to De-installing Oracle9i Application Server. You can ignore the error message generated by the configuration assistant and continue to use Oracle Universal Installer to deinstall.

De-installing Oracle9*i* Application Server

1. Start the Oracle Universal Installer. For information on starting the installer, refer to "Starting Oracle Universal Installer" on page 2-35.

   Once Oracle Universal Installer is launched, Welcome screen appears. Click on **Deinstall Products**.

Figure 7–5 Welcome Screen



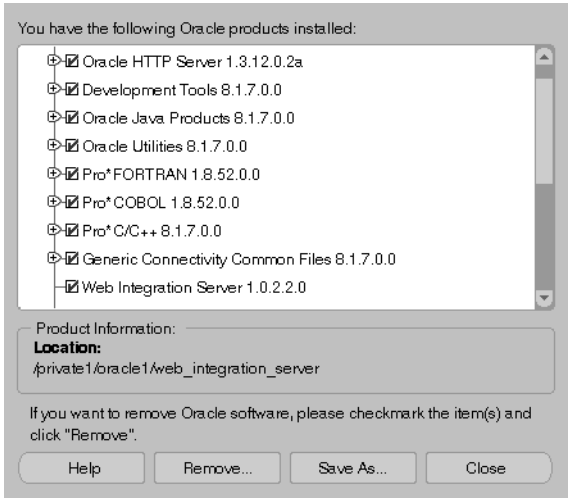
The Welcome screen provides information about Oracle Universal Installer.

The installer provides you with two ways to deinstall products:

- **Deinstall Products**: To de-install individual components or the entire product.
- **Installed Products**: To view currently installed products and de-install individual components or the entire product.

2. Review all installed components and check the ones you wish to deinstall. Click **Remove**.

Figure 7–6 Inventory Screen



The Inventory screen appears when you click **Deinstall Products** on the Welcome screen, or **Installed Products** on any screen.

The Inventory screen displays all the components installed in *ORACLE_HOME*.

The following buttons appear on the Inventory screen:

- **Help**: To access detailed information about the functionality of the Inventory screen.
- **Remove**: To de-install all checked components from *ORACLE_HOME*.
- **Save As**: To save the inventory as text. A file browser dialog pops us when you click **Save As**. Accept a file name and the complete inventory list as displayed by the inventory screen will be logged into this file as text.
- **Close**: To quit the Inventory screen.
- **Location**: To view the full location path of the selected component.

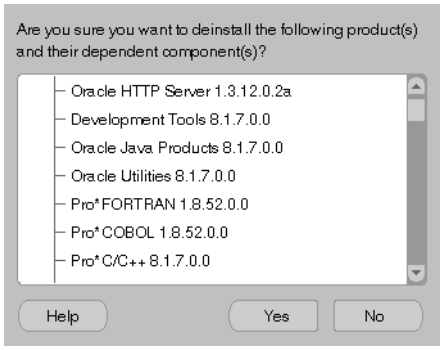
Note: The "+" sign before a product name indicates that there are more components and files installed within that particular product. Click on it to view dependent components. If you choose to remove a product or component, then all of its dependent components and files are also de-installed.

If you wish to deinstall Oracle9*i* Application Server completely, check the box displayed before the product name, which is listed directly below the *ORACLE_HOME* name.

Note: If you de-install a product or component, then all of its dependent components and files will also be de-installed.

3. Verify the components selected for de-installation, and click **Yes**.

Figure 7–7 Confirmation Screen



The Confirmation screen lists all the components selected for de-installation in the previous step. Scroll down the screen to verify selected components.

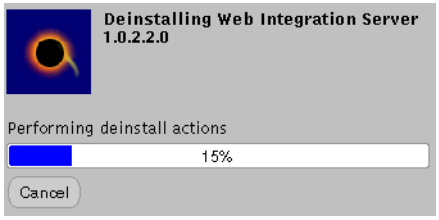
Note: Oracle Universal Installer does not de-install all the files and directories during de-installation. These must be deleted manually.

The following buttons appear on the Confirmation screen:

- **Help**: To access detailed information about the functionality of the Confirmation screen.
- **Yes**: To start de-installation of listed components.
- **No**: To return to the Inventory screen. Listed components are not removed from *ORACLE_HOME*.

4. Monitor the de-installation process.

Figure 7–8 Remove Progress Bar Screen



The Remove Progress Bar screen appears when you click **Remove**. The installer detects all components chosen for de-installation from the Inventory screen and removes them from *ORACLE_HOME*.

- **Cancel**: To discontinue the de-installation process.

Note: If you de-install a product or component, then all of its dependent components and files will also be de-installed.

You have successfully deinstalled Oracle9*i* Application Server.

Re-Installation

Oracle Universal Installer does not allow re-installation of Oracle9*i* Application Server over an already installed version. To re-install Oracle9*i* Application Server over the same version, deinstall using the steps listed in"De-installation" on page 7-2, and then install the product.

A

Configuration Tools

This appendix guides you through the steps required to run component-specific configuration assistants to configure Oracle9*i* Application Server. It contains instructions on manually launching, and running the configuration assistants to configure the components you chose not to configure during installation.

Contents

Component-specific Configuration Assistants

This section contains instructions on manually launching, and running configuration assistants for the following components:

- Oracle Database Cache
- Oracle Internet File System
- Oracle Portal
- Oracle Management Server
- Oracle Database

Oracle Database Cache

Before you can run the Oracle Database Cache Configuration Assistant, you need to configure the `ora_icache_origin` service manually.

The **tnsnames.ora** in the ***ORACLE_HOME*/network/admin** directory has the following entry after installation:

```
ora_icache_origin =
    (DESCRIPTION =
        (ADDRESS_LIST =
            (ADDRESS =
               (PROTPCOL = TCP)
               (HOST = <ORIGINHostName>)
               (PORT = originPortNumber>))
             )
        (CONNECT_DATA =
            (SERVICE_NAME = <originServiceName>)
        )
    )
```

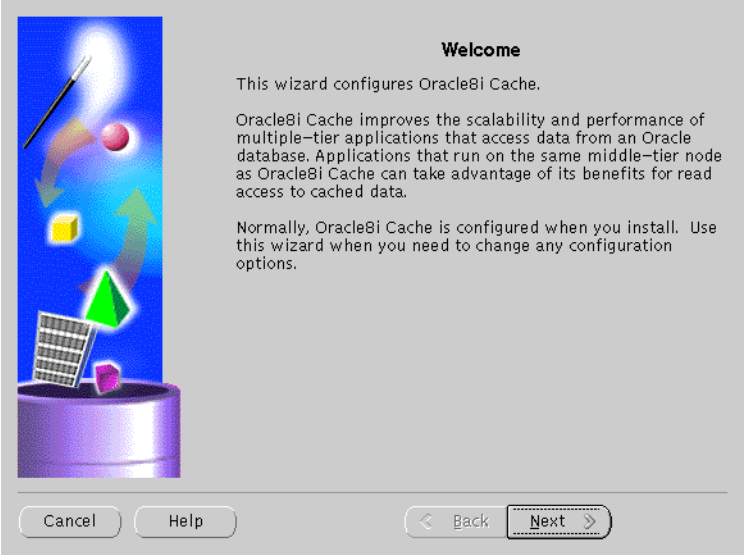
Fill in the origin host name, port and service name in **tnsnames.ora** file as per the above example before running the following command to launch the Oracle Database Cache Configuration Assistant:

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

The following steps guide you through the Oracle Database Cache Configuration Assistant:

1. Review the Oracle Database Cache Configuration Assistant welcome screen and click **Next**.

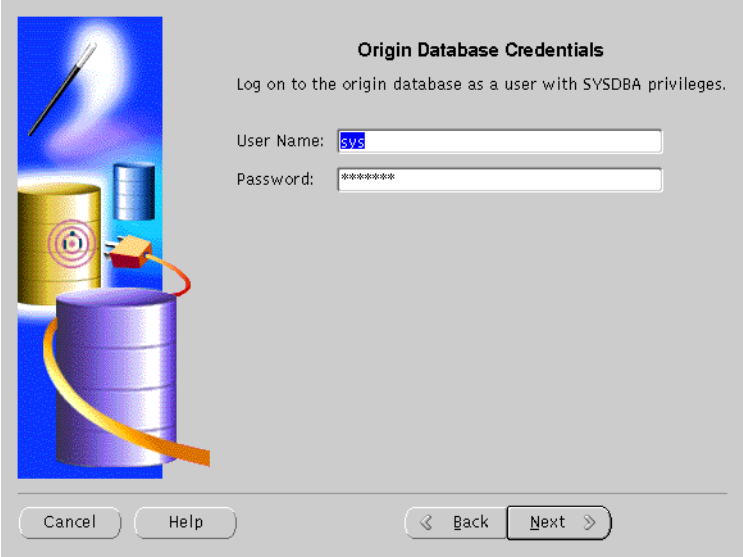
Figure A–1 Welcome Screen



The Welcome screen introduces you to the Oracle Database Cache Wizard.

2. Enter the privileged account information and click **Next**.

Figure A–2 Origin Database Credentials Screen

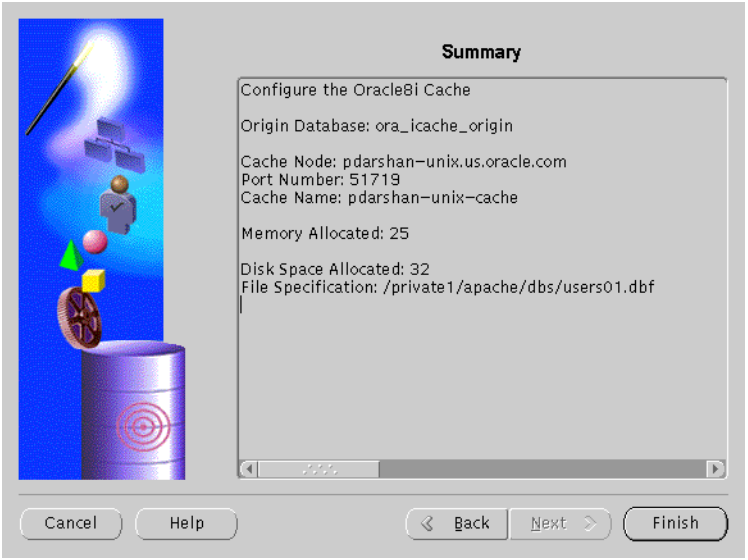


The Oracle Database Credentials screen specifies the database that is the original and primary storage for the data that you cache on the middle-tier node.

- **User Name**: The name of a user on the origin database who has the SYSDBA role. This field defaults to the information you entered in the Origin Database User Information screen during installation.
- **Password**: The password of the specified user. This field defaults to the information you entered in the Origin Database User Information screen during installation.

3. Review the summary screen and click **Finish** to configure the cache.

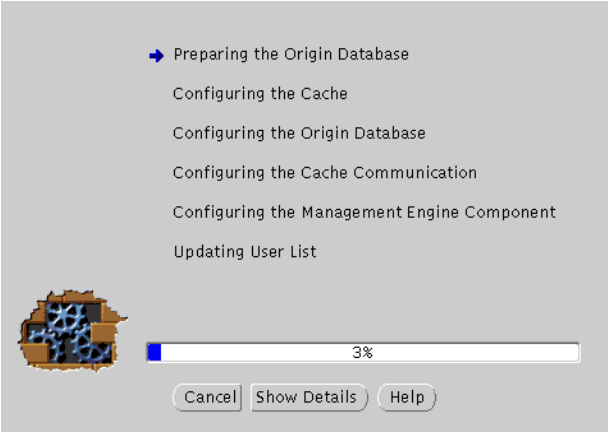
Figure A–3 Summary Screen



The Summary screen provides information about the origin database, cache node, port number, cache name, memory and disk space allocated.

4. Monitor the Configuration Assistant as it configures your cache.

Figure A–4 Cache Configuration Assistant Progress Screen



The Cache Configuration Assistant Progress screen informs you of the results of the configuration.

- **Show Details**: To display detailed result of the configuration.

Oracle Internet File System

The following command launches the Oracle Internet File System Configuration Assistant:

```
prompt> <ORACLE_HOME>/ifs1.1/bin/ifsconfig
```

Note: Be sure that the origin database is running to store the Oracle Internet File System schema. You must have a TNS name that maps to that database instance.

The following steps guide you through the Oracle Internet File System Configuration Assistant:

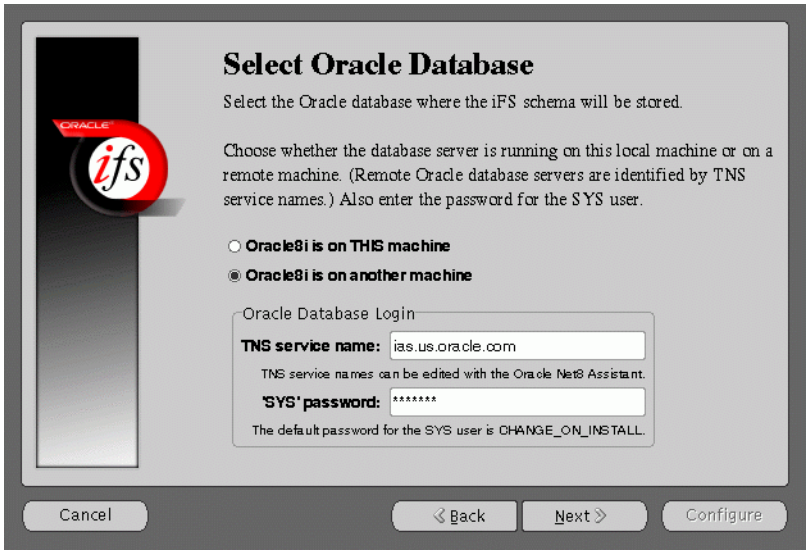
1. Review the Welcome screen and click **Next**.

Figure A–5 Welcome Screen

The Welcome screen introduces you to the Oracle Internet File System Configuration Assistant and allows you to review the licensing agreement before you can proceed to configure Oracle Internet File System.

2. Select the database to store Oracle Internet File System, and click **Next**.

Figure A–6 Select Oracle Database Screen



Select Oracle Database screen allows you to choose where the Oracle Internet File System schema will be stored. Select whether the origin database is on the local machine or on the remote machine other than the Oracle Internet File System server machine currently being configured.

Note: Be sure to connect, and store objects in the origin database or any Oracle8*i* database that you have access to. Otherwise you will get an error stating that the `sys` user is locked.

If you select Oracle8*i* on THIS machine, then you will have to fill in the SYS password field.

If you select Oracle8*i* on another machine, then you will have to enter the TNS service name and the SYS password in their respective fields.

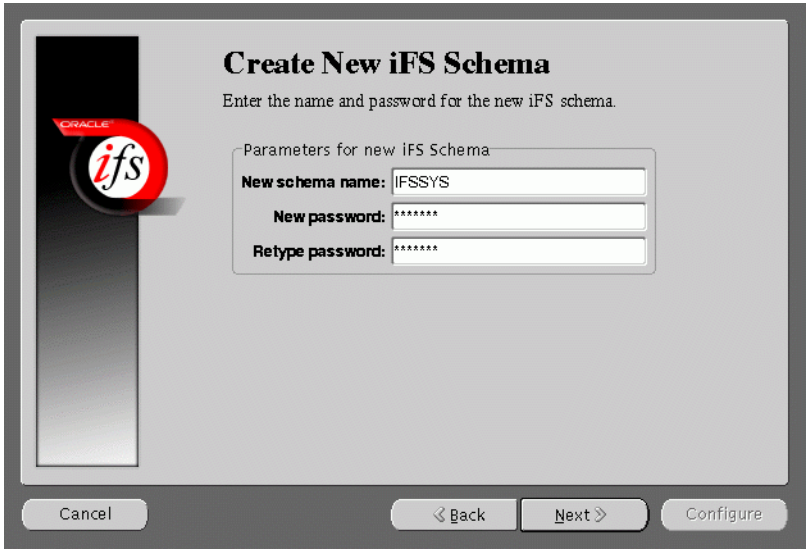
- **TNS Service Name**: This is used to identify the database server you want to use for Oracle Internet File System. The TNS Name specifies the hostname, port, protocol, and service name for the database. For more information, refer to *Net8 Administration Guide*.

- **SYS Password**: This is the password for the SYS database account.

If an error occurs, you will be required to correct the database connection information before continuing.

3. Enter an Oracle database username and password for a new schema, and click **Next**.

Figure A–7 Create New iFS Schema Screen



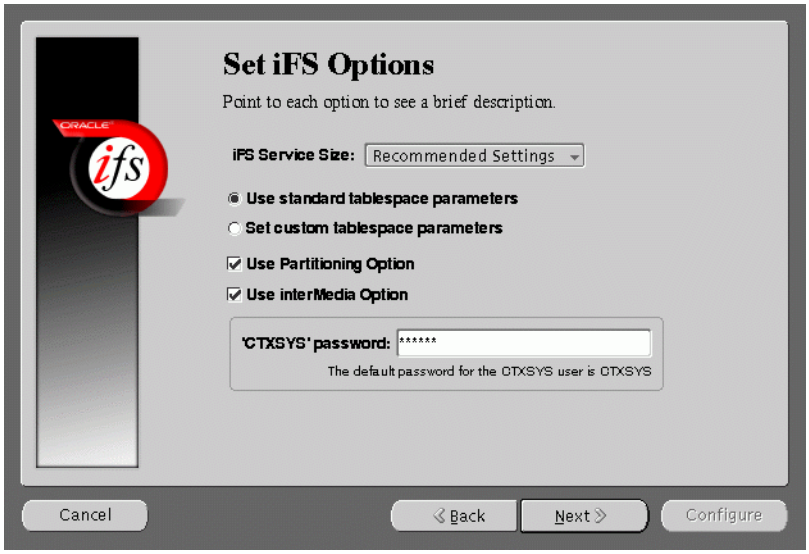
Create New *i*FS Schema screen allows you to specify an Oracle database username and password for the new schema.

- **New Schema Name**: Enter the Oracle database username for the new schema. The default username is **ifssys**.
- **New Password**: Enter the password for the Oracle database user for the new schema.
- **Retype Password**: Re-enter the new schema user password for confirmation.

If you choose to create a new schema with the same name as an existing schema, a warning message appears. Creating a new schema with the same name as an existing schema will drop the existing schema.

4. Set the necessary Oracle Internet File System options, and click **Next**.

Figure A–8 Set iFS Options Screen



Set *i*FS Options screen allows you to set certain schema options and to select a service size for your Oracle Internet File System server. There are two choices for the Oracle Internet File System server size:

- Minimum requirements
- Recommended settings

If you are creating a new Oracle Internet File System schema, then you can choose whether to use standard tablespace parameters, or to specify custom tablespace parameters.

- **Standard Tablespaces**: By default, the Oracle Internet File System configuration creates six tablespaces used to store the data in the Oracle Internet File System schema. The database files for these tablespaces are placed in the same location (on the database machine) as the SYSTEM tablespace, which is usually found under ***ORACLE_HOME*/oradata/<*global_dbname*>)**. Oracle recommends storing each of these tablespaces on separate disks for best performance.

  - Primary: Stores metadata for documents. information about users and groups, and other Oracle Internet File System data.

- Non-Indexed Medias: Stores the LOB data for documents that are not indexed by interMedia, such as image, audio, and video files.

- Indexed Media: Stores the LOB data documents that are indexed by interMedia, such as text and word processing files.

- interMedia Index: Stores the Oracle indexed on interMedia data.

- interMedia Keymap: Stores the mapping between interMedia Text information and Oracle Internet File System information.

- interMedia Data: Stores the interMedia data about Oracle Internet File System documents.

- **Custom Tablespaces**: Choosing the custom tablespaces option displays six additional pages where the custom tablespace information can be entered. These pages allow experienced database administrators to create customized tablespaces for Oracle Internet File System or to select existing tablespaces.

  - Partioning Option: Improves performance. Available only with Oracle8*i* Enterprise Edition.

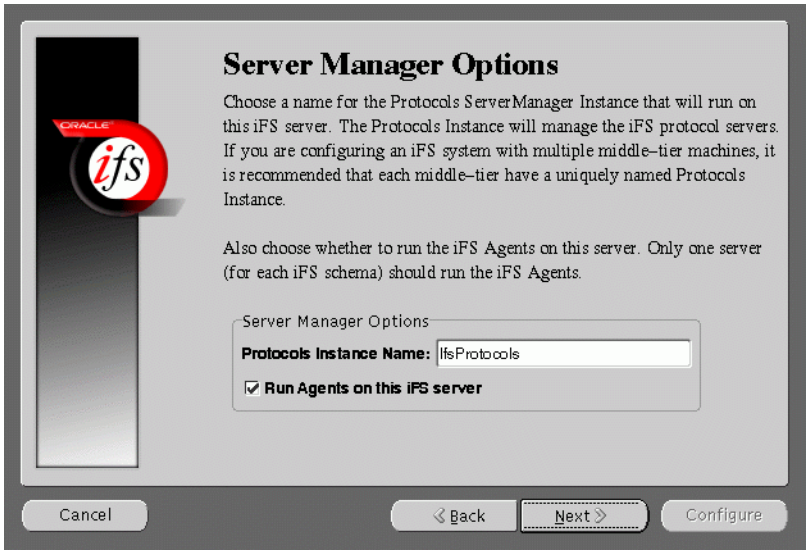
  - interMedia Option: If you have installed interMedia Text, then select this option to use interMedia Text for searching document contents.

  - CTXSYS: If you choose the interMedia Text option, then enter the password for the interMedia CTXSYS account. The default password is **CTXSYS**.

If you have chosen to use interMedia Text, the Configuration Assistant will verify the interMedia configuration when you click the **Next** button. If an error occurs. then you will not be able to choose the interMedia Text option unless you rectify the error.

5. Enter the Protocol Instance Name, and click **Next**.

Figure A–9 Server Manager Options Screen

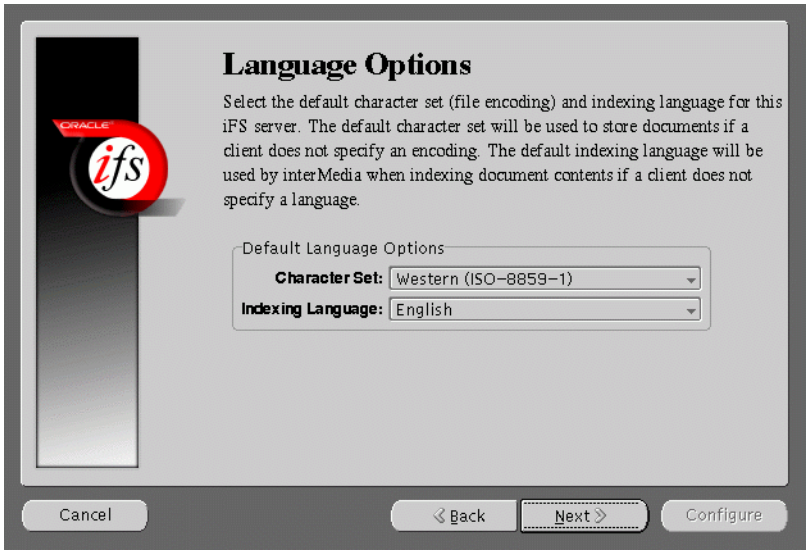


Server Manager Options screen allows you to enter a name for the Protocols Server Manager Instance that will run on this Oracle Internet File System server.

- **Protocol Instance Name**: Enter the Protocols Server Manager Instance name that will run on this Oracle Internet File System server. The Protocols Instance will manage the Oracle Internet File System protocol servers. If you are configuring an Oracle Internet File System system with multiple middle-tier machines, then it is recommended that each middle-tier have a uniquely names Protocols Instance.
- **Run Agents on This iFS Server**: Choose whether to run the Oracle Internet File System Agents on this server. Only one server for each Oracle Internet File System schema should run the Oracle Internet File System Agents.

6. Select the default character set and indexing language, and click **Next**.

Figure A–10 Language Options Screen

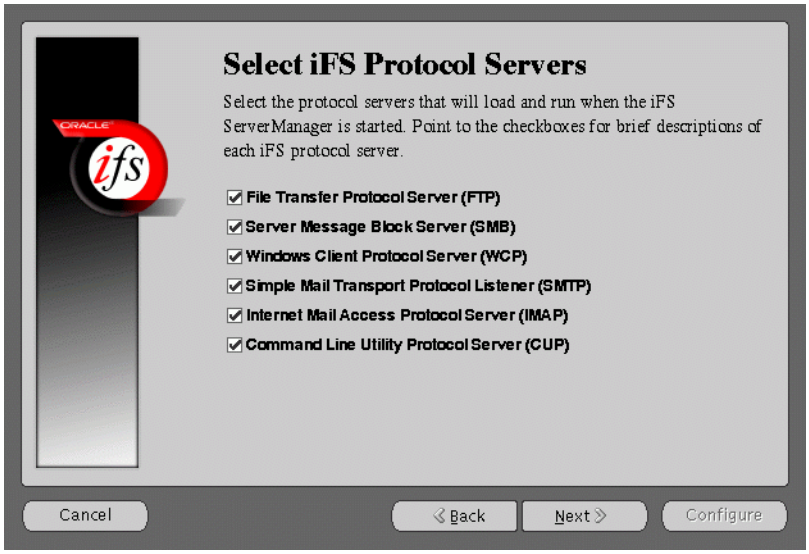


Language Options screen allows you to select the Character set and indexing language for this Oracle Internet File System server.

- **Character Set**: Select the default character set (file encoding). The default character set will be used to store documents if a client does not specify an encoding.
- **Indexing Language**: Select the default indexing language. The default indexing language will be used by interMedia when indexing document comment contents if a client does not specify a language.

7. Select the required Oracle Internet File System protocol serves, and click **Next**.

Figure A–11 Select iFS Protocol Servers Screen



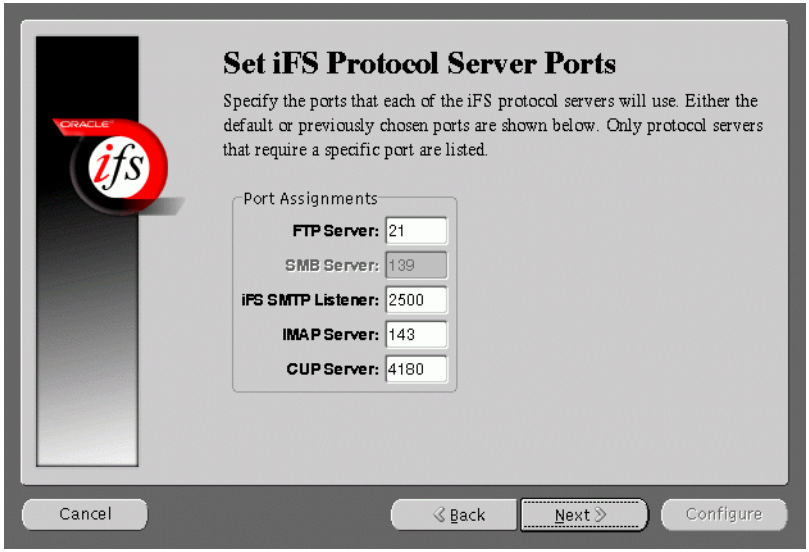
Select *i*FS Protocol Servers screen allows you to select the protocol servers to configure for this Oracle Internet File System server. The following protocol servers are available:

- File Transfer Protocol Server (FTP)
- Server Message Block Server (SMB)
- Windows Client Protocol Server (WCP)
- Simple Mail Transport Protocol Listener (SMTP)
- Internet Mail Access Protocol Server (IMAP)
- Command Line Utility Protocol Server (CUP)

For more information on configuration of these protocols, refer to *Oracle Internet File System Setup and Administration Guide*.

8. Select the port numbers for the Oracle Internet File System protocol servers, and click **Next**.

Figure A–12 Set iFS Protocol Server Ports Screen



Set *i*FS Protocol Server Ports screen allows you to set port numbers for the protocol servers you selected in the previous screen. The following is a list of protocol servers and their default port numbers:

- **FTP Server**: Port 21
- **SMB Server**: Port 139 (not configurable)
- ***i*FS SMTP Listener**: Port 2500
- **IMAP Server**: Port: 143
- **CUP Server**: Port 4180

When you click the **Next** button, the port availability on your computer is tested. If a port is already in use, a warning screen appears. A common port conflict can arise because the standard Solaris installation includes a FTP server on port 21, which conflicts with the Oracle Internet File System FTP server. You must resolve such conflicts before starting the Oracle Internet File System protocol servers.

9. Enter your Oracle Internet File System Email Domain, and click **Next**.

Figure A–13 Configure iFS Email Screen

Configure *i*FS Email screen allows you to enter the *i*FS Email domain.

- **Use NIS for *i*FS Email**: Click on the check box to use NIS (Network Information System) for your Oracle Internet File System email package.
- ***i*FS Email Domain**: Enter the default email domain for the users you will create on your Oracle Internet File System server. This option is available only if you are creating a new Oracle Internet File System schema.

10. Review the screen and click **Configure** to begin the Oracle Internet File System configuration process.

Figure A–14 Begin iFS Configuration Screen

Begin *i*FS Configuration screen informs the users of the configuration process, and displays the location for the log files.

Once you have started the configuration process, a progress window appears. indicating the progress of the Oracle Internet File System configuration. If an error occurs, check the log files that are displayed on the Begin iFS Configuration screen.

A dialog box appears noting that the configuration was successfully completed. You are then prompted to run the **ifssetup** script as a root user. The script is located in the ***ORACLE_HOME*/ifs/bin** directory. This script will configure your system for Oracle Internet File System email, if this option was selected.

Oracle Portal

The following command launches the Oracle Portal Configuration Assistant:

```
prompt> <ORACLE_HOME>/assistants/opca/launch.sh
```

The following steps guide you through the Oracle Portal Configuration Assistant:

1. Choose the first installation option to install Oracle Portal and the Login Server and click **Next**.

Figure A–15 Installation Options Screen

The Installation Options screen allows you to install and deinstall Oracle Portal. Selecting "Install Oracle Portal and the Login Server" installs the Oracle Portal schema and the Login Server onto your database.

2. Enter the database connection information and click **Next**.

Figure A–16 Database Authentication Screen

The Database Authentication screen allows you to specify the database connection information granting the Configuration Assistant database access to install the Oracle Portal database objects.

Note: Be sure to connect, and store objects in the origin database or any Oracle8*i* database that you have access to. Otherwise you will get an error stating that the `sys` user is locked.

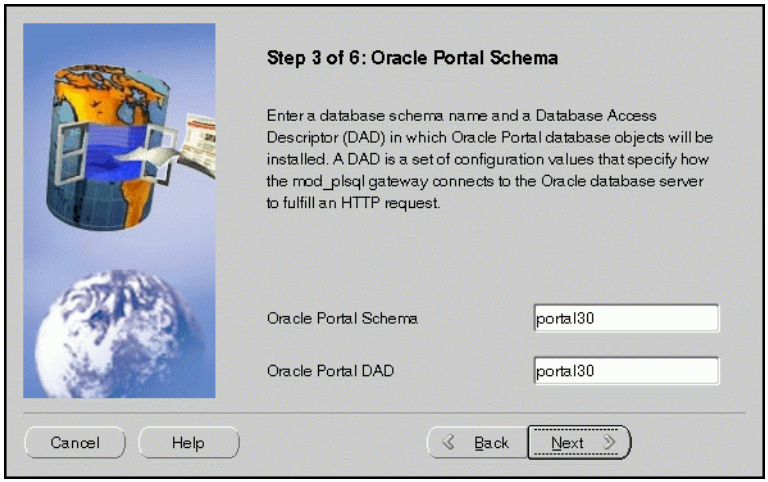
- **SYS Password**: Enter the SYS password for the database on which you want to install Oracle Portal database objects. When an Oracle database is created, the user SYS, identified by the password `CHANGE_ON_INSTALL`, is automatically created and granted the DBA role.
- **Connection Information**: Enter the connect information in the following format: `HOSTNAME:PORT:SID`

  Example: `oasdocs:1521:orcl`

  where **hostname** is the domain name and machine where you want to install Oracle Portal, **port** is the port number on which the Oracle8*i* database is running, and **SID** is the database name which uniquely identifies a node's instance. The default SID name is `orcl`.

3. Enter the Oracle Portal Schema and Oracle Portal DAD names, and click **Next**.

Figure A–17 Oracle Portal Schema Screen



Oracle Portal Schema screen allows you to enter the Schema and DAD name. These *must* match the Oracle Portal Schema and DAD name you entered during the installation process on the Apache Listener Configuration for Oracle Portal (DAD and Schema name) screen. The default is `portal30`.

4. Enter the SSO Schema and SSO DAD names for the Login Server, and click **Next**.

Figure A–18 Single SIgn-On Schema Screen

Single Sign-On Schema screen allows you to enter the SSO Schema and DAD name. These *must* match the SSO Schema and DAD name you entered during the installation process on the Apache Listener Configuration for Oracle Portal (Login Server) screen. The default is `portal30_sso`.

5. Enter the tablespace names for Oracle Portal installation. Click **Next**.

Figure A–19 Tablespace Options Screen

Tablespace Options screen allows you to enter the tablespace names for Oracle Portal. Choose from the list of tablespaces. For more information, refer to Table A–1.

Table A–1 Tablespace Options

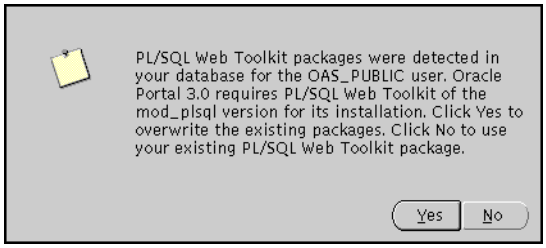
Field	Description
Default Tablespace	Used to store any database objects or components created by the Oracle Portal user. Required minimum: 100 MB
Temporary Tablespace	Improves the concurrence of multiple sort operations, reduce their overhead, or avoid Oracle space management operations altogether. Used for the creation of temporary table segments for operations performed by the Oracle Portal user such as sorting table rows.

Table A–1 Tablespace Options

Field	Description
Document Tablespaces	Used to store any items uploaded onto an Oracle Portal content area. These item types can include files, images, folders, and stored procedures. **Note**: The Document Tablespace will gradually fill as users add items to Oracle Portal content area. You should choose a tablespace large enough to accommodate these additions or a tablespace that automatically extends itself. Size the document tablespaces according to the planned size of your content areas.
Logging Tablespace	Name of the tablespace where the logs are stored. These contain logging information such as end user requests for components and information about the time of the request, the end user who made the request, the machine and browser that was used, and when an Oracle Portal developer created or last edited the component. Additional logging information includes database storage allocated to users, objects, and tablespaces, memory allocation, object creation dates, objects created during a given time span, rollback segment attributes, session locks, redo logs, and DBMS jobs.

6. Determine if you want to overwrite or keep the existing PL/SQL Web Toolkit packages. Click **Yes** or **No** accordingly.

Figure A–20 PL/SQL Web Toolkit Screen



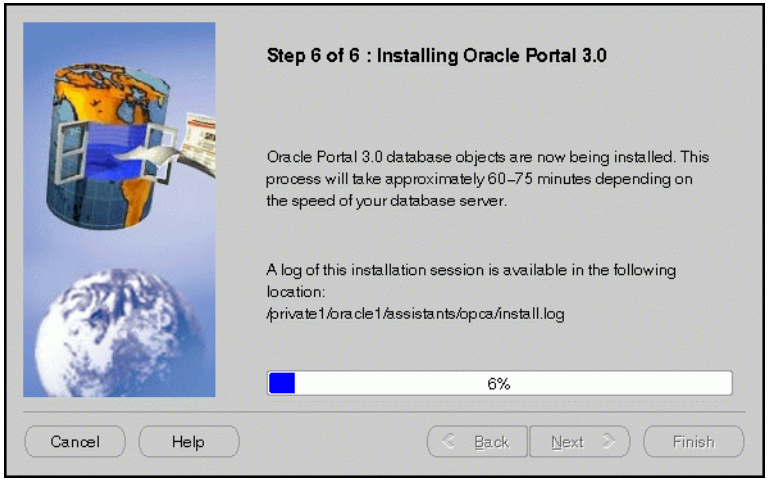
PL/SQL Web Toolkit screen appears only if the configuration assistant detects that PL/SQL Web Toolkit packages already exist on your machine. Click **Yes** to overwrite the existing packages, or click **No** to keep the existing PL/SQL Web Toolkit packages.

Note: Oracle Portal requires the latest version of PL/SQL Web Toolkit packages. If you are unsure if your existing packages are compatible with PL/SQL Gateway, click **Yes** to install the correct version.

---

7. Monitor the progress of the configuration assistant as the database objects are installed.

Figure A–21 Installing Oracle Portal Screen



Installing Oracle Portal screen displays a database objects installation progress bar. Please be patient and refrain from using your machine while this is underway. This process may a long time to complete.

8. Make note of the information, and click **OK**.

Figure A–22 Summary Screen

Summary screen appears at the end of installation. It reveals information about accessing the Oracle Portal Home page, Login Server page and the gateway settings page. For your convenience, make note of this information before clicking **OK**.

9. An installation session log that describes the actions performed and the components installed is creates. You can check the log fine for ORA and PLS errors that may have occurred during installation. The log file is located in the following locations:

   `<ORACLE_HOME>/assistants/opca/install.log`

Oracle Management Server

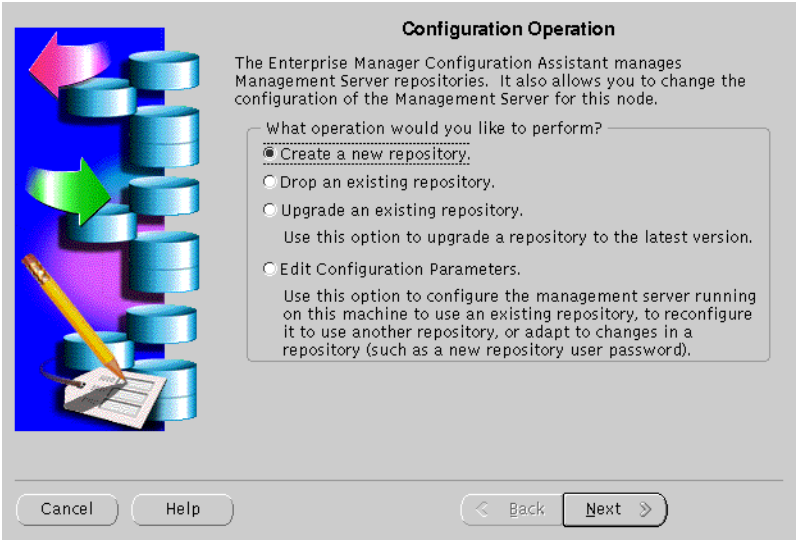
The following command launches the Oracle Enterprise Manager Configuration Assistant:

```
prompt> <ORACLE_HOME>/bin/emca
```

The following steps guide you through the Oracle Enterprise Manager Configuration Assistant:

1. Select "Create a new repository" and click **Next**.

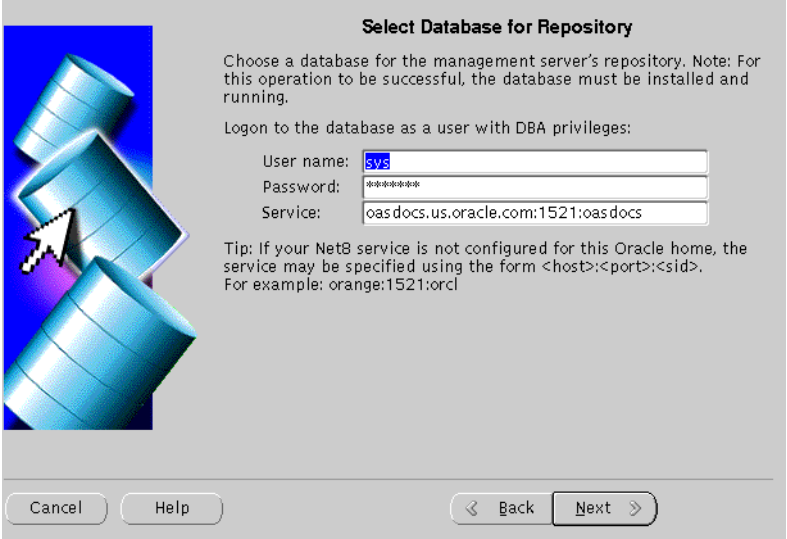
Figure A–23 Configuration Operation



Configuration Operation Screen allows you to create, drop, or upgrade a repository. It also enables you to edit your configuration parameters.

2. Enter the host name, password, and service information, and click **Next**.

Figure A–24 Select Database for Repository Screen



Select Database for Repository screen allows you to enter database information for the management server's repository. Be sure to log in as a user with DBA privileges.

- **User name**: Enter a user name, with DBA privileges.
- **Password**: Enter the password for the username.
- **Service**: Enter the *<host>:<port>:<SID>* for the database.

3. Enter the repository login information, and click **Next**.

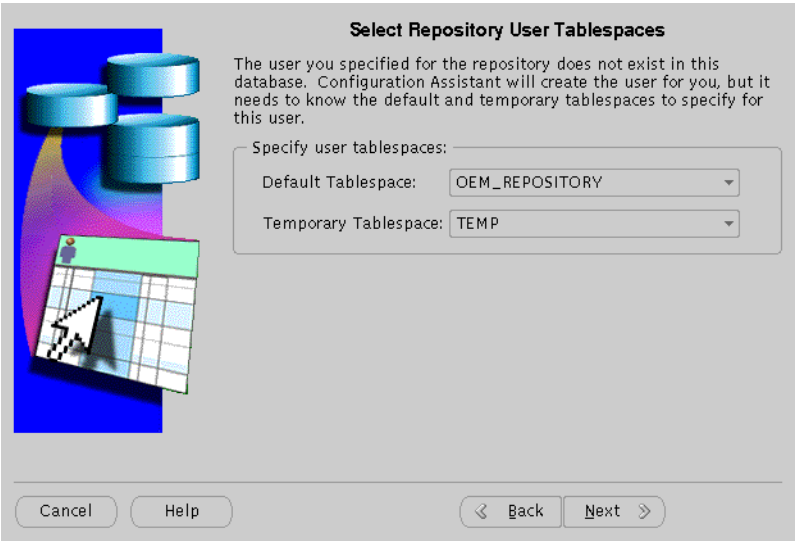
Figure A–25 Repository Login Information Screen

Repository Login Information screen allows you to enter the login username and password for the database user.

- **Username**: Enter the database user name who will own the repository.
- **Password**: Enter the password for the username.
- **Confirm Password**: Re-enter the user password for verification.

4. Select the default and temporary tablespace for the new repository user, and click **Next**.

Figure A–26 Select Repository User Tablespaces Screen



Select Repository User Tablespaces screen allows you to select the default and temporary tablespace for the new repository user. Use the drop-down button to select the default and temporary tablespace.

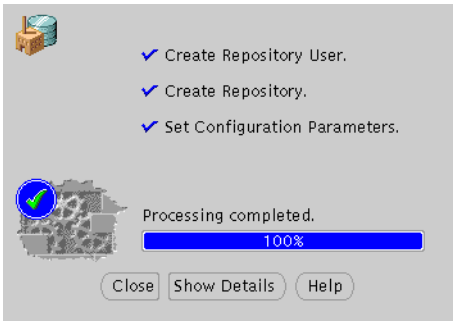
5. Review the repository summary, and click **Finish**.

Figure A–27 Create Repository Summary

Create Repository Summary screen displays all your repository settings. Be sure to verify them for accuracy.

6. Monitor the repository creation process, and click **Close** when it finishes.

Figure A–28 Configuration Screen



Configuration screen indicates the progress the configuration assistant has made as it creates the repository. Click on **Show Details** if you get an error.

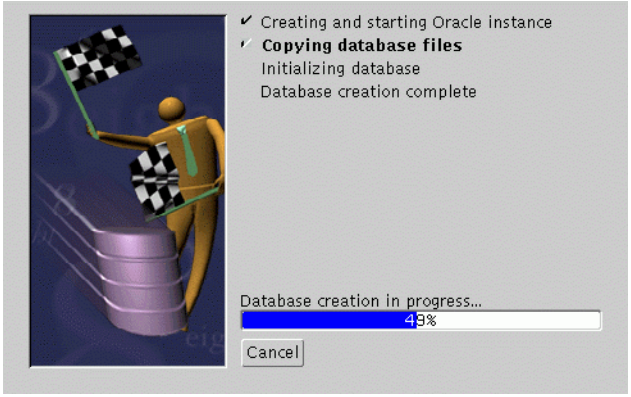
Oracle Database

The following command launches the Oracle Database Configuration Assistant:

```
prompt> <ORACLE_HOME>/bin/dbassist
```

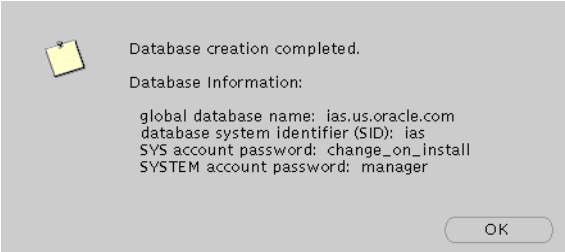
The Oracle Database Configuration Assistant creates a database that is used as a container for Oracle 8*i* JVM. The following screen appears as the configuration assistant creates the database:

Figure A–29 Oracle Database Configuration Assistant Screen



Oracle Database Configuration Assistant does not require any user input. Once the database creation process ends, the following screen appears.

Figure A–30 Database Information Screen



The Database Information screen displays database information such as global database name, database SID, SYS account password, and SYSTEM account password. Make a note of this information and click **OK**. You have completed the database creation process.

B

Installing Oracle Portal-to-Go Client

This appendix guides you through the installation steps for the Oracle Portal-to-Go client. It lists basic steps for a quick installation and provides detailed information for reference.

Contents

About Oracle Portal-to-Go Client

The Oracle Portal-to-Go client runs on the Windows NT platform. The client installation consists of the following components:

- Service Designer
- Web Integration Developer

Service Designer

Service Designer is a visual interface for implementing and managing Oracle Portal-to-Go. It creates and modifies Oracle Portal-to-Go objects, including users, adapters, transformers, and services. Service Designer provides a tree view of the Oracle Portal-to-Go repository. The tree displays Oracle Portal-to-Go objects classes, such as adapters and transformers, as folders or branch nodes. It shows instances of those classes as objects or leaf nodes.

The Service Designer is installed during the Oracle Portal-to-Go client installation.

Web Integration Developer

Web Integration Developer is a development environment for creating and testing Web Integration services written in Web Interface Definition Language (WIDL). The Web Integration Developer also has tools that you use to:

- Publish WIDL services for Web Integration Server.
- Create source code for client applications that invoke Web Integration services.
- Create starter code for the development of an integration module.

The Web Integration Developer is installed during the Oracle Portal-to-Go client installation. For post-installation configuration instructions, refer to "Configure the Web Integration Developer" on page B-3.

Note: The Web Integration Developer includes its own Java Virtual Machine (JVM). It does not require any Java setup.

Installation

For hardware requirements for installation, refer to "Oracle Portal-to-Go Client Requirements" on page 1-4.

The following steps guide you through the Oracle Portal-to-Go client installation process:

1. Insert the Oracle9*i* Application Server Administrative and Development Client CD-ROM and run the setup program. The Welcome screen appears. Click **Next**.
2. The File Location screen appears. Select the installation source, and then enter or select the destination Oracle home name and its path. Click **Next**.
3. The Available Products screen appears. Select Portal-to-Go Client. Click **Next**.
4. The Installation Types screen appears. Select the installation type:
   - **Typical**: Installs the Service Designer and Web Integration Developer.
   - **Custom**: Installs individual components.

   Click **Next**.
5. The Summary screen appears. Verify the installation selections, and click **Next**.
6. When the installation is complete, the End of Installation screen appears.

Configure the Web Integration Developer

To configure the Web Integration Developer, follow these steps:

1. Run the Web Integration Developer from the Windows NT Programs menu. Select **Programs** > **Oracle for Windows NT** > **Portal-to-Go** > **Web Integration Developer**.
2. From the **Edit** menu, select **Preferences**, and then **Configuration**.
3. Enter the Proxy (HTTP) and the Secure Proxy (HTTPS) settings appropriate for your environment.
4. Click **OK**.

C

Installing Oracle Database Cache on the Origin Database System

This chapter guides you through the steps necessary to install Oracle Database Cache on the same machine as the origin database.

Contents

Introduction

To install and run Oracle Database Cache and the origin database on the same machine, you must take special steps before and during installation.

For example, unless you take the steps described here, the Oracle Database Cache Configuration Assistant will fail when it attempts to connect with the origin database because the database had been shut down before launching the installer.

This section guides you through the configuration steps necessary to install and run Oracle Database Cache on the same machine as the origin database.

Pre-installation Tasks

Before you start the Oracle Database Cache installation, perform the following configuration steps for the origin database:

1. Edit the **listener.ora** file for the origin database, adding the following entries:

```
# listener configuration file for an origin database

CONNECT_TIMEOUT_LISTENER = 0

LISTENER =
(DESCRIPTION_LIST =
    (DESCRIPTION =
        (ADDRESS_LIST =
        (ADDRESS = (PROTOCOL=tcp) (HOST= <hostname>) (PORT = 1521))
        )
    )
)

SID_LIST_LISTENER = (SID_LIST =
    (SID_DESC =
(SID_NAME = <origin_sid>)
        (GLOBAL_DBNAME=<origin_dbname>) (ORACLE_HOME=<origin_home_spec>))

        (SID_DESC = (SID_NAME = extproc)
        (GLOBAL_DBNAME = extproc)
        (ORACLE_HOME = <origin_home_spec>) (PROGRAM = extproc))
)
```

   The listener must be listening on a TCP port, such as 1521.

2. Configure the listener for the origin database so that it listens for external procedure calls, as described in "Configure the Listener for External Procedures" on page 2-25.
3. Allow remote access to origin database through Oracle Database Cache, such as described in "Allow Remote Access to the Origin Database" on page 2-23.
4. Make sure that the following environment variables are set before you start the listener:
   - **ORACLE_HOME**: Defined as the ***ORACLE_HOME*** for the origin database.
   - **LD_LIBRARY_PATH**: Defined as ***ORACLE_HOME*/lib** for the origin database.
   - **PATH**: Defined as *O**RACLE_HOME*/bin** for the origin database.
5. Start the listener and be sure that the origin database is started.

Installation and Post-installation Tasks

During the Oracle Database Cache installation, follow the installation instructions in "Enterprise Edition" on page 5-1, with the following exceptions:

1. If possible, install Oracle Database Cache using a different user than for the origin database. At a minimum, you *must* start the installation from a different process from which you started the origin database.
2. For that user (or process), make sure that the following environment variables are not set during the Oracle9*i* Application Server installation:
   - ORACLE_HOME
   - ORACLE_SID
   - TNS_ADMIN
3. For that user (or process), make sure that either the environment variable LD_LIBRARY_PATH is not set or, if it is set, that it does not include ***ORACLE_HOME*/lib** for the origin database.
4. For that user (or process), make sure that the environment variable PATH does not include ***ORACLE_HOME*/bin** for the origin database.
5. You *must* install Oracle Database Cache in a separate Oracle home.

6. When the Oracle Database Cache Configuration Assistant - It enables you to configure your middle-tier caches. For instructions on running the Oracle Database Cache Configuration Assistant, refer to "Oracle Database Cache" on page A-3. appears, during the installation, do not click **Next** immediately. Instead, open another terminal window and look at the **listener.ora** file for Oracle Database Cache. This file is located in:

   ```
   <ORACLE_HOME>/network/admin
   ```

   Verify that there are no conflicts between port numbers for the origin database and the cache. If there are, edit the **listener.ora** file to change the port numbers for the cache.

7. In the Configuration Assistant, click **Next** to continue the configuration. For instructions on running the Configuration Assistant, refer to "Oracle Database Cache" on page A-3.

After the installation completes, be sure to perform the post-installation steps described in "Oracle Database Cache" on page 5-32.

D

Documentation Library Installation

The Oracle9*i* Application Server Documentation Library CD-ROM contains the documentation set for this product. The documentation on the CD-ROM is available in both HTML and PDF formats. This appendix describes the contents of the CD-ROM and provides instructions for installing and viewing the documentation.

Contents

Documentation Library Titles

The Documentation Library CD-ROM contains the documentation listed in the tables on the following pages. Titles that have a part number are available as printed and bound manuals from the Oracle Store at **http://store.oracle.com**.

Table D–1 Oracle9i Application Server

Part Number	Title
N/A	Quick Tour
A86151-01	Overview Guide
A83709-03	Migrating from Oracle Application Server

Table D–2 Oracle HTTP Server powered by Apache

Part Number	Title
N/A	Apache 1.3.12 User's Guide
N/A	Apache JServ Documentation *(links to http://java.apache.org/jserv)*
N/A	Apache mod_perl Documentation *(links to http://perl.apache.org)*
N/A	mod_ssl Documentation (links to http://www.modssl.org)
N/A	OpenSSL Documentation (links to http://www.openssl.org)
A86263-01	Using the PL/SQL Gateway
A83720-01	Oracle8*i* Oracle Servlet Engine User's Guide
A86059-01	Oracle HTTP Server Performance Guide

Table D–3 Oracle Internet File System

Part Number	Title
N/A	Quick Tour
A81197-04	Setup and Administration Guide
A75154-04	User's Guide
A75172-04	Developer's Guide

Table D–4 Oracle Portal

Part Number	Title
N/A	Quick Tour
A86707-01	Oracle Portal 3.0 Configuration Guide
A86188-01	Tutorial
A86182-01	Task Help
A86181-01	Field-Level Help
A86183-01	Building Advanced Portals
OTN	Single Signon Application Developer's Guide *(available on http://otn.oracle.com/products/ias)*

Table D–5 Oracle Portal-to-Go

Part Number	Title
A86634-01	Portal-to-Go Configuration Guide
A86635-01	Portal-to-Go Implementation Guide

Table D–6 Oracle Discoverer 3i Viewer

Part Number	Title
A86662-01	Oracle Discoverer 3*i* Viewer Configuration Guide

Table D–7 Oracle Web Cache

Part Number	Title
OTN	Administration and Deployment Guide *(available on http://otn.oracle.com/products/ias)*

Table D–8 Oracle Forms and Reports Services

Part Number	Title
N/A	Forms Developer Quick Tour
A86202-01	Deploying Forms Applications to the Web with Oracle9*i* Application Server
A73074-01	Form Builder Reference Manual
N/A	Reports Developer Quick Tour
A83592-02	Publishing Reports to the Web with Oracle9*i* Application Server
A73172-01	Building Reports
A73174-01	Reports Developer Reference Manual
A73073-02	Guidelines for Building Applications
A73075-01	Graphics Builder Reference Manual
A73076-01	Procedure Builder Reference Manual
A73152-01	Common Built-in Packages Reference Manual

Table D–9 Oracle Database Cache

Part Number	Title
N/A	Quick Tour
A86617-01	Oracle Database Cache Concepts and Administration Guide

Table D–10 Database Client Developer's Kit

Part Number	Title
A83723-01	Oracle 8*i* SQLJ Developer's Guide and Reference
A83724-01	Oracle 8*i* JDBC Developer's Guide and Reference

Table D–11 Oracle 8i JVM

Part Number	Title
A83727-01	Oracle8*i* Java Tools Reference
A83728-01	Oracle8*i* Java Developer's Guide
A83724-01	Oracle8*i* JDBC Developer's Guide and Reference
A83725-01	Oracle8*i* Enterprise JavaBeans Developer's Guide and Reference
A83720-011	Oracle8*i* Servlet Engine User's Guide
A83726-01	Oracle JavaServer Pages Developer's Guide and Reference
A83722-01	Oracle8*i* CORBA Developer's Guide and Reference
A83723-01	Oracle8*i* SQLJ Developer's Guide and Reference
A81358-01	Oracle8*i* Java Stored Procedures Developer's Guide
A81357-01	Oracle8*i* JPublisher User's Guide
A85456-01	Oracle8*i* Supplied Java Packages Reference

Table D–12 Oracle Enterprise Manager Client

Part Number	Title
N/A	Oracle Enterprise Manager Console Quick Tour
N/A	Standard Management Pack Quick Tour
A85250-01	Oracle Enterprise Manager Concepts Guide
A85247-01	Oracle Enterprise Manager Configuration Guide
A85248-01	Oracle Enterprise Manager Administrator's Guide
A85251-01	Oracle Intelligent Agent User's Guide
A85245-01	Oracle Enterprise Manager Messages Manual Release 2.2
A85249-01	Oracle SNMP Support Reference Guide

Table D–13 OracleJSP

Part Number	Title
A83726-01	Developer's Guide and Reference (links to book from Oracle 8*i* JVM)
N/A	Developer's Guide

Table D–14 Oracle BC4J

Part Number	Title
N/A	Developing Business Components
N/A	Connecting to Remotely Deployed Oracle BC4J
N/A	Reference API

Table D–15 Oracle LDAP Developer's Kit

Part Number	Title
A86082-01	Oracle Internet Directory Application Developer's Guide

Table D–16 Oracle XML Developer's Kit

Part Number	Title
A86030-01	Oracle8*i* Application Developer's Guide - XML
A83730-01	Oracle8*i* XML Reference Guide

Table D–17 Apache JServ

Part Number	Title
N/A	Apache JServ Documentation *(links to http://java.apache.org/jserv)*

Installing the Documentation Library

You can install the documentation on the CD-ROM in either of two ways:

- Copying the files from the CD-ROM to your local system.
- Using the Oracle Universal Installer included with Oracle9*i* Application Server.

File Copy Installation

The simplest installation method is to directly copy the files from the CD-ROM to your computer. Use your operating system's commands to copy the contents of the **doc** directory on the CD-ROM to the appropriate installation directory on your system. For consistency with installations performed by the Oracle Universal Installer, Oracle recommends that you name the directory **doc**.

For example, the following command copies the documentation from the CD-ROM to your *ORACLE_HOME* directory.

For UNIX, enter the following command:

```
prompt> cp -r /<mount-point>/doc $ORACLE_HOME
```

For Windows, enter the following command at the command prompt:

```
prompt> xcopy /s <cdrom_drive>\doc %ORACLE_HOME%
```

Note: This method may overwrite files if the destination directory already exists.

Oracle Universal Installer Installation

The Oracle Universal Installer also installs the documentation onto your computer from the CD-ROM. The following instructions describe the process:

1. Launch the Oracle Universal Installer. For further instructions on this task refer "Starting Oracle Universal Installer" on page 2-35.
2. At the Welcome screen, click **Next**.

3. At the File Locations screen do the following:
   a. Eject the Oracle9*i* Application Server CD-ROM and replace it with the Documentation Library CD-ROM.
   b. In the Source field,

      For UNIX, enter **<*mount_point*>/stage/products.jar**.

      For Windows, enter **<*cdrom-drive*>\stage\products.jar**.

      This directs the installer to the installation file for the documentation library.
   c. In the Destination field, enter the path to the *ORACLE_HOME* you are installing the documentation to. The documentation will be installed in the **doc** directory under *ORACLE_HOME*.
   d. Click **Next** to continue.
4. At the Summary screen, review the summary and click **Install** to begin the installation process.
5. After installation, the End of Installation screen will appear. Click **Exit** to quit the installer.

Viewing the Documentation Library

You can view the Oracle9*i* Application Server documentation library directly from the CD-ROM or from disk after installing it. For information about the tools necessary to view the documentation, refer to "Online Documentation Requirements" on page 1-5.

To view the HTML and PDF documentation from a local installation or from the CD-ROM, follow these steps:

1. Use your browser to open the top-level **index.htm** file from the **doc** directory on either the CD-ROM or *ORACLE_HOME* directory.
2. Click on the list of components to see the documentation relating to a particular component.

Using the Oracle Information Navigator Applet

Oracle Information Navigator is a Java-based search and navigation utility provided with Oracle online documentation. If you are using a Java-enabled browser, the navigator is launched automatically when you open **index.htm** in a browser. The navigator can be used with Oracle documentation, whether you are reading from the CD-ROM or from installed files.

For information on how to use the navigator, click the **Help** button in the top right corner of the browser window.

Bypassing the Oracle Information Navigator Applet

If you do not wish to launch the Oracle Information Navigator applet, open **products.htm** instead of **index.htm**.

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