Oracle9*i* Application Server

Installation Guide

Release 1.0.2 for Windows NT/2000

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Oracle9*i* Application Server Installation Guide, Release 1.0.2 for Windows NT/2000

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Oracle9*i* Application Server Release 1.0.2, Installation Guide

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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 guide describes the installation process for Oracle9*i* Application Server.

This preface contains these topics:

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.

Organization

This document contains:

Chapter 1, "Requirements"

This chapter provides hardware and software requirements for Oracle9*i* Application Server, Oracle Portal-to-Go client, and the online documentation.

Chapter 2, "Concepts and Preinstallation"

This chapter provides basic concepts, and preinstallation steps for Oracle9*i* Application Server.

Chapter 3, "Oracle HTTP Server Only"

This chapter guides you through the installation and postinstallation steps for the Oracle HTTP Server Only installation option for Oracle9*i* Application Server.

Chapter 4, "Standard Edition"

This chapter guides you through the installation and postinstallation steps for the Standard Edition installation option for Oracle9*i* Application Server.

Chapter 5, "Enterprise Edition"

This chapter guides you through the installation and postinstallation steps for the Enterprise Edition installation option for Oracle9*i* Application Server.

Chapter 6, "Deinstallation and Reinstallation"

This chapter guides you through the deinstallation and reinstallation steps for the for Oracle9*i* Application Server.

Chapter A, "Configuration Tools"

This appendix guides you through the steps required to run component-specific configuration assistants to configure Oracle9*i* Application Server.

Chapter B, "Installing Oracle Portal-to-Go Client"

This appendix provides an overview, and describes the installation process for the Oracle Portal-to-Go client.

Chapter C, "Installing Oracle Database Cache on the Origin Database System"

This appendix describes steps necessary to install Oracle Database Cache on the same machine as the origin database.

Chapter D, "Enabling SSL for Apache"

This appendix describes steps necessary to enable SSL for Apache.

Chapter E, "Installing Documentation Library"

This appendix contains the contents of the Oracle9*i* Application Server Documentation Library CD-ROM, and provides instructions for installing and viewing the documentation.

Related Documentation

For more information, see these Oracle resources:

- Oracle9*i* Application Server Documentation Library CD-ROM
- Oracle Database Documentation Library CD-ROM
- Oracle9*i* Application Server Platform Specific Documentation on Oracle9*i* Application Server Disk 1.

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

`http://oraclestore.oracle.com/`

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

`http://www.oraclebookshop.com/`

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

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

`http://technet.oracle.com/membership/index.htm`

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

`http://technet.oracle.com/docs/index.htm`

Conventions

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

- Conventions in Text
- Conventions in Code Examples

Conventions in Text

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

Convention	Meaning	Example
Bold	Bold typeface indicates terms that are defined in the text or terms that appear in a glossary, or both.	The C datatypes such as **ub4**, **sword**, or **OCINumber** are valid. When you specify this clause, you create an **index-organized table**.
Italics	Italic typeface indicates book titles, emphasis, syntax clauses, or placeholders.	*Oracle8i Concepts* You can specify the *parallel_clause*. Run `Uold_release.SQL` where *old_release* refers to the release you installed prior to upgrading.
UPPERCASE monospace (fixed-width font)	Uppercase monospace typeface indicates elements supplied by the system. Such elements include parameters, privileges, datatypes, RMAN keywords, SQL keywords, SQL*Plus or utility commands, packages and methods, as well as system-supplied column names, database objects and structures, user names, and roles.	You can specify this clause only for a `NUMBER` column. You can back up the database using the `BACKUP` command. Query the `TABLE_NAME` column in the `USER_TABLES` data dictionary view. Specify the `ROLLBACK_SEGMENTS` parameter. Use the `DBMS_STATS.GENERATE_STATS` procedure.
lowercase monospace (fixed-width font)	Lowercase monospace typeface indicates executables and sample user-supplied elements. Such elements include computer and database names, net service names, and connect identifiers, as well as user-supplied database objects and structures, column names, packages and classes, user names and roles, program units, and parameter values.	Enter `sqlplus` to open SQL*Plus. The `department_id`, `department_name`, and `location_id` columns are in the `hr.departments` table. Set the `QUERY_REWRITE_ENABLED` initialization parameter to `true`. Connect as `oe` user.

Conventions in Code Examples

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

```
SELECT username FROM dba_users WHERE username = 'MIGRATE';
```

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

Convention	Meaning	Example
[ ]	Brackets enclose one or more optional items. Do not enter the brackets.	`DECIMAL (digits [ , precision ])`
{ }	Braces enclose two or more items, one of which is required. Do not enter the braces.	`{ENABLE | DISABLE}`
|	A vertical bar represents a choice of two or more options within brackets or braces. Enter one of the options. Do not enter the vertical bar.	`{ENABLE | DISABLE}` `[COMPRESS | NOCOMPRESS]`
. . .	Horizontal ellipsis points indicate either:	
	■ That we have omitted parts of the code that are not directly related to the example	`CREATE TABLE ... AS subquery;`
	■ That you can repeat a portion of the code	`SELECT col1, col2, ... , coln FROM employees;`
. . .	Vertical ellipsis points indicate that we have omitted several lines of code not directly related to the example.	
Other notation	You must enter symbols other than brackets, braces, vertical bars, and ellipsis points as it is shown.	`acctbal NUMBER(11,2);` `acct CONSTANT NUMBER(4) := 3;`
Italics	Italicized text indicates variables for which you must supply particular values.	`CONNECT SYSTEM/system_password`

Convention	Meaning	Example

`UPPERCASE`	Uppercase typeface indicates elements supplied by the system. We show these terms in uppercase in order to distinguish them from terms you define. Unless terms appear in brackets, enter them in the order and with the spelling shown. However, because these terms are not case sensitive, you can enter them in lowercase.	`SELECT last_name, employee_id FROM employees;`
		`SELECT * FROM USER_TABLES;`
		`DROP TABLE hr.employees;`

`lowercase`	Lowercase typeface indicates programmatic elements that you supply. For example, lowercase indicates names of tables, columns, or files.	`SELECT last_name, employee_id FROM employees;` `sqlplus hr/hr`

1

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. The topics include:

- Hardware Requirements
- Software Requirements
- Certified Software
- Oracle Portal-to-Go Client Requirements
- Online Documentation Requirements

Hardware Requirements

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

Hardware Items	Required
CPU	An Intel compatible 486 or higher processor
Memory	128 MB
Disk Space	Oracle HTTP Server Only: 550 MB Standard Edition: 1.63 GB Enterprise Edition: 2.56 GB
Total Pagefile Size	500 MB

Make note of the following:

- The disk space must be available on a single drive. Oracle9*i* Application Server does not support spanning the installation over multiple drives.
- **For Standard Edition Only**: You will need an additional 430 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*.
- **For 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.

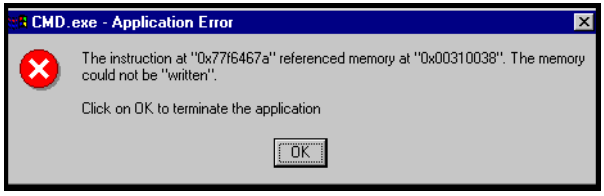
Software Requirements

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

Software Items	Version
Operating System	■ Microsoft Windows NT with Service Pack 3 (minimum) or 5 (recommended); Service Pack 4 has TCP/IP and Winsock issues ■ Microsoft Windows 2000
Virtual Memory	At least 360 MB of free virtual memory. To change the amount of virtual memory, go to Windows Control Panel and open System. Under the performance tab, change the amount of virtual memory.

Path Environment Variable

If the value of the user's PATH environment variable is over 1,024 bytes, then the following error may occur when the installer starts up the Oracle HTTP Server process:



This error can be resolved by doing either one of the following:

- Shortening the length of the PATH environment variable.
- Downloading a patch from Microsoft to correct the problem in `cmd.exe`. The path is described in Microsoft Knowledge Base article **Q268722**.

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 table contains the requirements for the installation of Oracle Portal-to-Go client.

See Also: 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 table contains the tools and disk space requirements for the installation of the Oracle9*i* Application Server online documentation.

See Also: Appendix E, "Installing Documentation Library"

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	200 MB

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Concepts and Preinstallation

This chapter guides you through the basic concepts and preinstallation steps for Oracle9*i* Application Server. The following topics provide information about Oracle9*i* Application Server overview, environment variables settings, configuration options, and starting Oracle Universal Installer:

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.

> **See Also:** *Oracle9i* Application Server *Overview Guide* in the Oracle9*i* Application Server Documentation Library for detailed information about each component.

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 Business Components for Java (BC4J)	x	x	x
Oracle Database Cache			x
Oracle Database Client Developer's Kit	x	x	x
Oracle Discoverer 3*i* Viewer			x

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

Component	Oracle HTTP Server Only	Standard Edition	Enterprise Edition
Oracle Enterprise Manager Client	x	x	x
Oracle Forms Services			x
Oracle HTTP Server *powered by Apache*	x	x	x
Oracle Internet File System		x	x
Oracle LDAP Developer's Kit		x	x
Oracle Management Server			x
Oracle Plug-in for Microsoft IIS	x	x	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 Business Components for Java (BC4J)

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 database. 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 Plug-in for Microsoft IIS

Oracle Plug-in for Microsoft IIS enables you to use Microsoft Internet Information Server (IIS) to directly access PL/SQL and Java Web components stored in an Oracle database. It provides functionality in a Microsoft IIS environment that is similar to the Oracle HTTP Server Modules, mod_plsql and mod_ose. Using it, you can access Web components by passing either a preconfigured virtual directory prefix (PL/SQL access), or a predefined file extension and virtual directory prefixes which are stored in the Java configuration file (Java access).

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.

Preinstallation Tasks

Perform the following preinstallation tasks before installing the Oracle9*i* Application Server.

If you are migrating from Oracle Internet Application Server, Release 1.0.1, then you must perform certain migration tasks before installing Oracle9*i* Application Server, Release 1.0.2.

> **See Also:** *Migrating from Oracle Internet Application Server 1.0.1* in the Oracle9*i* Application Server Documentation Library

- Log in with administrator privileges.
- Go to the **Control Panel** and set all Oracle services to manual startup. After installing Oracle9*i* Application Server, the Oracle services can be changed back to automatic start mode.
- Be sure to verify that your PATH environment variable does not exceed 1,024 bytes.

> **See Also:** "Path Environment Variable" on page 1-3

The list below directs you to the installation option that you have licence to:

- Oracle HTTP Server Only on page 2-9
- Standard Edition on page 2-10
- Enterprise Edition on page 2-13

Oracle HTTP Server Only

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

Proceed to "About Oracle Universal Installer" on page 2-21 to start the installer.

Standard Edition

The following are the preinstallation 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:

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.

   See Also: *Oracle8i Installation Guide* in the Oracle Database Documentation Library

   Set the following Oracle initialization parameters to the values specified. These parameters are contained in the `init<SID>.ora` file in the *`ORACLE_HOME`*`\admin\<global_database_name>\pfile` directory.

   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 50M.

   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 2–2 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)
```

> **See Also:** *Oracle8i Administration Guide* in the Oracle Database Documentation Library

2. Restart the network listener and database.

> **See Also:** *Oracle8i Installation Guide* in the Oracle Database Documentation Library

3. 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.

> **See Also:** *Oracle8i Administration Guide* in the Oracle Database Documentation Library

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.

> **See Also:** *Oracle8i Administration Guide* in the Oracle Database Documentation Library

You have completed the preinstallation tasks for the Oracle9*i* Application Server. Proceed to "About Oracle Universal Installer" on page 2-21 to start the installer.

Enterprise Edition

The following are the preinstallation 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* in the Oracle9*i* Application Server Documentation Library.

Oracle Database Cache

Perform the following preinstallation tasks for Oracle Database Cache. Be sure to shut down the origin database and listener before making any changes.

> **See Also:** *Oracle8i Administration Guide* and *Oracle8i Installation Guide* in the Oracle Database Documentation Library

- Allow Remote Access to the Origin Database
- Configure the Listener for External Procedures

Allow Remote Access to the Origin Database

To allow remote access to the origin database through Oracle Database Cache, you must check the `init`*`SID`*`.ora` file of the origin database and create a password file for the database if it does not exist. Take the following steps:

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`. Oracle Database Cache can use either value. 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
```

initSID.ora file is in the ORACLE_HOME\admin\dbs directory for of the origin database.

For the database, check if a password file exists. The file is named pwd*SID*.ora, where SID is the system identifier of the origin database. It is located in the following directory:

```
prompt> ORACLE_HOME\Database
```

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

```
prompt> cd ORACLE_HOME\bin
prompt> ORAPWD FILE=PWD<i>SID</i>.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.

  See Also: *Oracle8i Administration Guide* in the Oracle Database Documentation Library for information on the `orapwd` utility and remote login.

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)
    )
   )
```

   Verify the following:

   - The service name is "`EXTPROC_CONNECTION_DATA`". (Note that the domain name can be set to any value appropriate for your network.)
   - The `ADDRESS_LIST` contains an `ADDRESS` entry setting "(`PROTOCOL = IPC`)".

   Make a note of the `KEY` value (in this example, it is "`EXTPROC0`"). Also make a note of the `SID` value (in his example, it is "`PLSExtProc`"). These values must match the `KEY` and `SID_NAME` value, respectively, in the corresponding entry in the `listener.ora` file.

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

```
LISTENER_01=
 (DESCRIPTION_LIST=
   (DESCRIPTION=
    (ADDRESS_LIST=
      (ADDRESS= (PROTOCOL= TCP) (HOST = my_hostname) (PORT = 1521))
     )
     (ADDRESS_LIST=
      (ADDRESS= (PROTOCOL= TCP)  (KEY=EXTPROC0))
     )
    )
  )
```

Verify the following:

- The `ADDRESS_LIST` contains an `ADDRESS` entry setting "`(PROTOCOL = IPC)`".
- The `ADDRESS_LIST` containing "`(PROTOCOL = IPC)` "has a key value which is the same `KEY` value from the `tnsnames.ora` file. In this example, the key value is "`EXTPROC0`".

Make a note of the name of the listener that will be used for external procedures. In this example, the listener name is "`LISTENER_01`".

3. Edit the `listener.ora` file and verify that there is a `SID` for external procedure listener in the listener's `SID` list.

```
SID_LIST_LISTENER=
   (SID_LIST=
      (SID_DESC=
         (SID_NAME=PLSExtProc)
         (ORACLE_HOME=/dsk1/oracle/rdbms/OraHome)
         (PROGRAM=extproc)
      )
  ...
   (SID_DESC =
      (GLOBAL_DBNAME = <global_DBname>)
      (ORACLE_HOME = /dks1/oracle/rdbms/OraHome)
      (SID_NAME = ias)
    )
   )
```

   Verify the following:

   - The `SID` list contains an entry with a `SID_NAME` that is the same as the `SID` noted in Step 1. In this example, the `SID` is "`PLSExtProc`".
   - The *ORACLE_HOME* value for this entry is set to the *ORACLE_HOME* for the origin database.
   - The `PROGRAM` value for this entry is "`extproc`".

4. Restart the listener if you have made any changes to the configuration files.

   If the listener name you notes in step 2 is anything other than "LISTENER", then you will need to start and stop that specific listener. In the following example, the listener name is "LISTENER_01".

```
prompt> lsnrctl stop listener_01
prompt> lsnrctl start listener_01
```

5. The `extproc` process spawned by the listener inherits the operating system privileges of the listener, so Oracle Corporation 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.

6. If not already installed, place the `extproc` executable in the `bin` directory under the *ORACLE_HOME* of the origin database.
7. Minimum configuration for `sqlnet.ora`:

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

SQLNET.AUTHENTICATION_SERVICES= (NTS)

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

> **See Also:** *Net8 Administrator's Guide* in the Oracle Database Documentation Library for information regarding the `listener.ora` file and the `tnsnames.ora` file.

Oracle Internet File System

Perform the following tasks before installing Oracle Internet File System:

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.

   > **See Also:** *Oracle8i Installation Guide* in the Oracle Database Documentation Library

   Set the following Oracle initialization parameters to the values specified. These parameters are contained in the `init<SID>.ora` file in the *ORACLE_HOME*`\admin\<global_database_name>\pfile` directory.

   > **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 50M.
   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)
```

> **See Also:** *Oracle8i Administration Guide* in the Oracle Database Documentation Library

2. Restart the network listener and database.

> **See Also:** *Oracle8i Installation Guide* in the Oracle Database Documentation Library

3. 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.

See Also: *Oracle8i Administration Guide* in the Oracle Database Documentation Library

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 preinstallation tasks for the Oracle9*i* Application Server. Proceed to "About Oracle Universal Installer" on page 2-21 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
- Deinstall products

If the installer fails during installation, do the following before launching it again.

Look in the registry for the string value `HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\iAS Install`, `Install Status` and delete it.

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. Be sure that you are logged in to the Windows NT system as a member of the Administrators group.
3. Insert Disk 1 into the CD-ROM drive to launch Oracle Universal Installer. If your machine supports the auto run feature, the installer will automatically launch on your machine.

   If your machine does not support the auto run feature, perform the following steps to launch the installer:

   a. Locate the following directory:

      `G:\setup.exe`, where "`G`" is the letter for your CD-ROM drive.

   b. Start the installer by launching the `SETUP.EXE` program.

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

The list below navigates you to installation instructions for the Oracle9*i* Application Server edition you are licensed to:

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

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. The following topics provide detailed installation steps, and basic postinstallation tasks:

- Installation
- Postinstallation

Installation

The installation process is divided into two parts:

- Preparing System for Installation
- Installing Oracle9i Application Server

Preparing System for Installation

The following instructions prepare your machine for the installation 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.

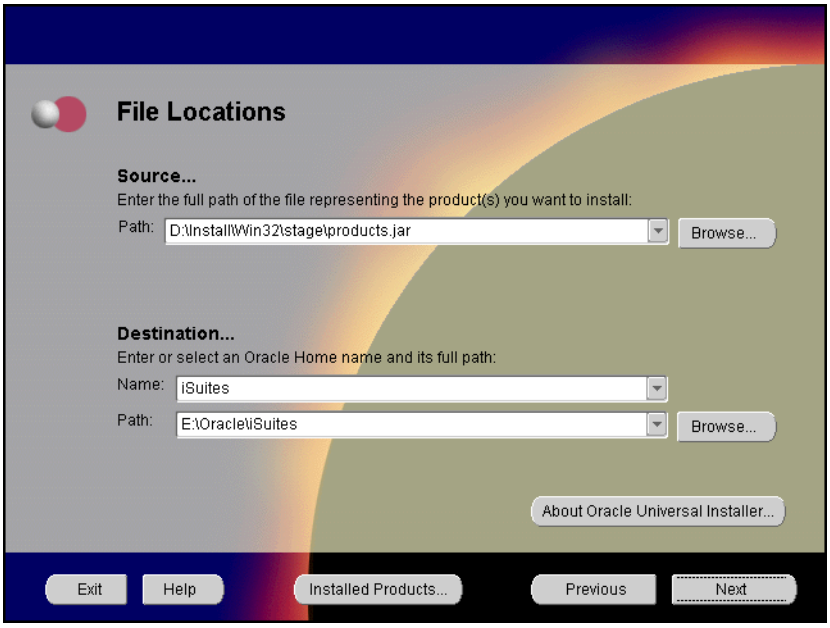
The following function buttons appear on the installation screens.

- **Deinstall Products**: To deinstall 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 deinstall 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 of *ORACLE_HOME*, which is the root directory in which product is installed.

  - Name: This is the name Windows uses to identify your *ORACLE_HOME.*

  - Path: This is the full path of the *ORACLE_HOME*.

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.

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

3. Select Oracle HTTP Server Only and click **Next**.

Figure 3–3 Installation Types Screen

The Installation Types screen allows you to select the Oracle9*i* Application Server installation option that you are licensed to use.

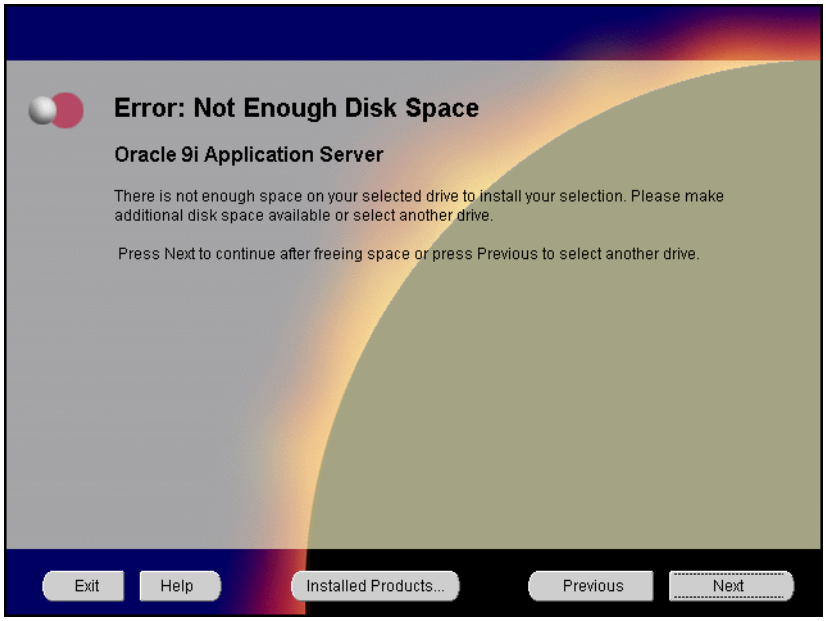
> **See Also:** Table 2–1, "Oracle9i Application Server Components" on page 2-2 for a complete list of components.

The following are the installation options:

- **Oracle HTTP Server Only**: Installs Oracle Portal, Oracle Portal-to-Go, Oracle Enterprise Manager Client, 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.

4. You do not have sufficient space to install Oracle9*i* Application Server. Free enough disk space to meet the hardware requirements and click **Next**, or click **Previous** to select another drive.

Figure 3–4 Insufficient Disk Space Screen



Insufficient Disk Space screen appears only if you do not have enough disk space on your selected drive to install Oracle9*i* Application Server. You can:

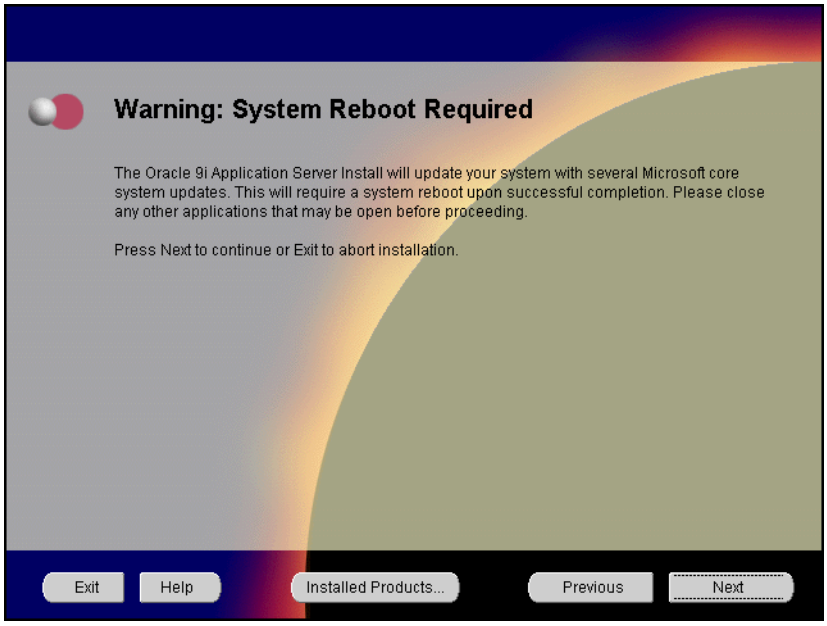
- Click **Next** once you have freed sufficient disk space.
- Click **Previous** to select another drive to install product.

See Also: Chapter 1, "Requirements"

5. Review the system reboot information and click **Next**.

> **Note:** Be sure to close all other open applications and processes as your machine will automatically reboot after the configuration files are copied.

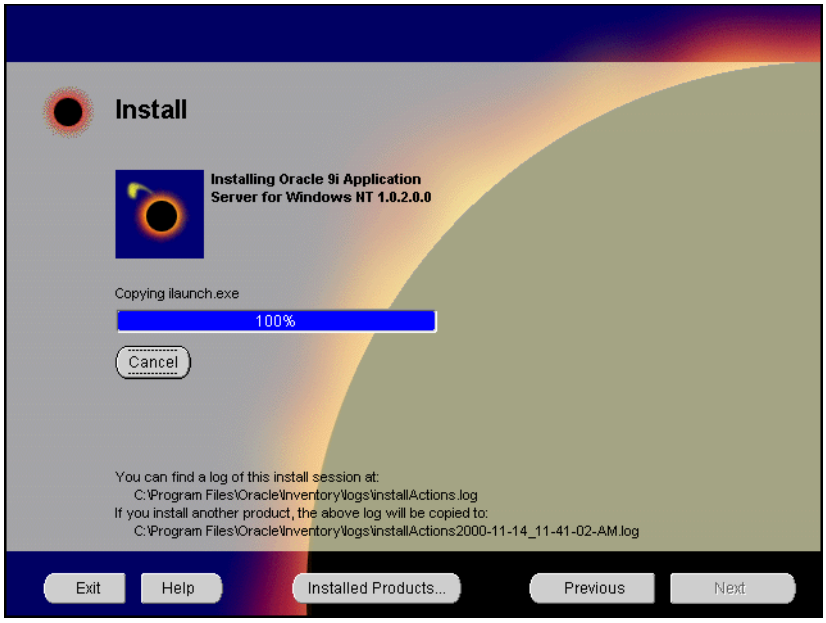
Figure 3–5 System Reboot Screen



The System Reboot screen informs you that after the installer copies the necessary files required to install Oracle9*i* Application Server, your machine will reboot to allow the configuration changes to take effect. When the machine starts up again, Oracle Universal Installer appears and begins the installation process of the Oracle9*i* Application Server.

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

Figure 3–6 Install Screen



The Install screen appears while Oracle Universal Installer installs required configuration files for Oracle9*i* Application Server. It also displays the full path of the installation log.

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

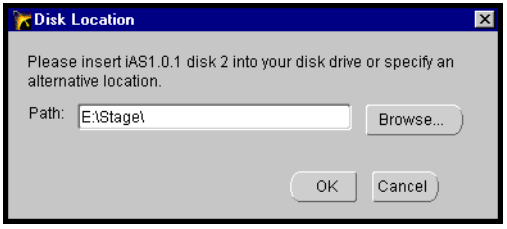
Your machine will reboot once the configuration files are copied. Do not attempt to restart the installer after reboot. It will launch automatically.

Installing Oracle9*i* Application Server

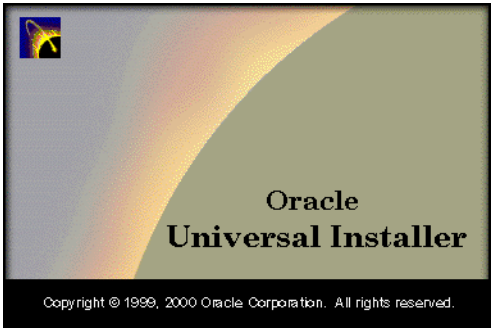
Once your machine starts up after rebooting, the installer appears and proceeds to install Oracle9*i* Application Server. The following instructions guide you through the installation process.

> **Note:** Be sure to log in with administrator privileges after your machine starts up again.

Changing Disks: During the installation process, the Disk Location dialog appears and prompts you to change disks. Insert the requested disk into your disk drive, or specify an alternative location, and click OK.



The following screen appears as Oracle Universal Installer relaunches. The installer may take up to several minutes to start, and might pause if some screensavers are activated.

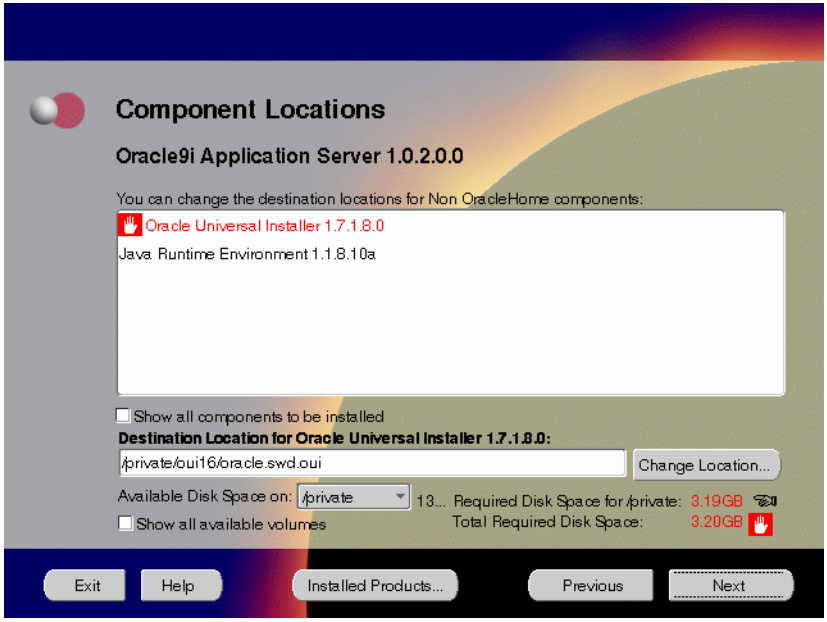


1. If needed, verify and change the locations of the components displayed on the screen, and click **Next**.

   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 3–7 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.

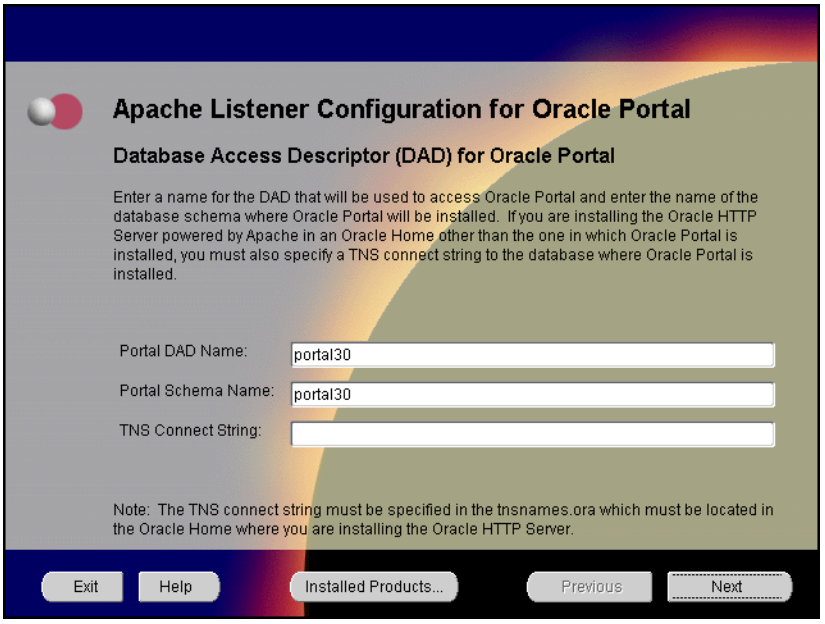
- **Destination Location**: To view the full path of the selected component.
- **Change Location**: To browse for alternate locations for the selected component.
- **Available Disk Space**: To view available disk space in the current directory. The installer also provides information about the total 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.

---

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

Figure 3–8 Apache Listener Configuration for Oracle Portal (DAD and Schema name) Screen



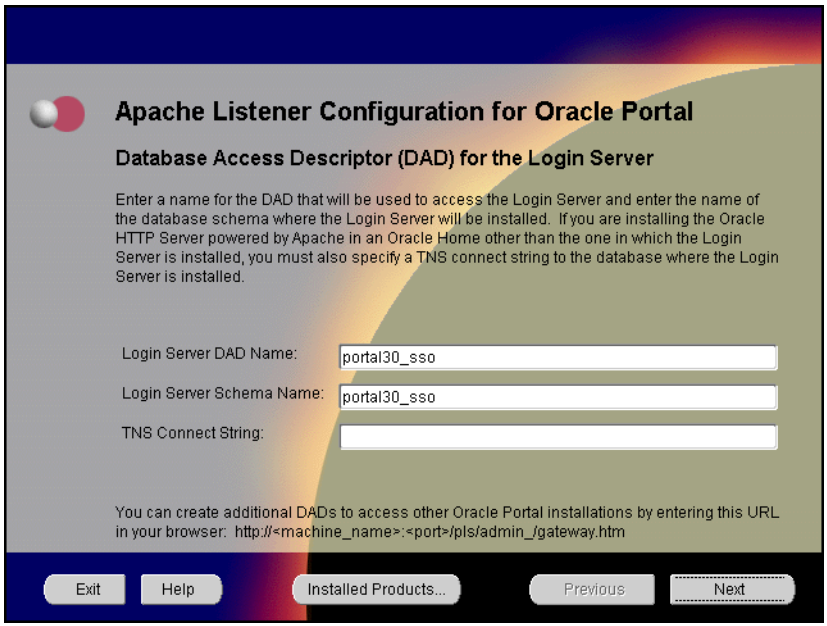
The Apache Listener Configuration for Oracle Portal DAD screen allows you to enter the name of the Database Access Descriptor (DAD) that will be used to access Oracle Portal, and the name of the database schema where Oracle Portal will be installed. It also enables you to enter the TNS connect string 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.

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

Figure 3–9 Apache Listener Configuration for Oracle Portal (Login Server) Screen



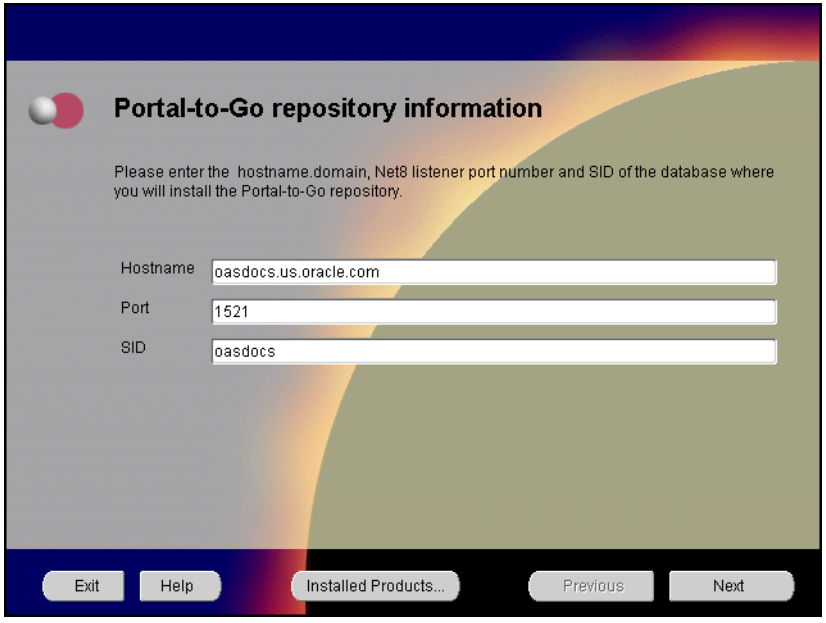
The Apache Listener Configuration for Oracle Portal screen allows you to enter the Login Server DAD and Schema Name, with a `_sso` extension for easy recognition. The Login Server provides an enterprise-wide Single Sign-On (SSO) mechanism that enables an Oracle Portal user to log in securely to Oracle 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.

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

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

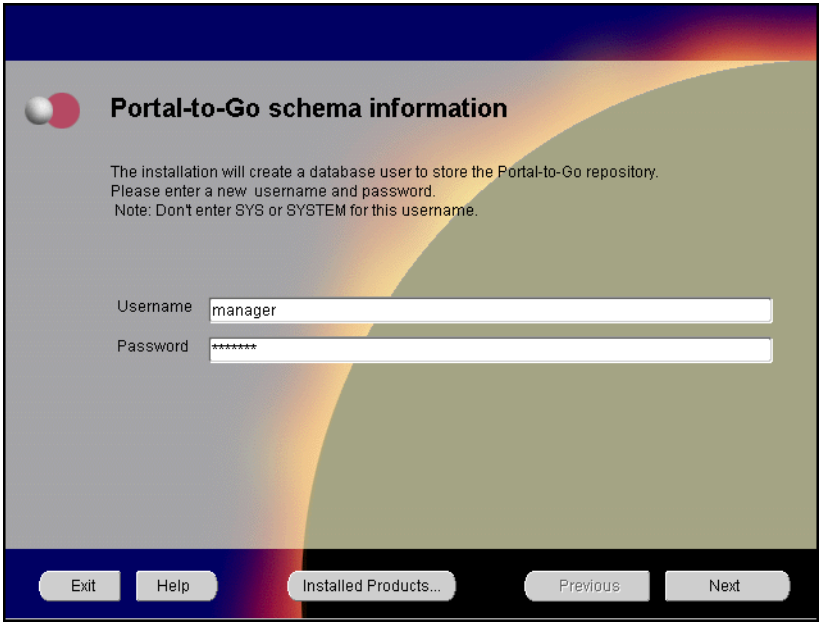


The Portal-to-Go Repository Information screen allows you to enter the hostname, Net8 Listener port number, and SID of the database where you will install the Portal-to-Go repository.

- **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.

5. Enter the new username and password for the database user to store the Portal-to-Go repository, and click **Next**.

Figure 3–11 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.

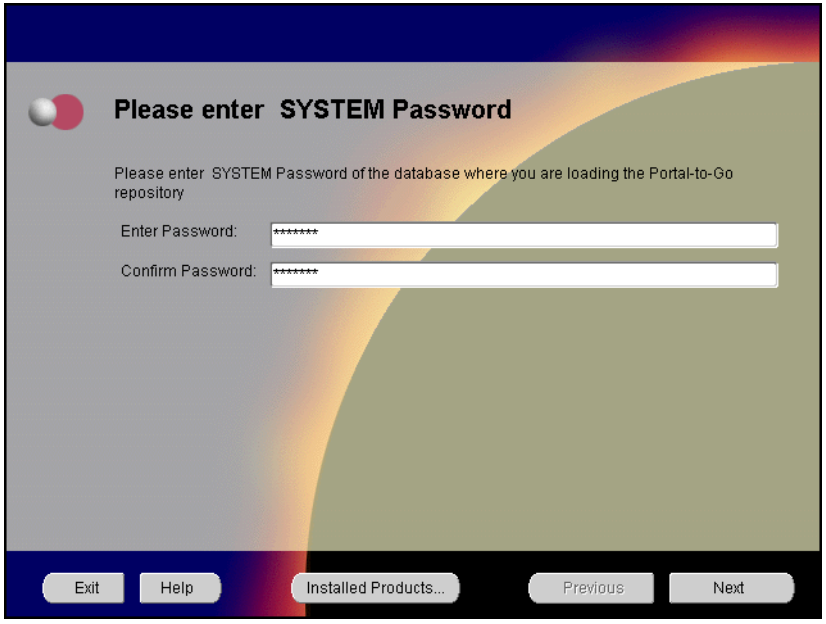
- **Username**: Enter a new user name for the database user to store the Portal-to-Go repository.
- **Password**: Enter a password for the database user.

Note: Do not use an existing database user, (that is, `SYS` or `SYSTEM`) as the username.

---

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

Figure 3–12 System Password Screen

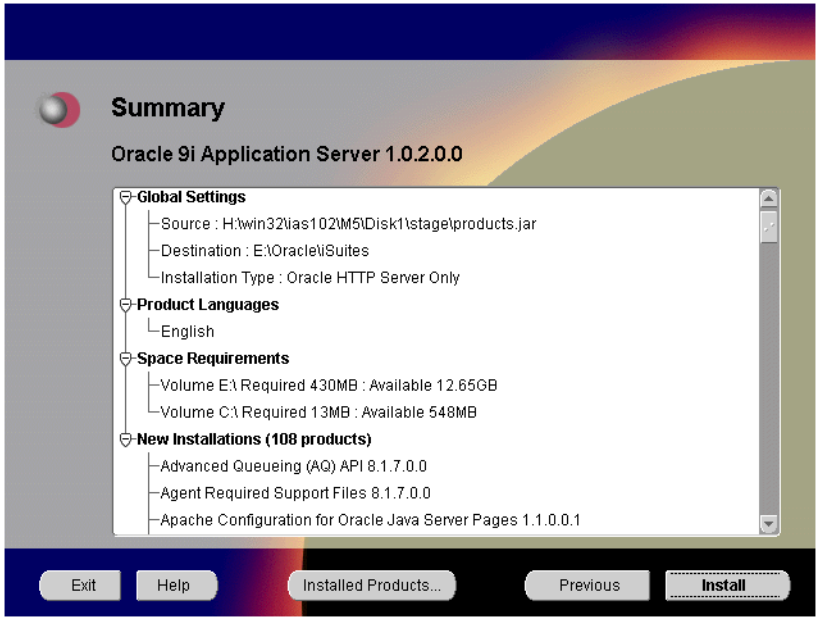


System Password screen allows you to enter and confirm the SYSTEM password of the database where you are loading the Portal-to-Go repository.

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

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

Figure 3–13 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.

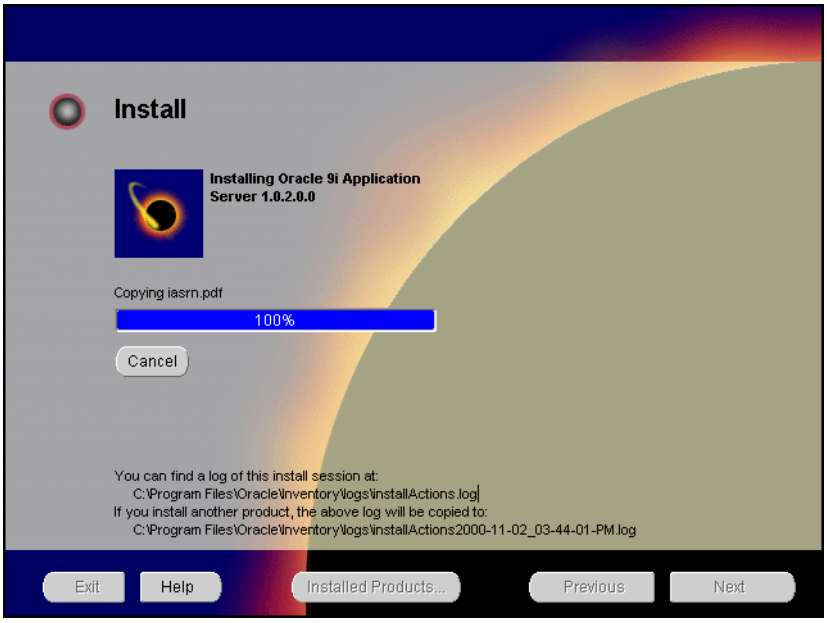
- To make changes to any of these settings, click **Previous** to return to the respective screens.

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

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

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

Figure 3–14 Install Screen

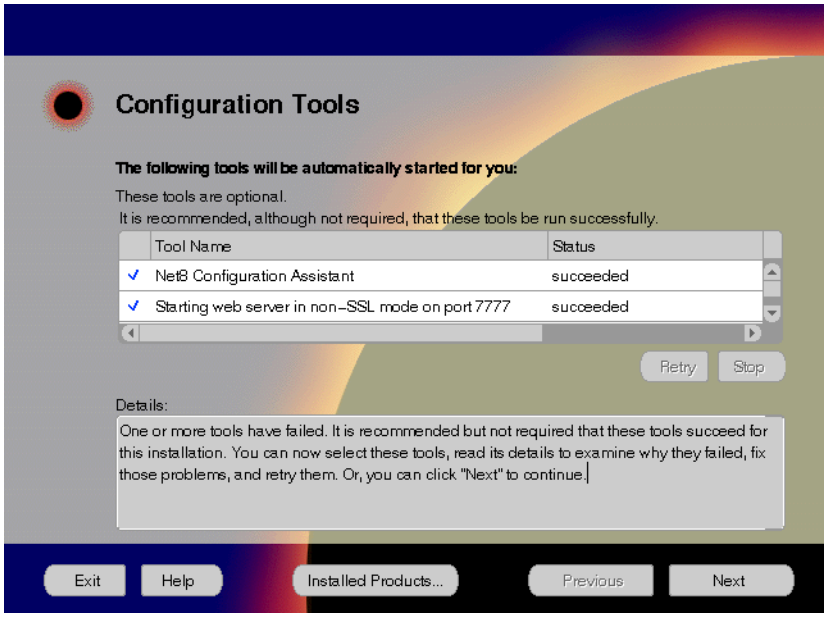


The Install screen appears while the product is installing. Installation operations include executing actions such as file copy and linking, and executing decision points and calculations. It also displays the full path of the installation log.

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

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

Figure 3–15 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 components.
- 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.

> **See Also:** *Net8 Administration's Guide* in the Oracle Database Documentation Library for information on running Net8 Configuration Assistant.

Starting Oracle HTTP service- It starts the Oracle HTTP Server.

Oracle HTTP Server starts up in a DOS window. In that window, you can test the Oracle HTTP Server installation.

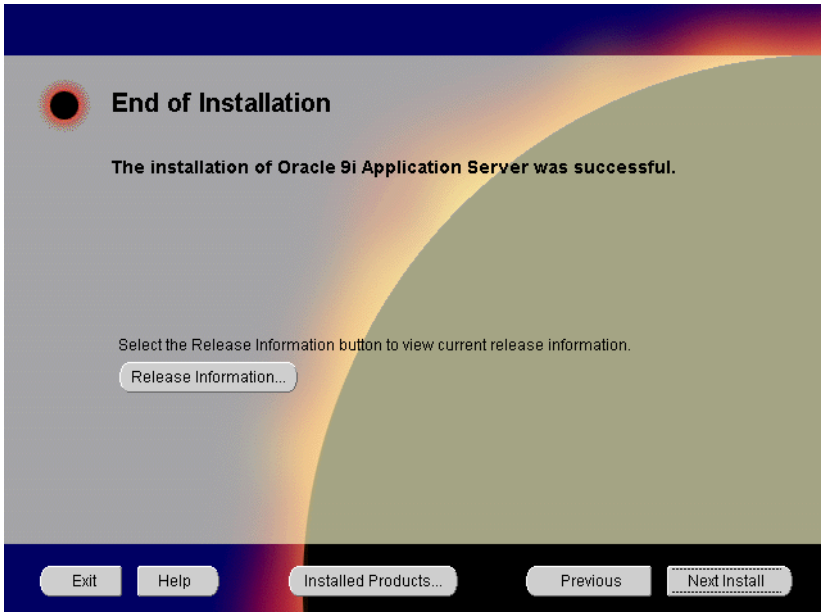
To administer the Oracle HTTP service from the `Control Panel`, reboot your machine after Oracle9*i* Application Server installation completes. Then, Oracle HTTP service will start automatically and you will no longer need to start it in a DOS window.

Oracle Portal Configuration Assistant - It loads necessary database objects for Oracle Portal to run.

> **See Also:** "Oracle Portal" on page A-19 for instructions on running Oracle Portal Configuration Assistant.

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

Figure 3–16 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 Oracle9*i* Application Server. Proceed to "Postinstallation" on page 3-24 to complete the installation process.

Postinstallation

The following instructions guide you through the basic postinstallation 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.

See Also: Appendix B, "Installing Oracle Portal-to-Go Client"

The postinstallation contains the following sections:

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

Component Port Numbers

Table 3–2 lists the default port numbers on which requests are received for each component.

Table 3–2 Port Numbers

Components	Port Number
Oracle HTTP Server 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

Component-specific Tasks

Oracle Portal-to-Go

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

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

Loading Oracle Portal-to-Go Repository

To load the bootstrap repository in the Oracle Portal-to-Go schema:

1. Open a DOS session, and go to `ORACLE_HOME\panama\setupconf` directory.
2. Type the following command:

   ```
   Set JAVA_HOME=ORACLE_HOME\Apache\jdk
   ```

3. Type the following to run the batch files:

   ```
   pa_java_inst
   ```

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.

See Also: Appendix B, "Installing Oracle Portal-to-Go Client"

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

1. Run the Web Integration Server.

   Web Integration Server is installed as a service. Select Oracle Web Integration Server from the `Services` dialog, and click the **Start** button.

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`.

   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\conf` 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\conf` 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\servlets` 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/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/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/ptg/rm`

Starting and Stopping Oracle HTTP Server

You can manually start and stop a component by doing the following:

1. In the Windows **Control Panel**, open **Services**.
2. In **Services**, select the service then click **Start** or **Stop** for desired result.

Additional Documentation

For further information on postinstallation and configuration tasks, refer to component-specific documentation. For information on viewing and installing the documentation, refer to Appendix E, "Installing Documentation Library".

4

Standard Edition

This chapter guides you through the installation steps for the Standard Edition of Oracle9*i* Application Server. The following topics provide detailed installation steps, and basic postinstallation tasks:

- Installation
- Postinstallation

Installation

The installation process is divided into two parts:

- Preparing System for Installation
- Installing Oracle9i Application Server

Preparing System for Installation

The following instructions prepare your machine for the installation 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.

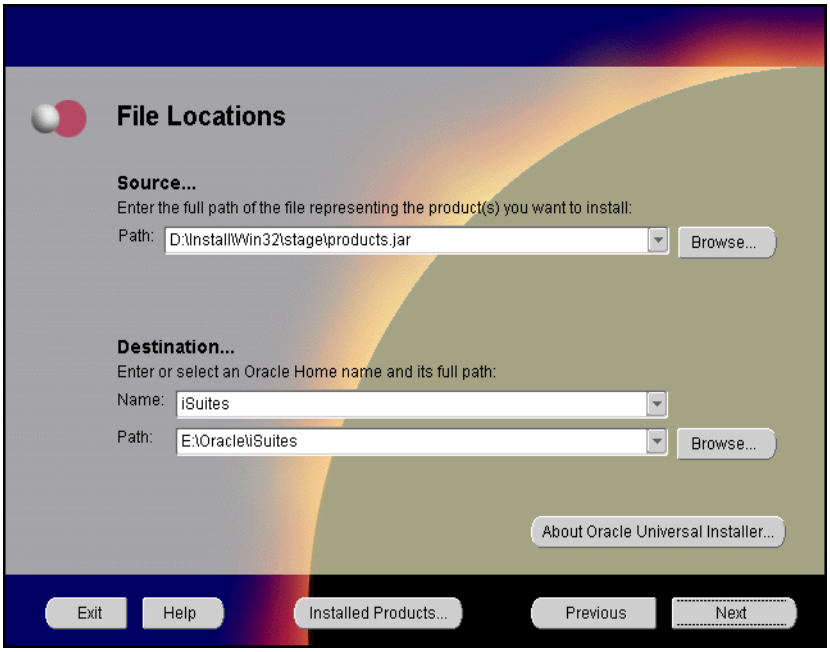
The following function buttons appear on the installation screens.

- **Deinstall Products**: To deinstall 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 deinstall 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 of ORACLE_HOME, which is the root directory in which product is installed.

  - Name: This is the name Windows uses to identify your ORACLE_HOME.

  - Path: This is the full path of the ORACLE_HOME.

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.

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

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

Figure 4–3 Installation Types Screen

The Installation Types screen allows you to select the Oracle9*i* Application Server installation option that you are licensed to use.

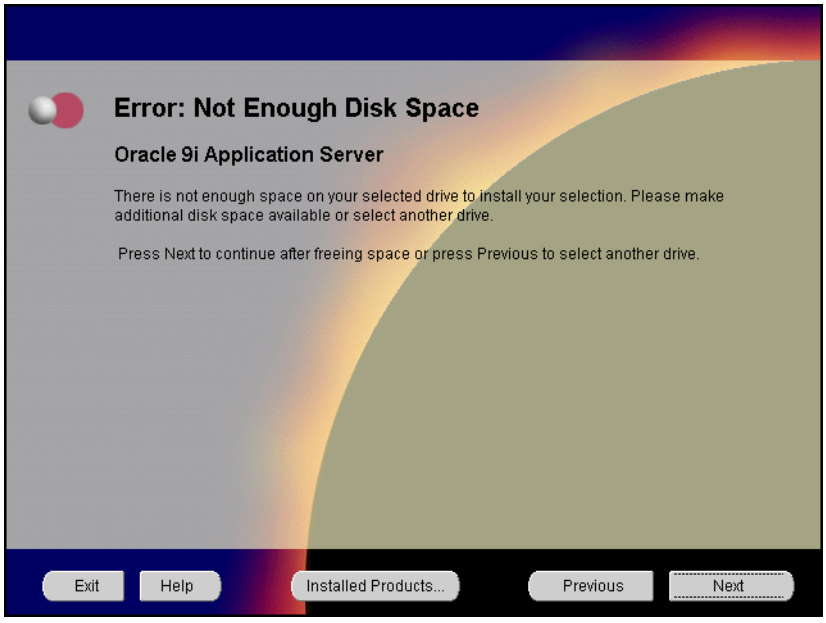
> **See Also:** Table 2–1, "Oracle9i Application Server Components" on page 2-2 for a complete list of components.

The following are the installation options:

- **Oracle HTTP Server Only**: Installs Oracle Portal, Oracle Portal-to-Go, Oracle Enterprise Manager Client, 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.

4. You do not have sufficient space to install Oracle9*i* Application Server. Free enough disk space to meet the hardware requirements and click **Next**, or click **Previous** to select another drive.

Figure 4–4 Insufficient Disk Space Screen



Insufficient Disk Space screen appears only if you do not have enough disk space on your selected drive to install Oracle9*i* Application Server. You can:

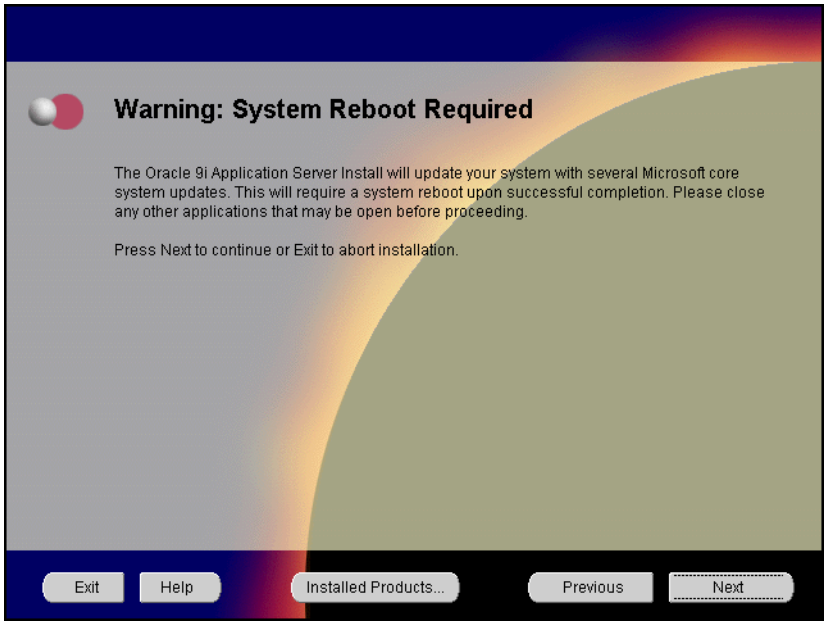
- Click **Next** once you have freed sufficient disk space.
- Click **Previous** to select another drive to install product.

See Also: Chapter 1, "Requirements"

5. Review the system reboot information and click **Next**.

> **Note:** Be sure to close all other open applications and processes as your machine will automatically reboot after the configuration files are copied.

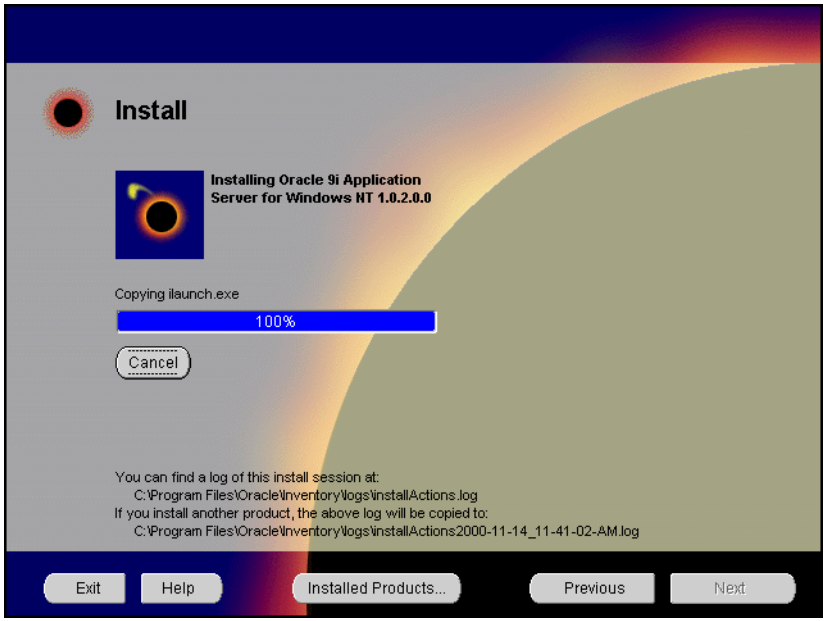
Figure 4–5 System Reboot Screen



The System Reboot screen informs you that after the installer copies the necessary files required to install Oracle9*i* Application Server, your machine will reboot to allow the configuration changes to take effect. When the machine starts up again, Oracle Universal Installer appears and begins the installation process of the Oracle9*i* Application Server.

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

Figure 4–6 Install Screen



The Install screen appears while Oracle Universal Installer installs required configuration files for Oracle9*i* Application Server. It also displays the full path of the installation log.

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

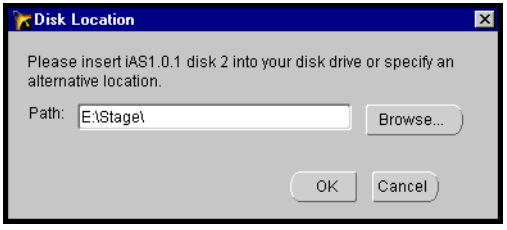
Your machine will reboot once the configuration files are copied. Do not attempt to restart the installer after reboot. It will launch automatically.

Installing Oracle9*i* Application Server

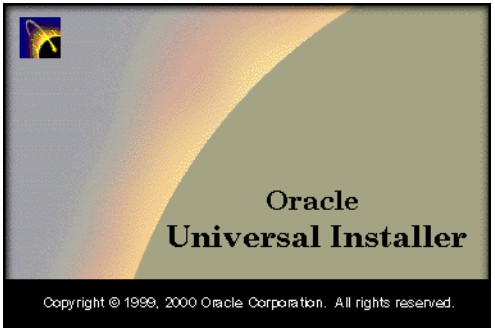
Once your machine starts up after rebooting, the installer appears and proceeds to install Oracle9*i* Application Server. The following instructions guide you through the installation process.

Note: Be sure to log in with administrator privileges after your machine starts up again.

Changing Disks: During the installation process, the Disk Location dialog appears and prompts you to change disks. Insert the requested disk into your disk drive, or specify an alternative location, and click OK.



The following screen appears as Oracle Universal Installer relaunches. The installer may take up to several minutes to start, and might pause if some screensavers are activated.

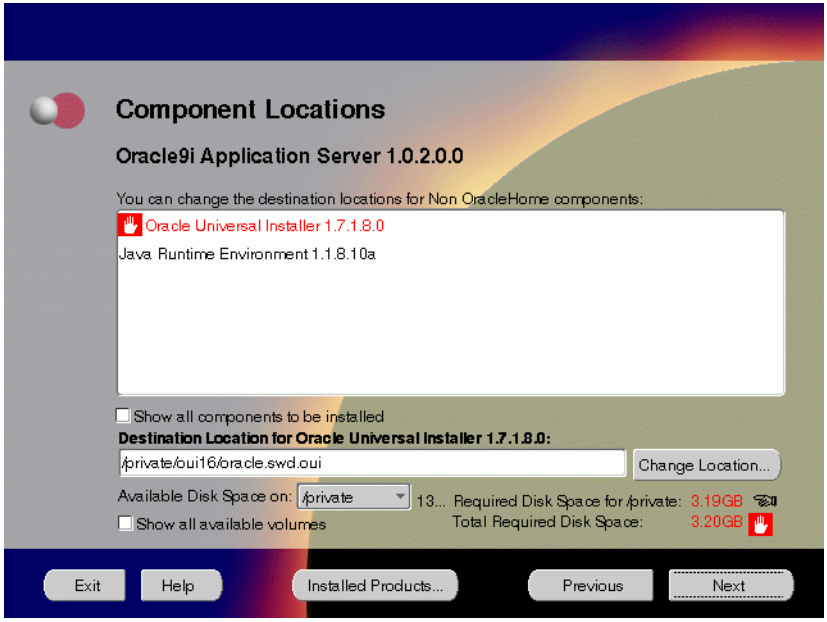


1. If needed, verify and change the locations of the components displayed on the screen, and click **Next**.

   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 4–7 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.

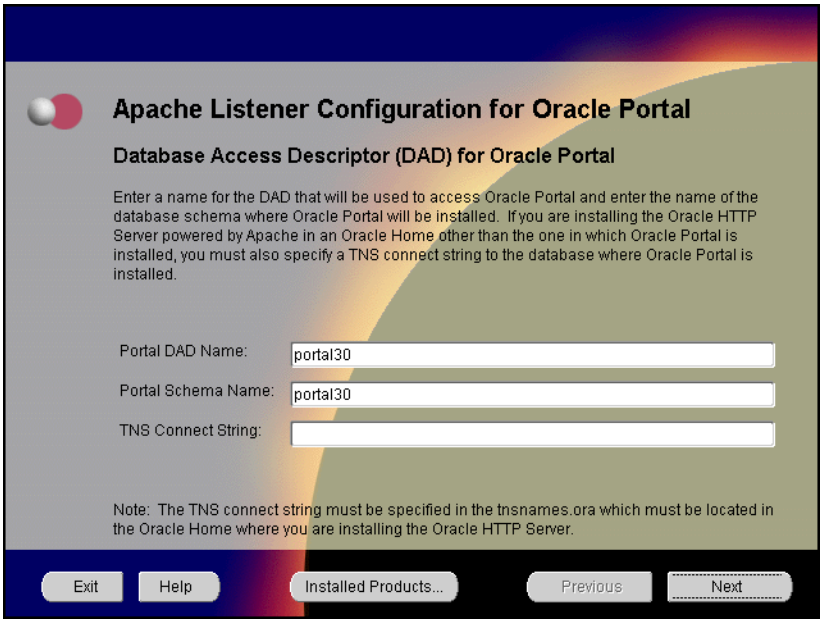
- **Destination Location**: To view the full path of the selected component.
- **Change Location**: To browse for alternate locations for the selected component.
- **Available Disk Space**: To view available disk space in the current directory. The installer also provides information about the total 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.

---

2. 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



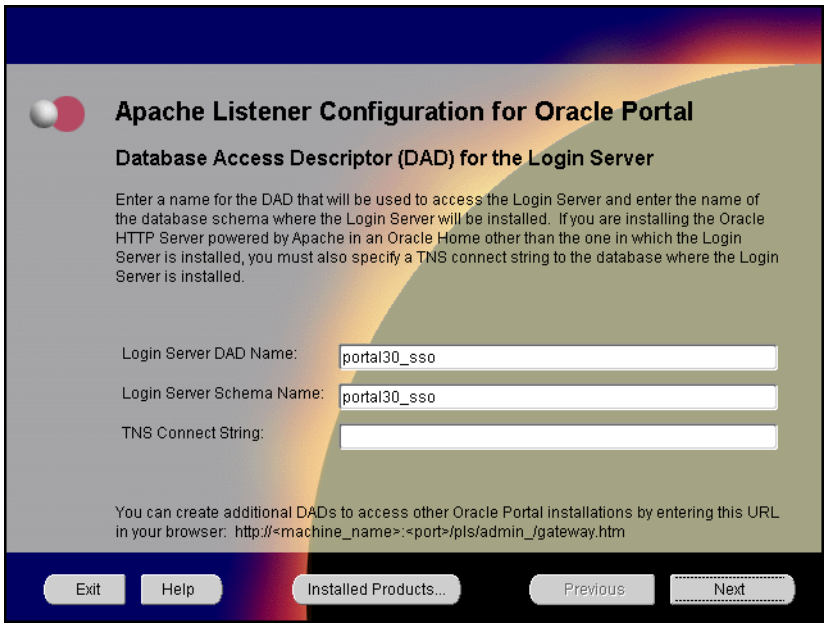
The Apache Listener Configuration for Oracle Portal DAD screen allows you to enter the name of the Database Access Descriptor (DAD) that will be used to access Oracle Portal, and the name of the database schema where Oracle Portal will be installed. It also enables you to enter the TNS connect string 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.

3. 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



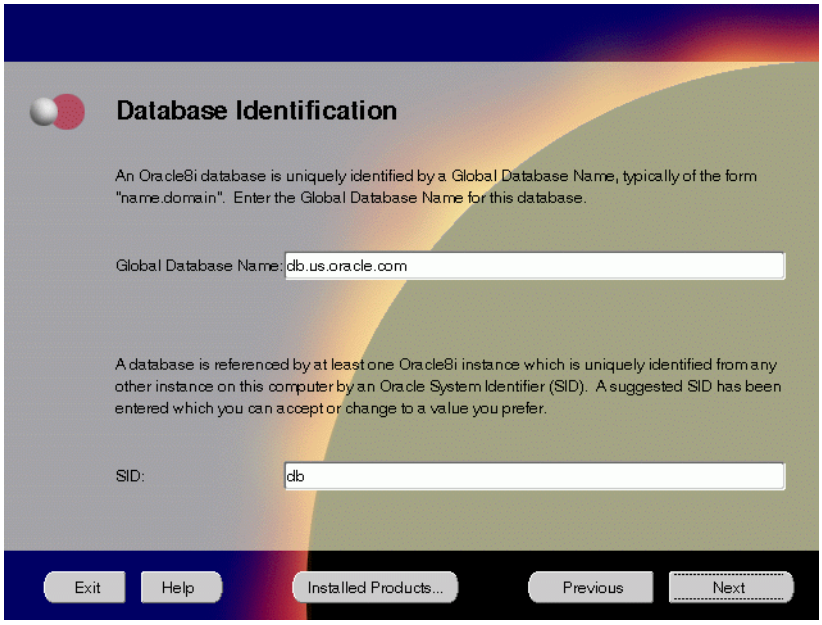
The Apache Listener Configuration for Oracle Portal screen allows you to enter the Login Server DAD and Schema Name, with a `_sso` extension for easy recognition. The Login Server provides an enterprise-wide Single Sign-On (SSO) mechanism that enables an Oracle Portal user to log in securely to Oracle 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.

4. 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:

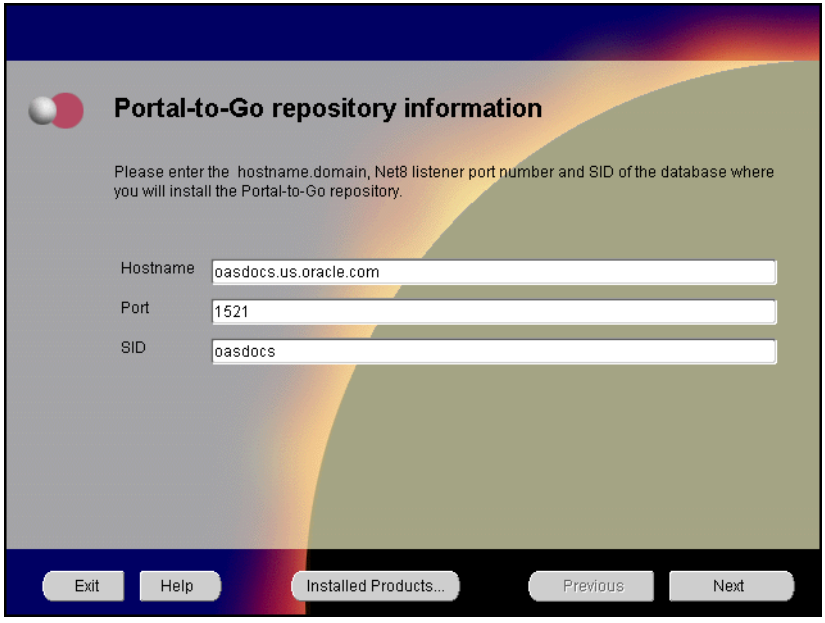
  `db.us.oracle.com`

  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.

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

Figure 4–11 Portal-to-Go Repository Information Screen

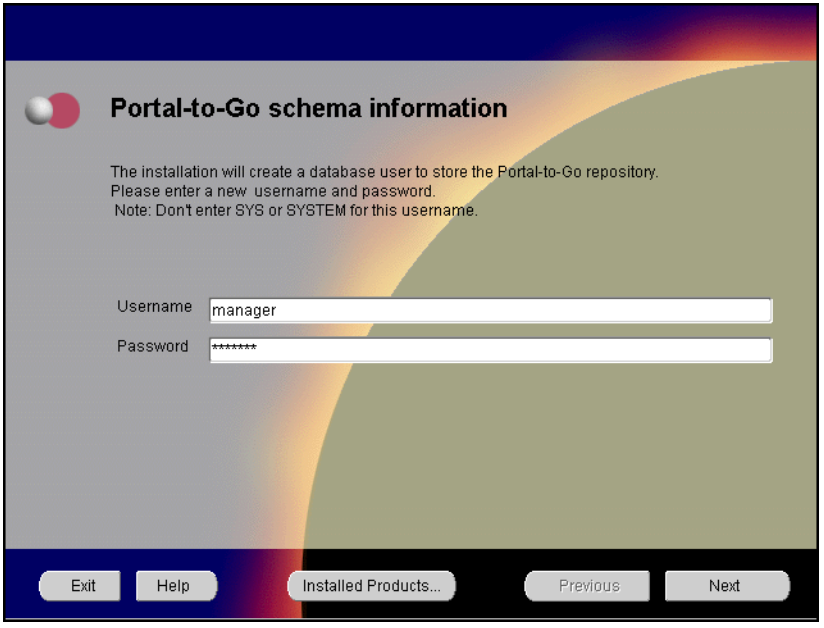


The Portal-to-Go Repository Information screen allows you to enter the hostname, Net8 Listener port number, and SID of the database where you will install the Portal-to-Go repository.

- **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.

6. Enter the new username and password for the database user to store the Portal-to-Go repository, and click **Next**.

Figure 4–12 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.

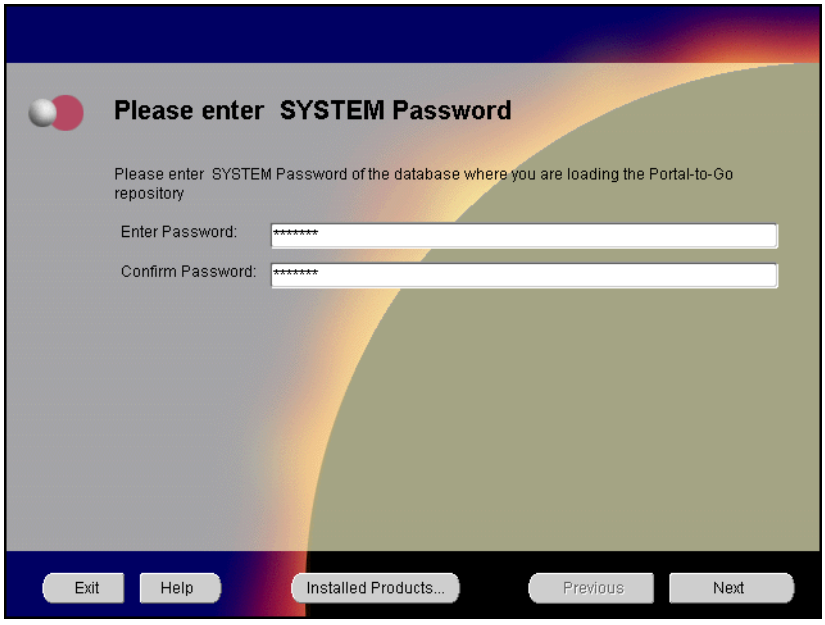
- **Username**: Enter a new user name for the database user to store the Portal-to-Go repository.
- **Password**: Enter a password for the database user.

Note: Do not use an existing database user, (that is, `SYS` or `SYSTEM`) as the username.

---

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

Figure 4–13 System Password Screen

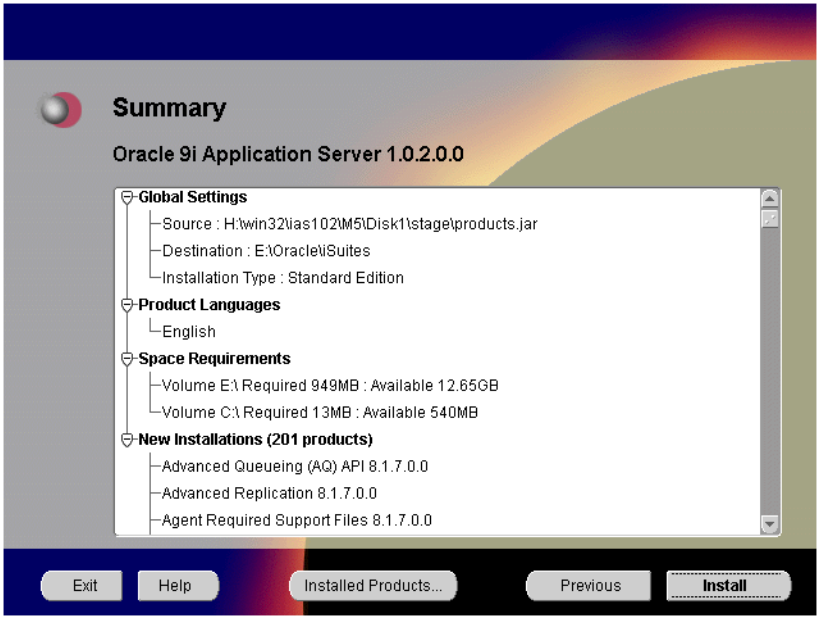


System Password screen allows you to enter and confirm the SYSTEM password of the database where you are loading the Portal-to-Go repository.

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

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

Figure 4–14 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.

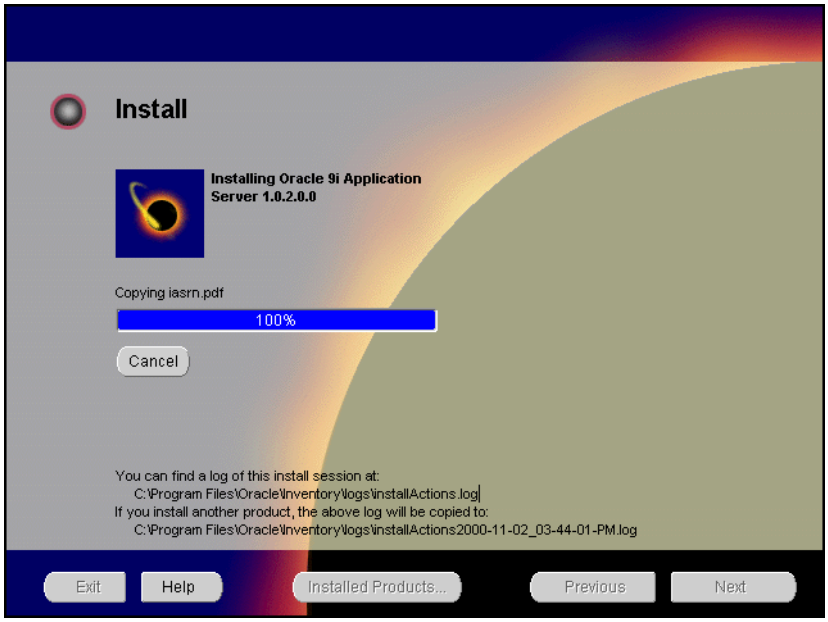
- To make changes to any of these settings, click **Previous** to return to the respective screens.

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

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

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

Figure 4–15 Install Screen

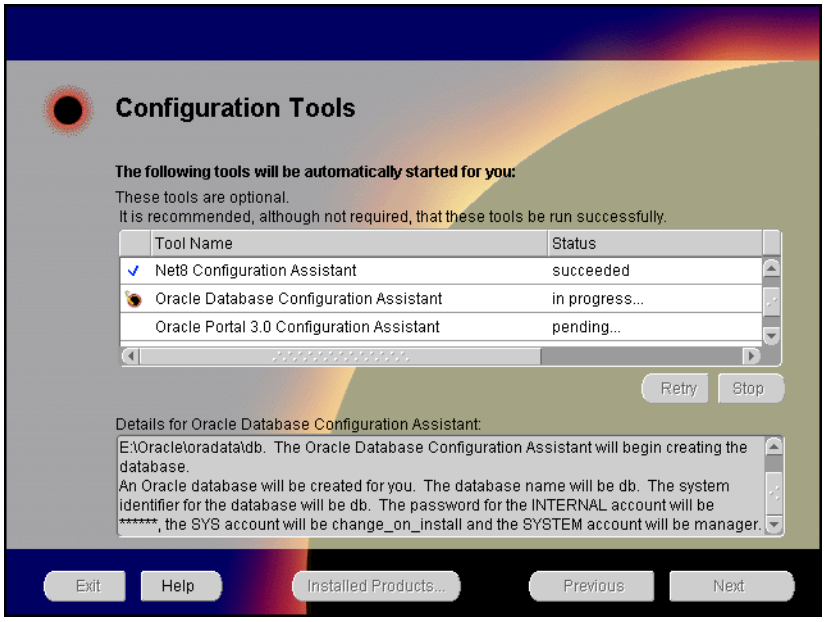


The Install screen appears while the product is installing. Installation operations include executing actions such as file copy and linking, and executing decision points and calculations. It also displays the full path of the installation log.

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

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

Figure 4–16 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 components.
- 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.

> **See Also:** *Net8 Administration's Guide* in the Oracle Database Documentation Library for information on running Net8 Configuration Assistant.

Oracle Database Configuration Assistant - It configures the database for Oracle8*i* JVM.

> **See Also:** "Oracle Database" on page A-34 for instructions on running Oracle Database Configuration Assistant.

Oracle Portal Configuration Assistant - It loads necessary database objects for Oracle Portal to run.

> **See Also:** "Oracle Portal" on page A-19 for instructions on running Oracle Portal Configuration Assistant.

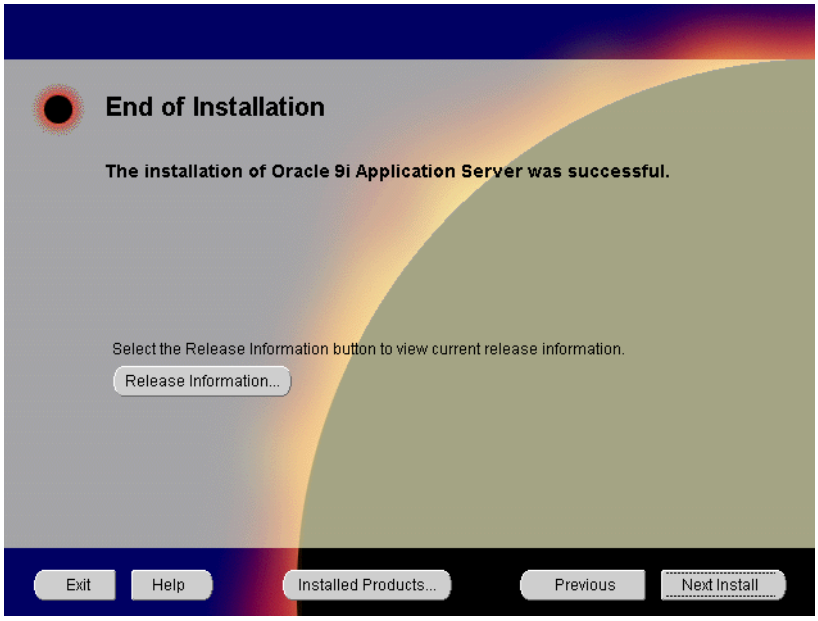
Starting Oracle HTTP service- It starts the Oracle HTTP Server.

Oracle HTTP Server starts up in a DOS window. In that window, you can test the Oracle HTTP Server installation.

To administer the Oracle HTTP service from the `Control Panel`, reboot your machine after Oracle9*i* Application Server installation completes. Then, Oracle HTTP service will start automatically and you will no longer need to start it in a DOS window.

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

Figure 4–17 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 Standard Edition installation option of Oracle9*i* Application Server. Proceed to "Postinstallation" on page 4-25 to complete the installation process.

Postinstallation

The following instructions guide you through the basic postinstallation 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.

See Also: Appendix B, "Installing Oracle Portal-to-Go Client"

The postinstallation contains the following sections:

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

Component Port Numbers

Table 4–2 lists the default port numbers on which requests are received for each component.

Table 4–2 Port Numbers

Components	Port Number
Oracle HTTP Server 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 postinstallation 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.

> **See Also:** "Oracle Internet File System" for instructions on running Oracle Internet File System Configuration Assistant.

Oracle Portal-to-Go

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

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

Loading Oracle Portal-to-Go Repository

To load the bootstrap repository in the Oracle Portal-to-Go schema:

1. Open a DOS session, and go to `ORACLE_HOME\panama\setupconf` directory.
2. Type the following command:

   ```
   Set JAVA_HOME=ORACLE_HOME\Apache\jdk
   ```

3. Type the following to run the batch files:

   ```
   pa_java_inst
   ```

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.

See Also: Appendix B, "Installing Oracle Portal-to-Go Client"

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

1. Run the Web Integration Server.

   Web Integration Server is installed as a service. Select Oracle Web Integration Server from the `Services` dialog, and click the **Start** button.

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`.

   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\conf` 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\conf` 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\servlets` 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/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/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/ptg/rm`

Starting and Stopping Components

You can manually start and stop a component by doing the following:

1. In the Windows **Control Panel**, open **Services**.
2. In **Services**, select the service then click **Start** or **Stop** for desired result.

Additional Documentation

For further information on postinstallation and configuration tasks, refer to component-specific documentation. For information on viewing and installing the documentation, refer to Appendix E, "Installing Documentation Library".

5

Enterprise Edition

This chapter guides you through the installation steps for the Enterprise Edition of Oracle9*i* Application Server. The following topics provide detailed installation steps, and basic postinstallation tasks:

- Installation
- Postinstallation

Installation

The installation process is divided into two parts:

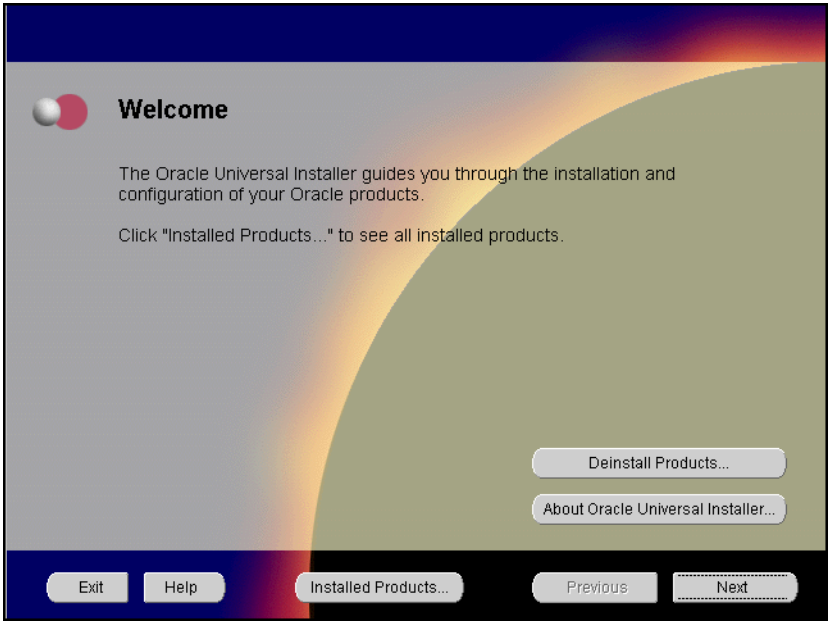
- Preparing System for Installation
- Installing Oracle9i Application Server

Preparing System for Installation

The following instructions prepare your machine for the installation 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.

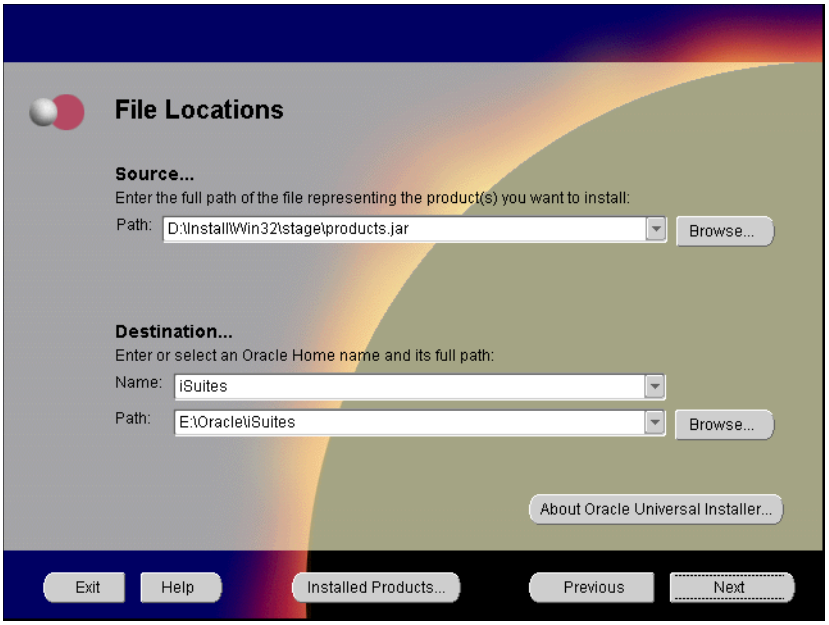
The following function buttons appear on the installation screens.

- **Deinstall Products**: To deinstall 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 deinstall 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 of ORACLE_HOME, which is the root directory in which product is installed.

  - Name: This is the name Windows uses to identify your ORACLE_HOME.

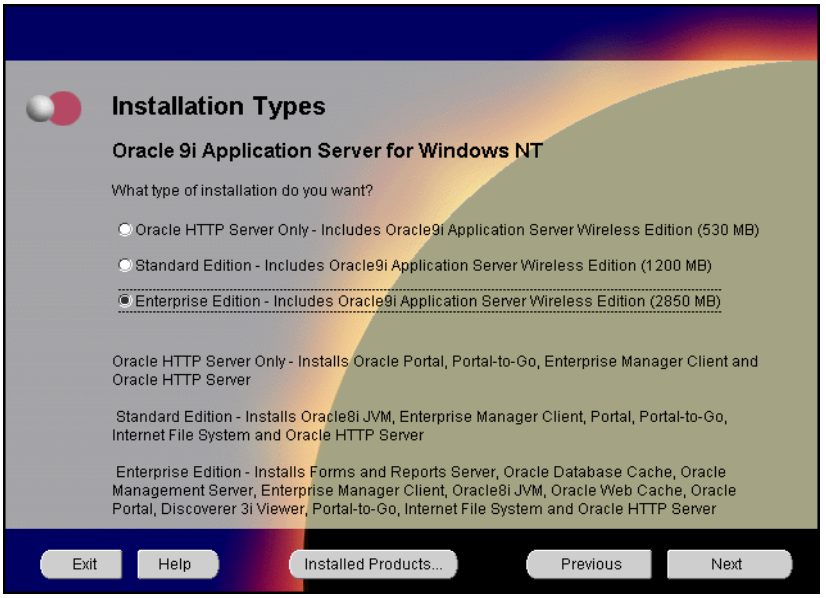
  - Path: This is the full path of the ORACLE_HOME.

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.

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

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

Figure 5–3 Installation Types Screen



The Installation Types screen allows you to select the Oracle9*i* Application Server installation option that you are licensed to use.

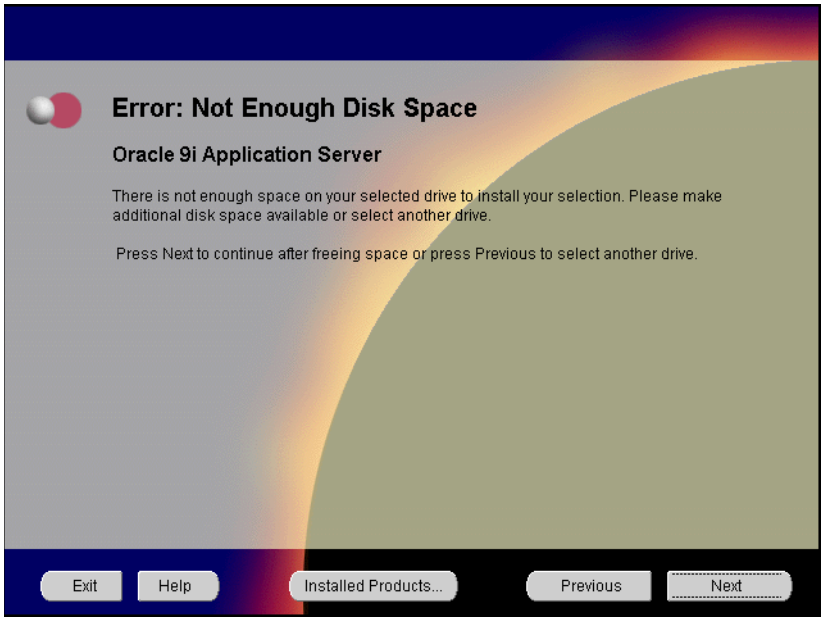
> **See Also:** Table 2–1, "Oracle9i Application Server Components" on page 2-2 for a complete list of components.

The following are the installation options:

- **Oracle HTTP Server Only**: Installs Oracle Portal, Oracle Portal-to-Go, Oracle Enterprise Manager Client, 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.

4. You do not have sufficient space to install Oracle9*i* Application Server. Free enough disk space to meet the hardware requirements and click **Next**, or click **Previous** to select another drive.

Figure 5–4 Insufficient Disk Space Screen



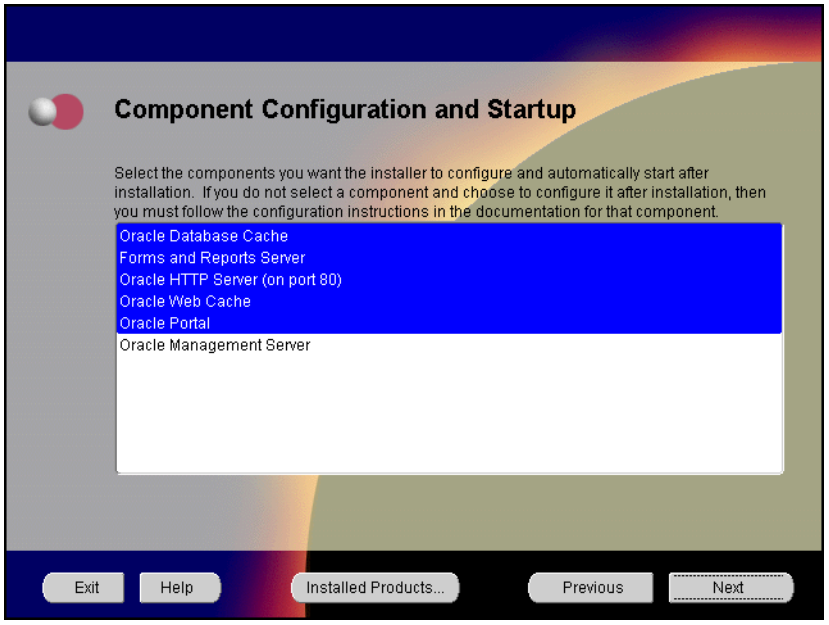
Insufficient Disk Space screen appears only if you do not have enough disk space on your selected drive to install Oracle9*i* Application Server. You can:

- Click **Next** once you have freed sufficient disk space.
- Click **Previous** to select another drive to install product.

See Also: Chapter 1, "Requirements"

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

Figure 5–5 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 manually launch the configuration assistant to configure that component.

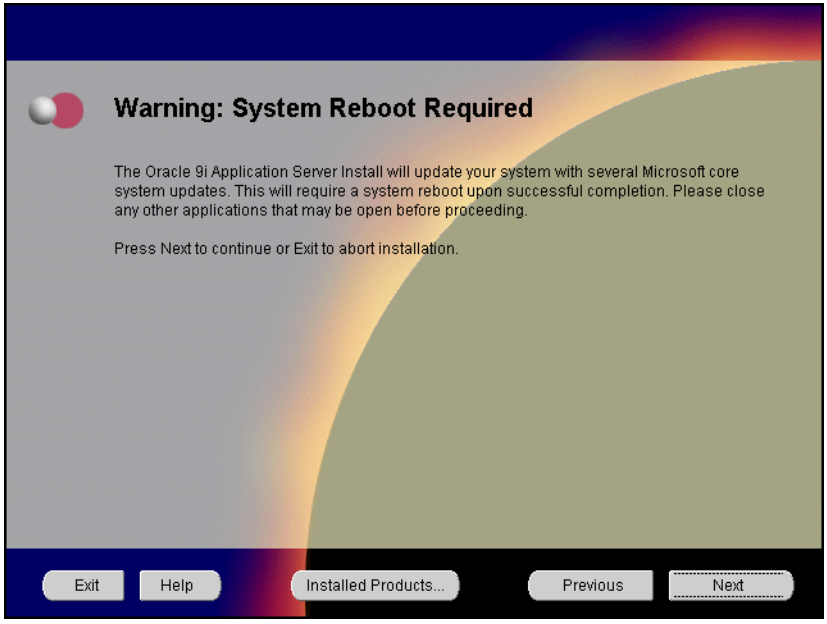
See Also: Appendix A, "Configuration Tools"

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

6. Review the system reboot information and click **Next**.

> **Note:** Be sure to close all other open applications and processes as your machine will automatically reboot after the configuration files are copied.

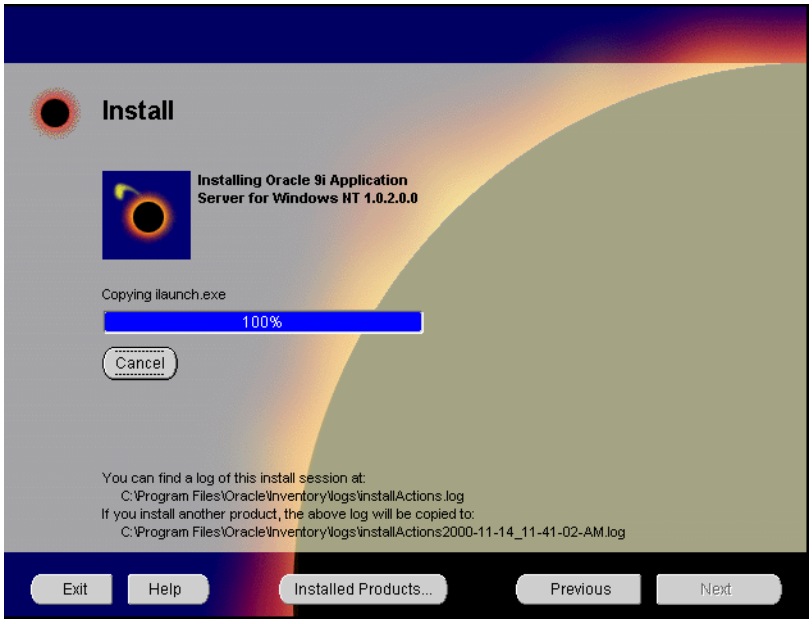
Figure 5–6 System Reboot Screen



The System Reboot screen informs you that after the installer copies the necessary files required to install Oracle9*i* Application Server, your machine will reboot to allow the configuration changes to take effect. When the machine starts up again, Oracle Universal Installer appears and begins the installation process of the Oracle9*i* Application Server.

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

Figure 5–7 Install Screen



The Install screen appears while Oracle Universal Installer installs required configuration files for Oracle9*i* Application Server. It also displays the full path of the installation log.

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

Your machine will reboot once the configuration files are copied. Do not attempt to restart the installer after reboot. It will launch automatically.

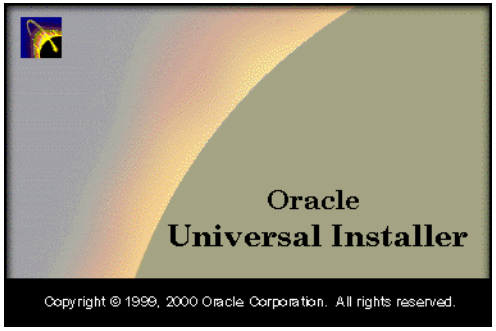
Installing Oracle9*i* Application Server

Once your machine starts up after rebooting, the Oracle Universal Installer appears and proceeds to install Oracle9*i* Application Server. The following instructions guide you through the installation process.

Note: Be sure to log in with administrator privileges after your machine starts up again.

Changing Disks: During the installation process, the Disk Location dialog appears and prompts you to change disks. Insert the requested disk into your disk drive, or specify an alternative location, and click `OK`.

The following screen appears as Oracle Universal Installer relaunches.The installer may take up to several minutes to start, and might pause if some screensavers are activated.

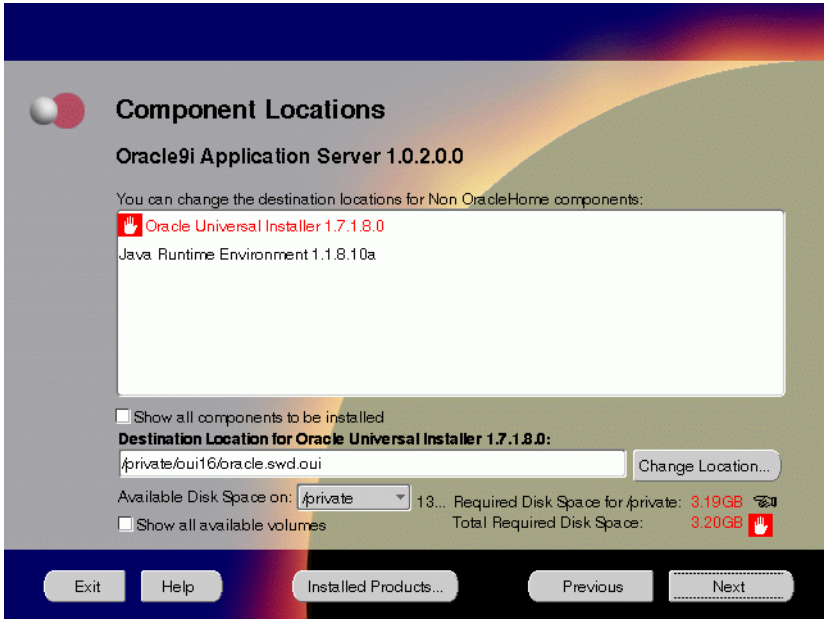


1. If needed, verify and change the locations of the components displayed on the screen, and click **Next**.

   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 5–8 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.

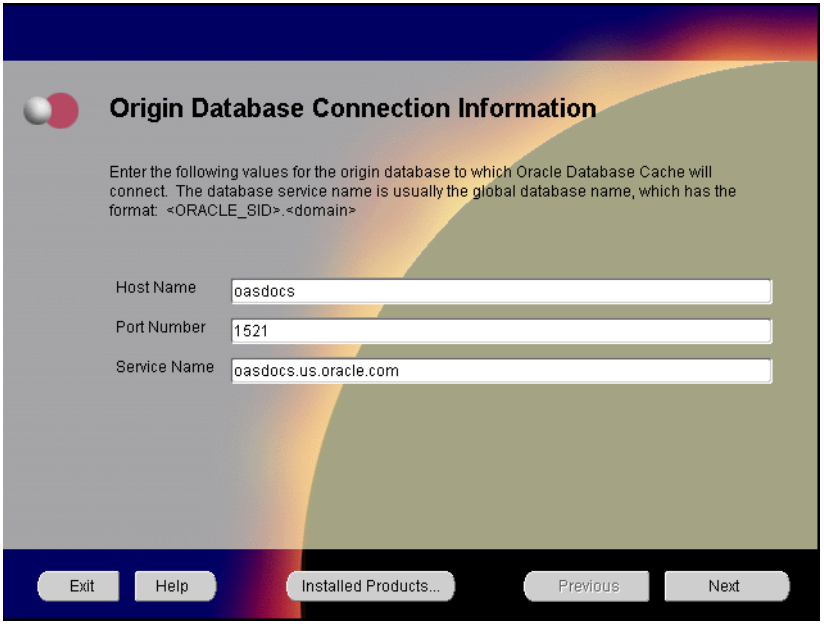
- **Destination Location**: To view the full path of the selected component.
- **Change Location**: To browse for alternate locations for the selected component.
- **Available Disk Space**: To view available disk space in the current directory. The installer also provides information about the total 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.

---

2. 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 5–9 Origin Database Connection Information



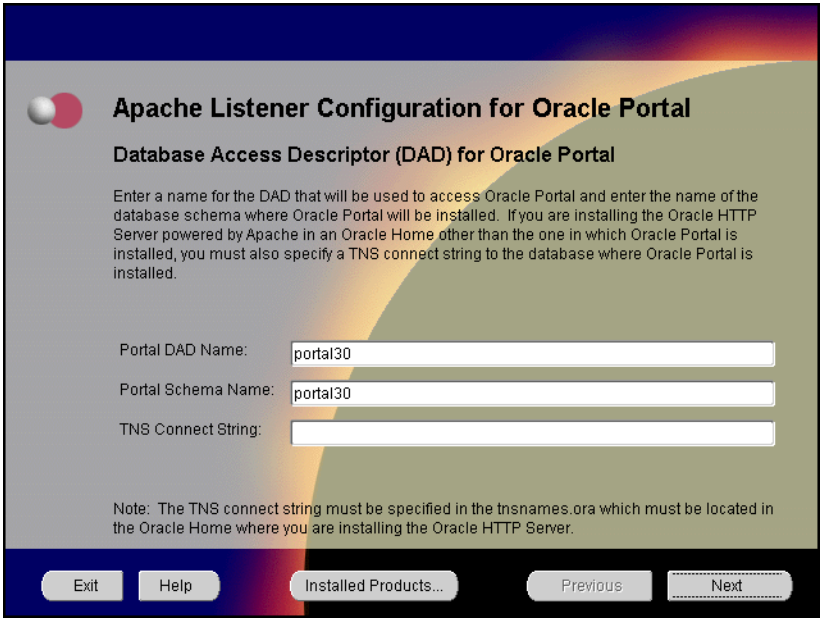
The Origin Database Connection Information screen enables you to identify the origin database for the middle-tier cache.

- **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 `oasdocs` is the database name and `us.oracle.com` is the network domain in which the database is located, then the service name is `oasdocs.us.oracle.com`.

3. 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 5–10 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`

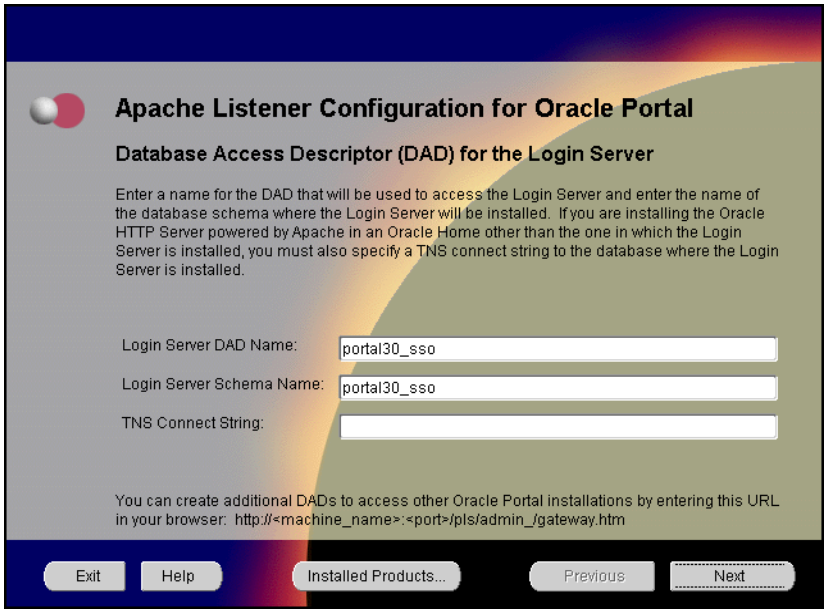
- **Portal DAD Name**: Enter the name of the DAD for each instance you installed in the database. A Database Access Descriptor (DAD) is a set of values that specify how the Apache Listener connects to your Oracle database server to fulfill an HTTP request. Based on this DAD name, the installation automatically 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.

4. 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 5–11 Apache Listener Configuration for Oracle Portal (Login Server) Screen



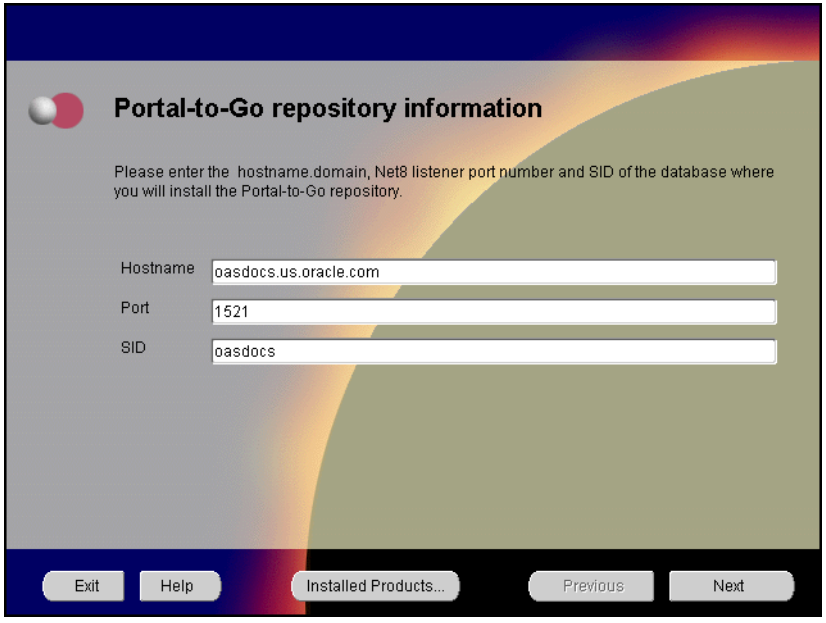
The Apache Listener Configuration for Oracle Portal screen allows you to enter the Login Server DAD and Schema Name, with a `_sso` extension for easy recognition. The Login Server provides an enterprise-wide Single Sign-On (SSO) mechanism that enables an Oracle Portal user to log in securely to Oracle 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.

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

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

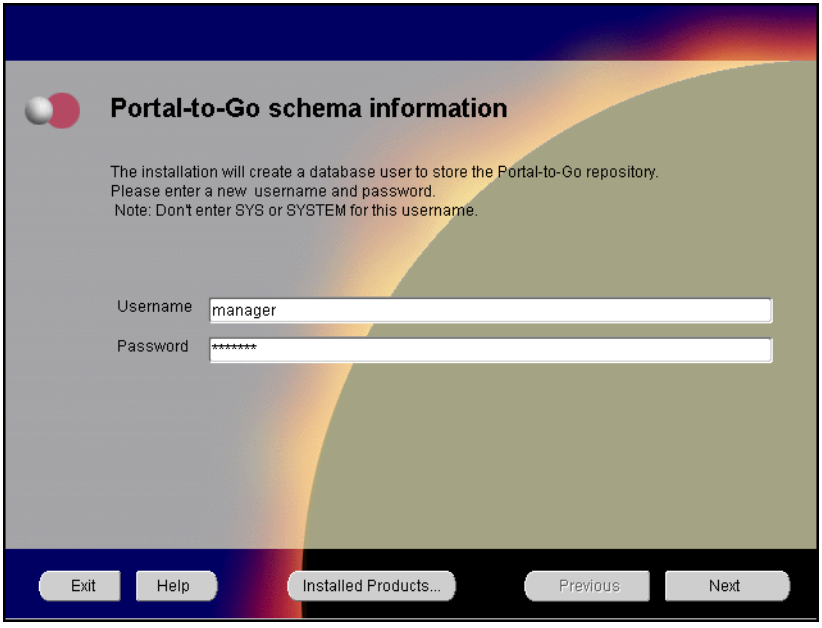


The Portal-to-Go Repository Information screen allows you to enter the hostname, Net8 Listener port number, and SID of the database where you will install the Portal-to-Go repository.

- **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.

6. Enter the new username and password for the database user to store the Portal-to-Go repository, and click **Next**.

Figure 5–13 Portal-to-Go Schema Information Screen



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

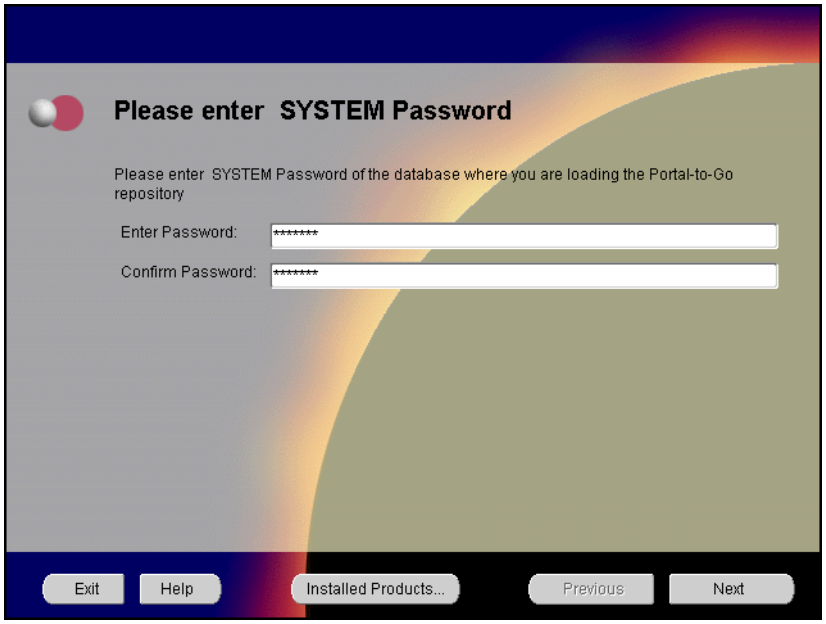
- **Username**: Enter a new user name for the database user to store the Portal-to-Go repository.
- **Password**: Enter a password for the database user.

Note: Do not use an existing database user, (that is, `SYS` or `SYSTEM`) as the username.

---

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

Figure 5–14 System Password Screen

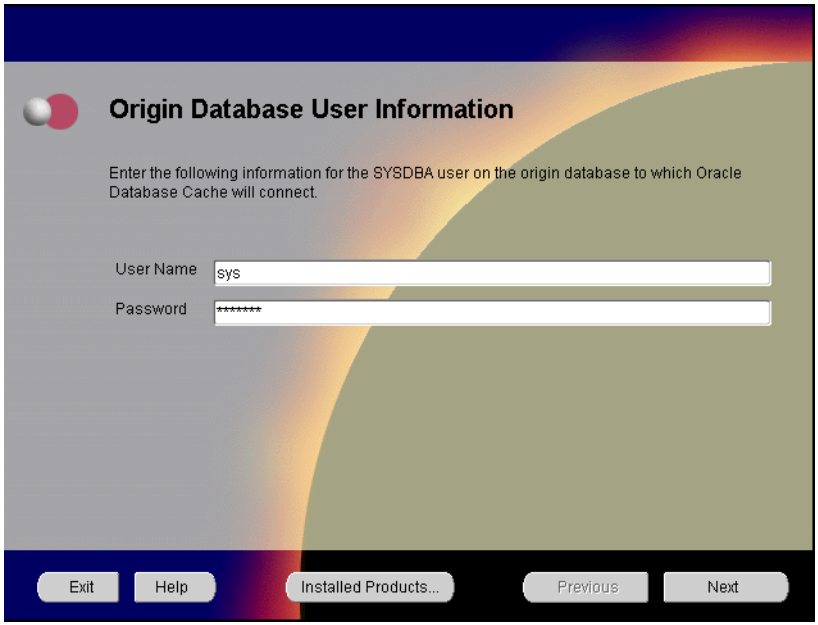


The System Password screen allows you to enter and confirm the SYSTEM password of the database where you are loading the Portal-to-Go repository.

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

8. 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 5–15 Origin Database User Information Screen

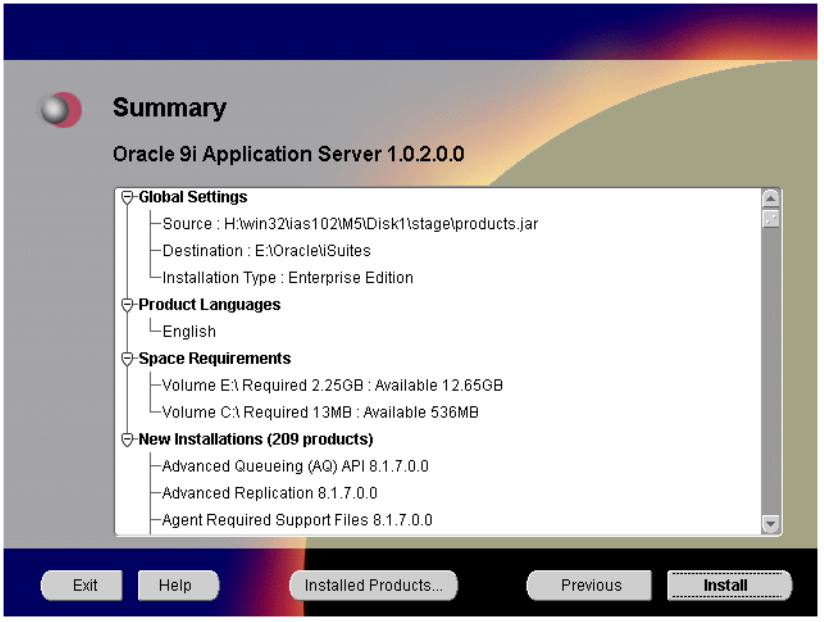


The Origin Database User Information screen allows you to enter the SYSDBA information created for the origin database.

- **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.

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

Figure 5–16 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.

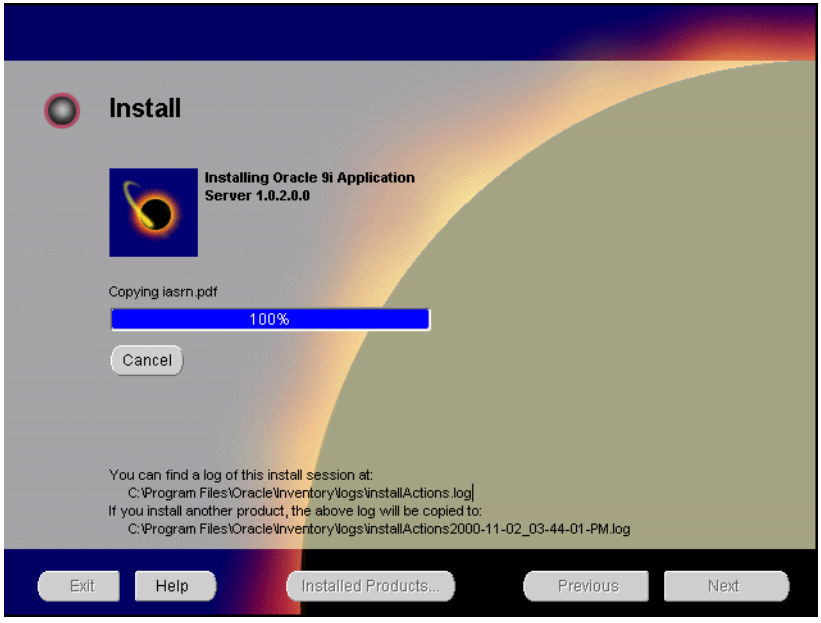
- To make changes to any of these settings, click **Previous** to return to the respective screens.

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

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

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

Figure 5–17 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.

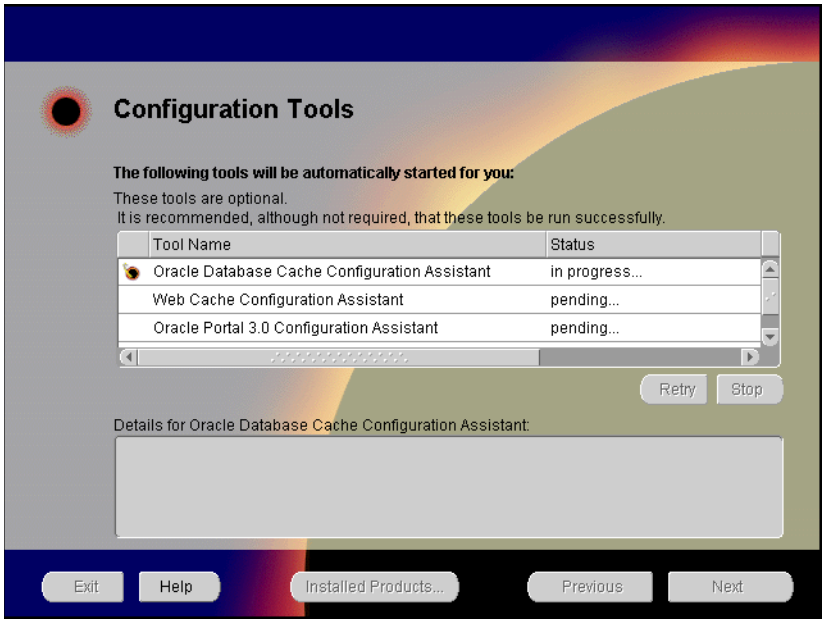
- **Cancel**: To discontinue the installation process. You can then choose to stop the installation of an individual component or the entire product.

The following screen indicates that Oracle Installer is installing Oracle Forms Services, Oracle Reports Services, and Oracle Discoverer 3*i* Viewer. No user input is required.

Figure 5–18 Oracle Installer

11. 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 5–19 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 Component Configuration and Startup 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 Database Cache Configuration Assistant - It enables you to configure your middle-tier caches.

> **See Also:** "Oracle Database Cache" on page A-2 for instructions on running Oracle Database Cache Configuration Assistant.

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 Appendix C, "Installing Oracle Database Cache on the Origin Database System" on page C-1.

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.

> **See Also:** "Starting and Stopping Components" on page 5-44

Oracle Portal Configuration Assistant - It loads necessary database objects for Oracle Portal to run.

> **See Also:** "Oracle Portal" on page A-19 for instructions on running Oracle Portal Configuration Assistant.

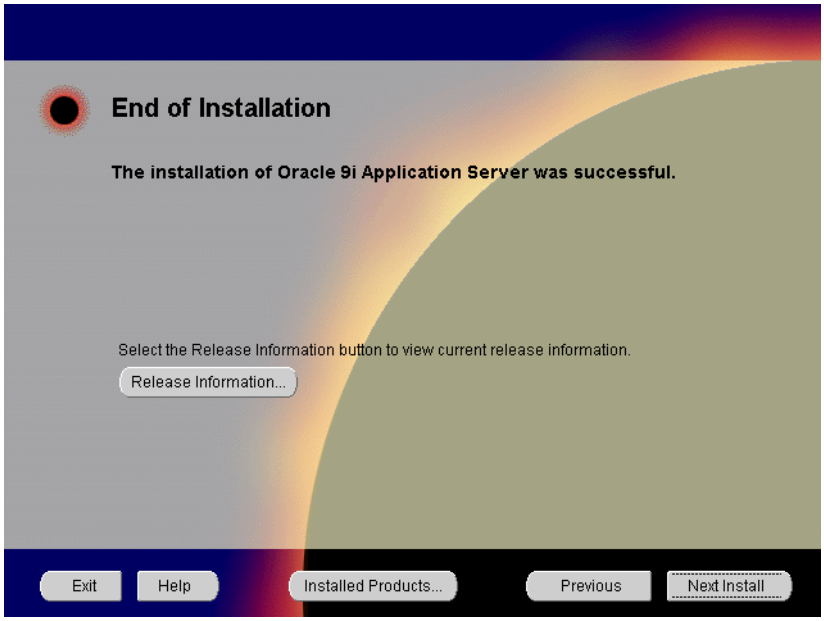
Starting Oracle HTTP service- It starts the Oracle HTTP Server.

Oracle HTTP Server starts up in a DOS window. In that window, you can test the Oracle HTTP Server installation.

To administer the Oracle HTTP service from the `Control Panel`, reboot your machine after Oracle9*i* Application Server installation completes. Then, Oracle HTTP service will start automatically and you will no longer need to start it in a DOS window.

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

Figure 5–20 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 Enterprise Edition installation option of Oracle9*i* Application Server. Proceed to "Postinstallation" on page 5-29 to complete the installation process.

Postinstallation

The following instructions guide you through the basic postinstallation 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.

See Also: Appendix B, "Installing Oracle Portal-to-Go Client"

The postinstallation contains the following sections:

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

Component Port Numbers

Table 5–2 lists the default port numbers on which requests are received for each component.

Table 5–2 Port Numbers

Components	Port Number
Oracle Web Cache	1100
Oracle Web Cache Administration Port	4000
Oracle Web Cache Invalidation Port	4001
Oracle Web Cache Statistics Port	4002
Oracle HTTP Server	80
Oracle HTTP Server (SSL-enabled)	443
Oracle Database Cache	51719
Oracle Forms Services	9001
Load Balancer Client	9011
Load Balancer Server	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 postinstallation 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.

> **See Also:** "Oracle Internet File System" for instructions on running Oracle Internet File System Configuration Assistant.

Oracle Management Server

You must run the Oracle Enterprise Manager Configuration Assistant to configure Oracle Management Server.

> **See Also:** "Oracle Management Server" for instructions on running Oracle Enterprise Manager Configuration Assistant.

Oracle Database Cache

Be sure to perform the following postinstallation steps for Oracle Database Cache:

- Setting Up the Oracle Database Cache Environment for Your Applications
- Modify the initicache.ora File
- Set NTFS File System and Windows NT Registry Permissions

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 Also: "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 Also: "Using a Previous Oracle8i Release 8.1.6 Oracle Home" on page 5-35 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 Also: "Relinking Applications That Use Releases Previous to Release 8.1.6" on page 5-36 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 `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 Also: *Oracle Database Cache Concepts and Administration Guide* in the Oracle9*i* Application Server Documentation Library.

   - 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.

- Set the value of the environment variable PATH so that the Oracle Database Cache library directory (<ORACLE_HOME>\lib) precedes other Oracle library directories.
- If you use the CLASSPATH environment variable, set it to the Oracle home in which you installed Oracle Database Cache.

2. If you use the environment variable or registry parameter TNS_ADMIN, make sure that it is set to the <ORACLE_HOME>\network\Admin directory in the Oracle home for Oracle Database Cache. The registry parameter is located in the following location:

   HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME *id*

3. From the Start menu, select Oracle for Windows NT -> Oracle Home Selector. Then, select the Oracle home in which you installed Oracle Database Cache.

4. 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.

See Also: "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>`\bin\oraclient8.dll`
   <ORACLE_HOME>`\bin\orageneric8.dll` (not required for 8.1.6.1)
   <ORACLE_HOME>`\bin\orawtc8.dll`
   <ORACLE_HOME>`\bin\orawtc8.lib`

2. From the Start menu, select `Oracle for Windows NT -> Oracle Home Selector`. Then, select the Oracle home for the Oracle8*i* server or client that your application uses.
3. Copy the SQL*Plus executable file 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.
4. 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.)
5. If you use the environment variable or registry parameter `TNS_ADMIN`, make sure it points to the Oracle home that your application uses.
6. 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 Oracle Database Cache.

> **See Also:** *Oracle Call Interface Programmers Guide* and *Oracle8i Administrator s Reference* in your Oracle Database Documentation Library

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"
```

`initicache.ora` is located in the *`ORACLE_HOME`*`\Admin\icache\pfile` directory.

Set NTFS File System and Windows NT Registry Permissions

Oracle Corporation recommends that you configure Oracle Database Cache files, directories, and registry settings to allow only authorized database administrators to have full control. The following sections describe how to perform these tasks.

See your Windows NT documentation for more information about modifying NTFS file system and Windows NT registry settings.

NTFS File System Security

Oracle Database Cache uses files to store data and configuration information. To do this, the Oracle Database Cache process runs under a security account. This security account (the account under which you installed Oracle Database Cache) includes the ability to create and access these files. The security account is assigned to the service that Oracle Database Cache uses (in the Control Panel). This account requires full file system permissions to create, read, write, delete, and execute files.

To ensure that only authorized users have full file system permissions:

1. From Windows NT Explorer, select Oracle Database Cache executables and dynamic link libraries (in `ORACLE_HOME\bin`), Oracle Database Cache directories, and files for the cache (in `ORACLE_HOME\dbs`).
2. Right-click and select **Properties**.
3. Adjust the file and directory permissions to ensure that:
   - Only the security account has full control permissions to these files
   - User accounts that must run Oracle applications (for example, SQL*Plus, Server Manager, and Pro*C) have read privileges on the necessary executables (for example, `sqlplus.exe` for SQL*Plus)

Windows NT Registry Security

Oracle Corporation recommends that you remove write permissions in the NT registry from users who are not DBAs or system administrators.

To remove write permissions:

1. From the Windows NT **Start menu**, select **Run**. For **Open**, type **regedt32**.
2. Select the key `HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE`.
3. From the **Security menu**, select **Permissions**.
4. In the Registry Key Permissions dialog box, remove write permissions from any users who are not Oracle Database Cache DBAs or system administrators. Note that the SYSTEM account must have Full Control.
5. Ensure that user accounts that must run Oracle applications have read privileges.
6. Click **OK**.
7. Exit the registry.

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 (`inst`*`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)(PREoracle.aurora.server.SGiopServer)"
  ```

Oracle Portal-to-Go

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

Loading Oracle Portal-to-Go Repository

To load the bootstrap repository in the Oracle Portal-to-Go schema:

1. Open a DOS session, and go to `ORACLE_HOME\panama\setupconf` directory.
2. Type the following command:

   ```
   Set JAVA_HOME=ORACLE_HOME\Apache\jdk
   ```

3. Type the following to run the batch files:

   ```
   pa_java_inst
   ```

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.

See Also: Appendix B, "Installing Oracle Portal-to-Go Client"

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

1. Run the Web Integration Server.

   Web Integration Server is installed as a service. Select Oracle Web Integration Server from the `Services` dialog, and click the **Start** button.

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`.

   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\conf` 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\conf` 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\servlets` 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/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/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/ptg/rm`

Starting and Stopping Components

You can manually start and stop a component by doing the following:

1. In the Windows **Control Panel**, open **Services**.
2. In **Services**, select the service then click **Start** or **Stop** for desired result.

Additional Documentation

For further information on postinstallation and configuration tasks, refer to component-specific documentation. For information on viewing and installing the documentation, refer to Appendix E, "Installing Documentation Library".

6

Deinstallation and Reinstallation

This chapter guides you through the deinstallation and reinstallation process for Oracle9*i* Application Server. They are described in the following topics:

- Deinstallation
- Reinstallation

Deinstallation

The following steps guide you through the deinstallation process of Oracle9*i* Application Server. This process is divided into four parts:

- Deinstalling Using Oracle Installer
- Deinstalling Oracle Database Cache (only if you have installed Enterprise Edition)
- Deinstalling Oracle Portal
- Deinstalling using Oracle Universal Installer

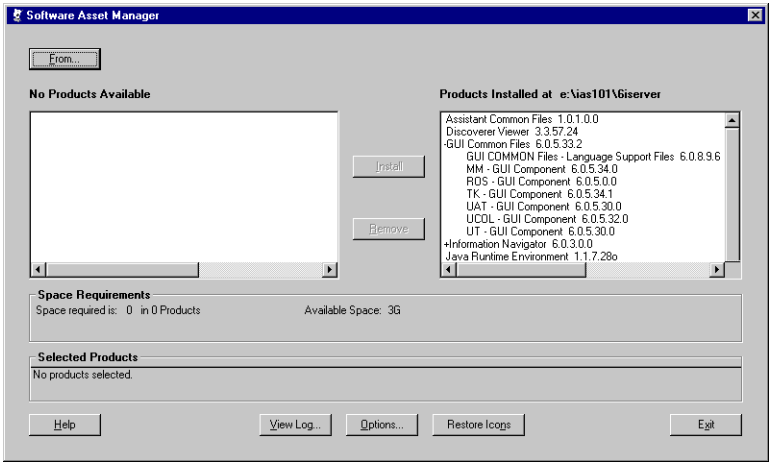
Note: Be sure to stop all services and processes before starting the deinstallation process.

Deinstalling Using Oracle Installer

Follow the instructions below to deinstall Oracle Forms Services, Oracle Reports Services, and Oracle Discoverer 3*i* Viewer Edition.

1. Launch Oracle Installer from **Start Menu** > **Programs** > **Oracle for Windows NT** > **Oracle Installer**.
2. When Oracle Installer launches, the Software Asset Manager appears. Hold down the **Control** button on your keyboard and click on each installed component. Once all components are selected, click **Remove**.

Figure 6–1 Software Asset Manager



The Software Asset Manager allows you to deinstall components. Be sure to scroll down to select all installed components. When you click **Remove**, a dialog appears asking you if you want to remove the selected components. Click **Yes**. When all the components are deinstalled, quit the installer by clicking **Exit**.

You have successfully deinstalled Oracle Forms Services, Oracle Reports Services, and Oracle Discoverer 3*i* Viewer Edition. Continue the deinstallation process:

- If you installed Enterprise Edition, proceed to "Deinstalling Oracle Database Cache" on page 6-4.
- If you installed Oracle HTTP Server Only or Standard Edition, proceed to "Deinstalling Oracle Portal" on page 6-5.

Deinstalling 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 "Deinstalling Oracle Portal" on page 6-5.

1. Make sure the cache is started. If it is not, then start the cache using the Cache Manager or start the following Windows NT services for Oracle8*i* Cache.

   ```
   OracleServiceicache
   OracleWTCiCache
   OracleOracle_homeDataGatherer
   OracleOracle_homeTNSListener
   ```

2. Run the Configuration Assistant, specifying the `-deinstall` option:

   ```
   prompt> wtacca -deinstall
   ```

Proceed to "Deinstalling Oracle Portal" on page 6-5.

Deinstalling Oracle Portal

If you wish to deinstall the Oracle Portal database objects and/or the login server, then perform the following steps:

Oracle Portal Schema

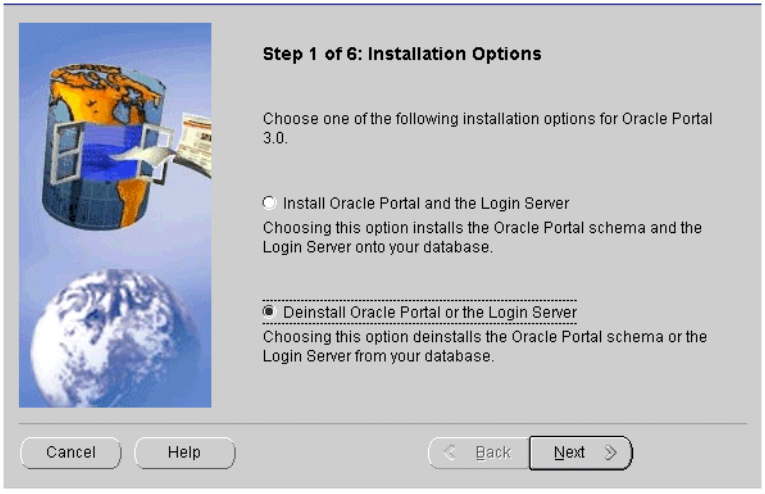
Perform the following steps to deinstall Oracle Portal Schema:

1. Manually launch the Oracle Portal Configuration Assistant using the following command:

   ```
   prompt> <ORACLE_HOME>\assistants\opca\launch.bat
   ```

2. When the configuration assistant appears, select the Deinstall Oracle Portal or Login Server, and click **Next**.

Figure 6–2 Installation Options Screen



The Installation Options screen allows you to select the deinstallation option to deinstall Oracle Portal and/or Login Server.

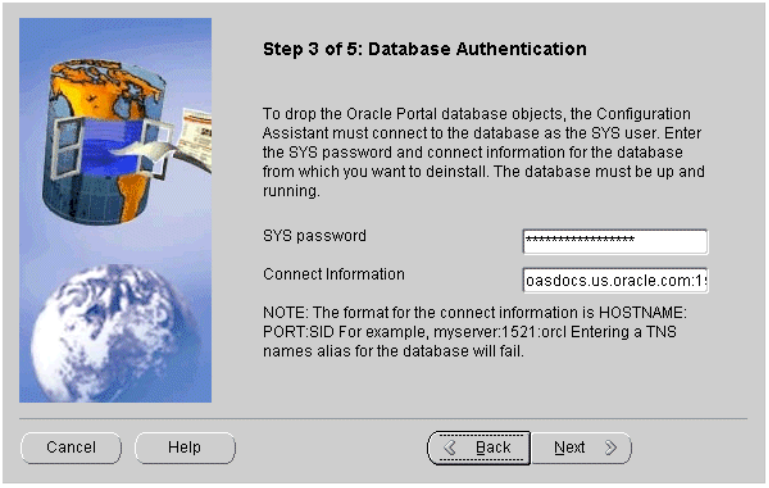
3. Select Oracle Portal, and click **Next**.

Figure 6–3 Product Option Screen

Product Options screen allows you to deinstall Oracle Portal and the Login Server. Select "Deinstall Oracle Portal" to drop the Portal schema from the database.

4. Enter the SYS password, and database connect information, and click **Next**.

Figure 6–4 Database Authentication Screen



Database Authentication screen allows you to connect to the database as the SYS user.

- **SYS password**: Enter the SYS password.
- **Connect Information**: Enter the complete hostname and domain, port number, and SID in a HOSTNAME:PORT:SID format.

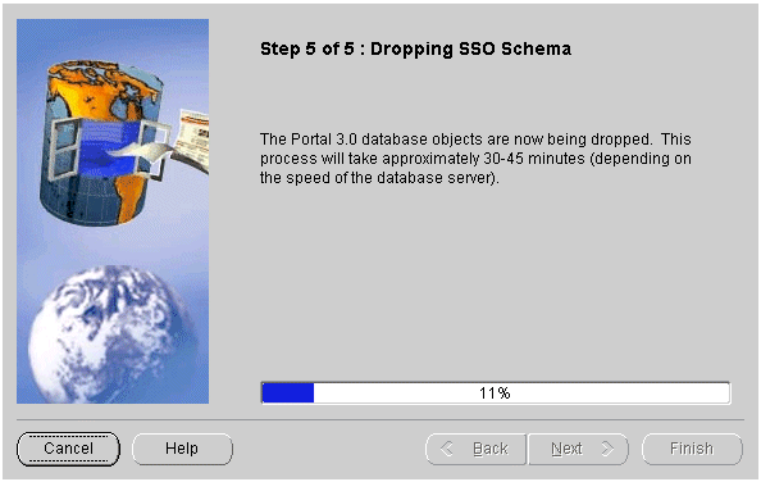
5. Enter the schema you wish to deinstall, and click **Next**.

Figure 6–5 Oracle Portal Schema Screen

Oracle Portal Schema screen allows you to enter the name of the schema you wish to deinstall. Oracle Portal Configuration Assistant will deinstall the entire schema, including all the objects it owns.

6. Monitor the deinstallation process, and click **Finish** when the process completes.

Figure 6–6 Dropping Oracle Portal 3.0 Schema Screen



Dropping Oracle Portal 3.0 Schema screen displays the progress the configuration assistant has made as it deinstalls the database objects.

You have successfully deinstalled Oracle Portal 3.0 Schema.

Login Server

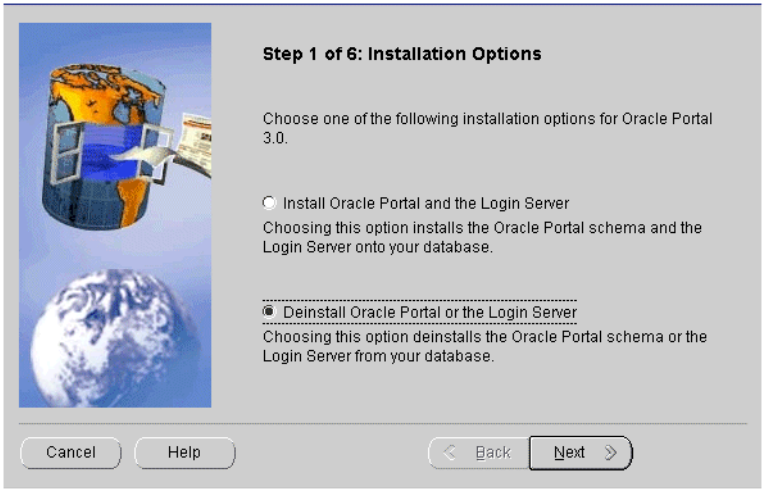
Perform the following steps to deinstall the Oracle Portal Login Server:

1. Manually launch the Oracle Portal Configuration Assistant using the following command:

   ```
   prompt> <ORACLE_HOME>\assistants\opca\launch.bat
   ```

2. When the configuration assistant appears, select the Deinstall Oracle Portal or Login Server, and click **Next**.

Figure 6–7 Installation Options Screen



The Installation Options screen allows you to select the deinstallation option to deinstall Oracle Portal and/or Login Server.

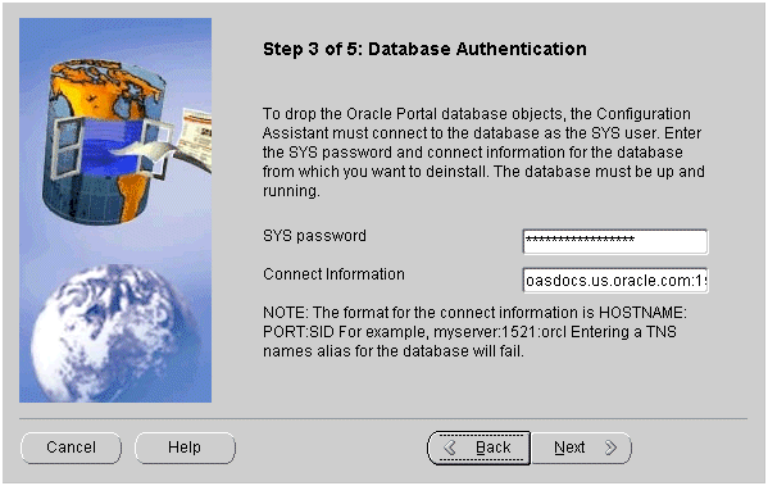
3. Select Login Server, and click **Next**.

Figure 6–8 Product Option Screen

Product Options screen allows you to deinstall Oracle Portal and the Login Server. Select "Deinstall Login Server" to drop the Portal schema from the database.

4. Enter the SYS password, and database connect information, and click **Next**.

Figure 6–9 Database Authentication Screen



Database Authentication screen allows you to connect to the database as the SYS user.

- **SYS password**: Enter the SYS password.
- **Connect Information**: Enter the complete hostname and domain, port number, and SID in a HOSTNAME:PORT:SID format.

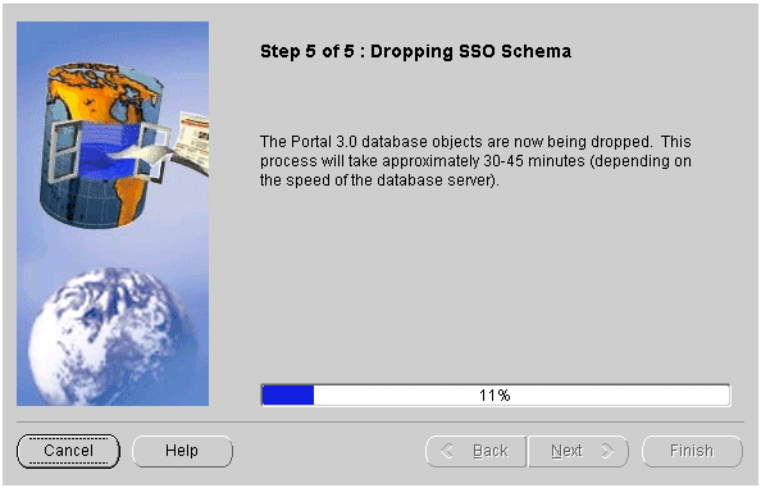
5. Enter the schema you wish to deinstall, and click **Next**.

Figure 6–10 SSO Schema Information Screen

SSO Schema Information screen allows you to enter the database schema name for the Login Server you wish to deinstall. Oracle Portal Configuration Assistant will deinstall the entire schema, including all the objects it owns.

6. Monitor the deinstallation process, and click **Finish** when the process completes.

Figure 6–11 Dropping SSO Schema Screen



Dropping SSO Schema screen displays the progress the configuration assistant has made as it deinstalls the database objects.

You have successfully deinstalled the Login Server.

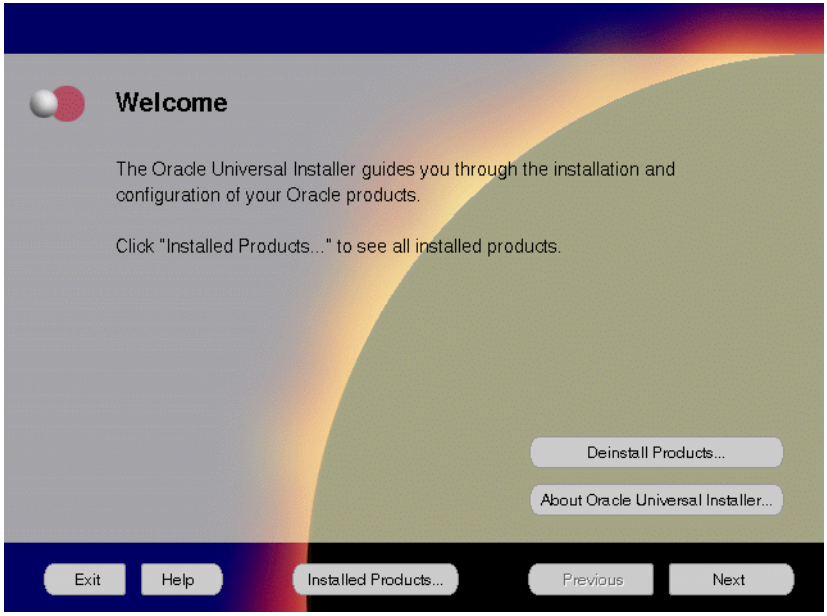
Proceed to "Deinstalling using Oracle Universal Installer" on page 6-15.

Deinstalling using Oracle Universal Installer

1. Launch the Oracle Universal Installer from **Start Menu** > **Programs** > **Oracle Installation Products** > **Oracle Universal Installer**.

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

Figure 6–12 Welcome Screen



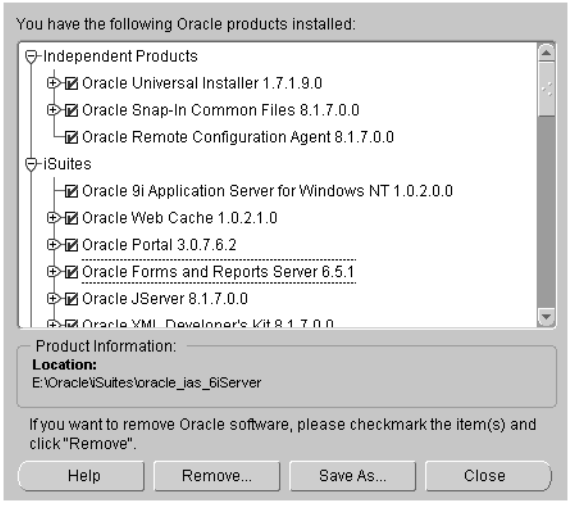
The Welcome screen provides information about Oracle Universal Installer.

The installer provides you with two ways to deinstall products:

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

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

Figure 6–13 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 deinstall 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.

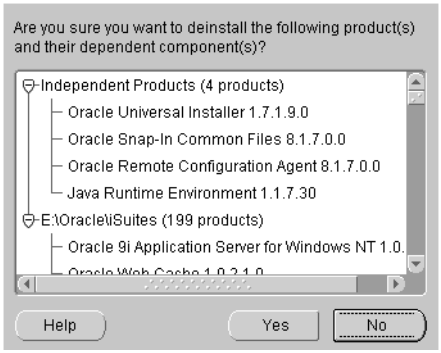
Note: The "+" sign before a product name indicates that there are more components and files installed within that particular product. Click on it to view dependent components. If you choose to remove a product or component, then all of its dependent components and files are also deinstalled.

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 deinstall a product or component, then all of its dependent components and files will also be deinstalled.

3. Verify the components selected for deinstallation, and click **Yes**.

Figure 6–14 Confirmation Screen



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

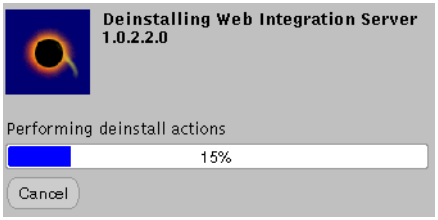
Note: Oracle Universal Installer does not deinstall all the files and directories during deinstallation. These must be deleted manually.

The following buttons appear on the Confirmation screen:

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

4. Monitor the deinstallation process.

Figure 6–15 Remove Progress Bar Screen



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

- **Cancel**: To discontinue the deinstallation process.

Note: If you deinstall a product or component, then all of its dependent components and files will also be deinstalled.

You have successfully deinstalled Oracle9*i* Application Server.

Reinstallation

Oracle Universal Installer does not allow reinstallation of Oracle9*i* Application Server over an already installed version. To reinstall Oracle9*i* Application Server over the same version, deinstall and then install the product.

See Also: "Deinstallation" on page 6-2

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 following configuration assistants to configure the components you chose not to configure during installation:

- 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>)
        )
    )
```

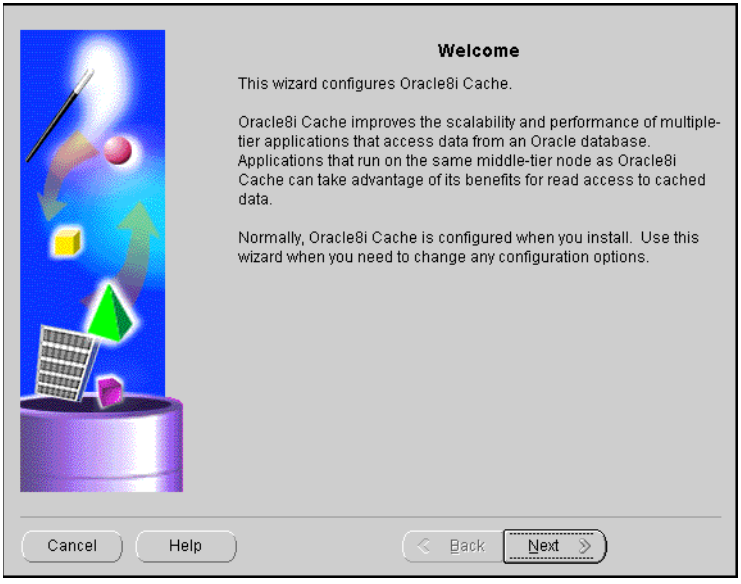
Fill in the origin host name, port and service name in `tnsnames.ora` file as per the above example before running the following command to launch the Oracle Database Cache Configuration Assistant:

```
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**.

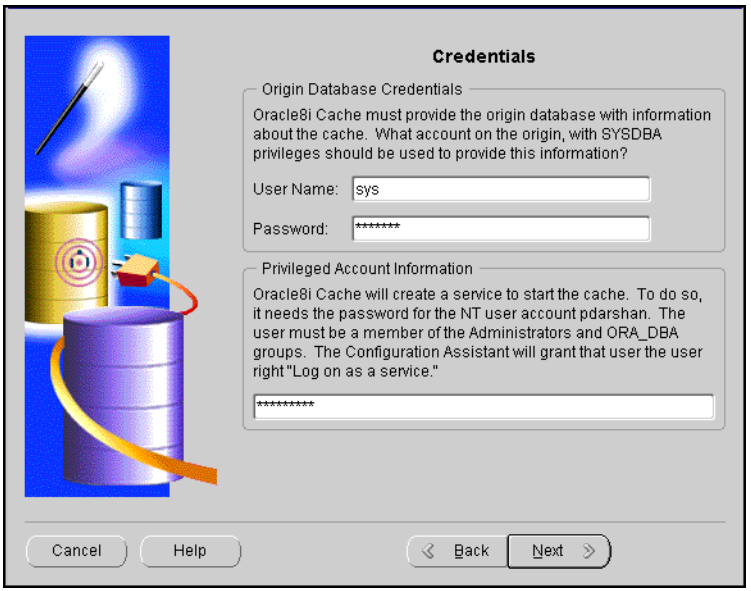
Figure A–1 Welcome Screen



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

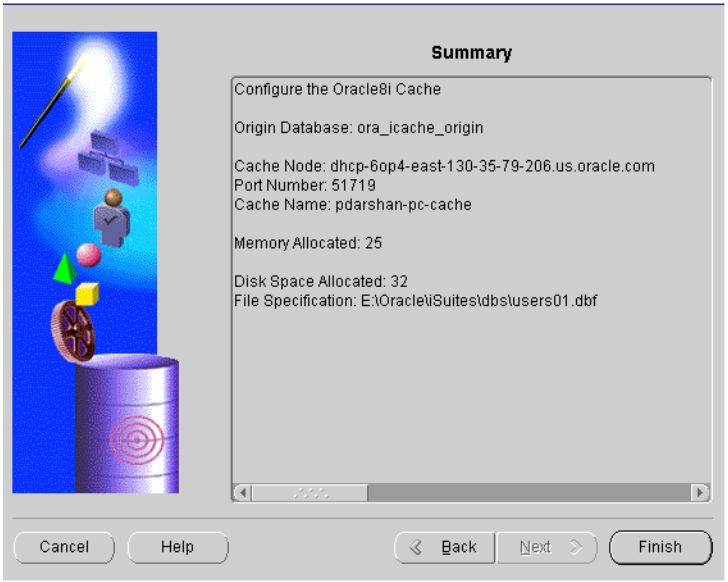


The Oracle Database Credentials screen specifies the database that is the original and primary storage for the data that you cache on the middle-tier node.

- **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.
- **Privileged Account Information**: The password for the Windows NT user who invoked the Configuration Assistant. If you enter a user name that is not valid or that does not have SYSDBA privileges, or if you enter an invalid password, the Configuration Assistant returns an error and allows you to enter another value.

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

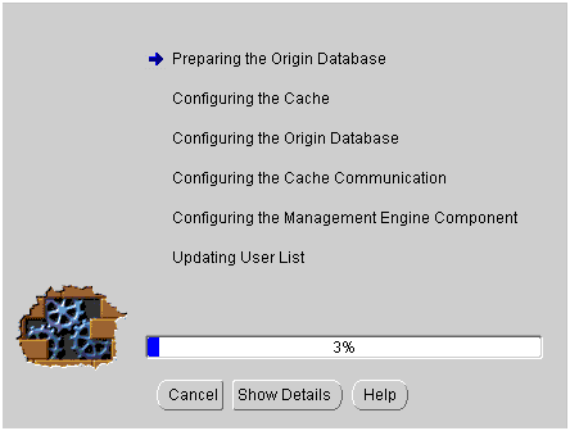
Figure A–3 Summary Screen



The Summary screen provides information about the origin database, cache node, port number, cache name, memory, disk space allocated and file specification.

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.bat
```

> **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:

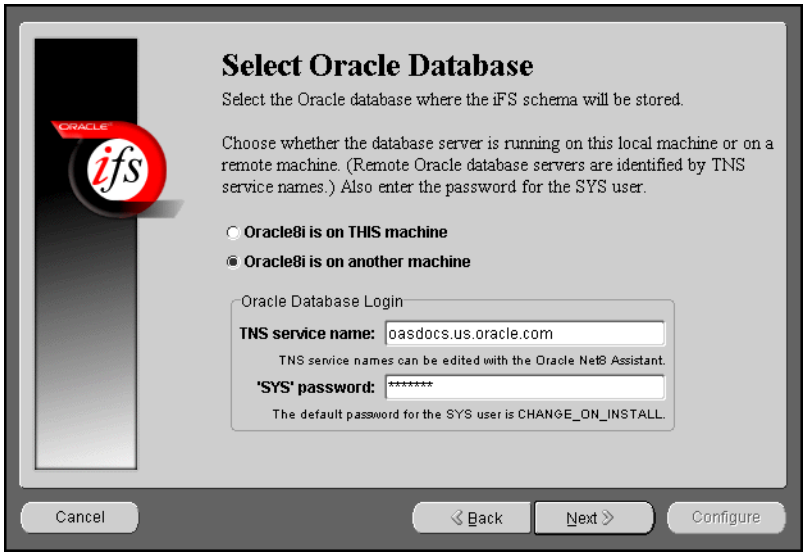
1. Review the Welcome screen and click **Next**.

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.

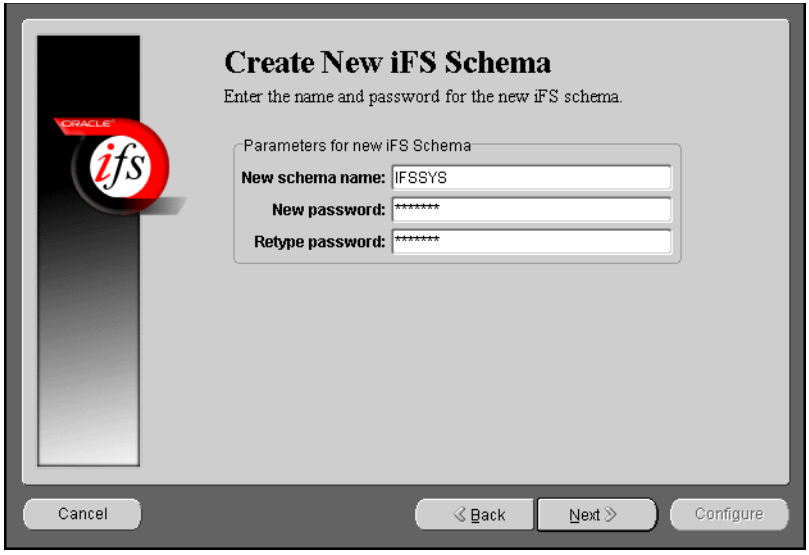
  See Also: *Net8 Administration Guide* in the Oracle Database Documentation Library

- **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



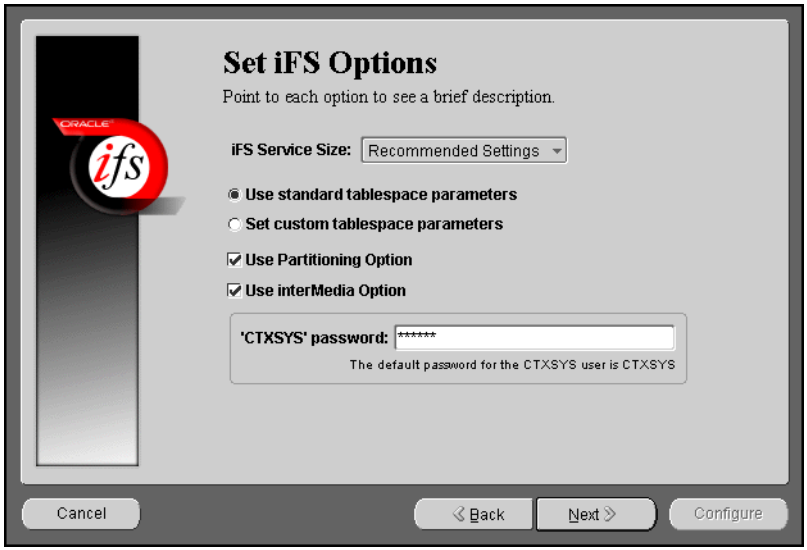
Create New *i*FS Schema screen allows you to specify an Oracle database username and password for the new schema.

- **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.

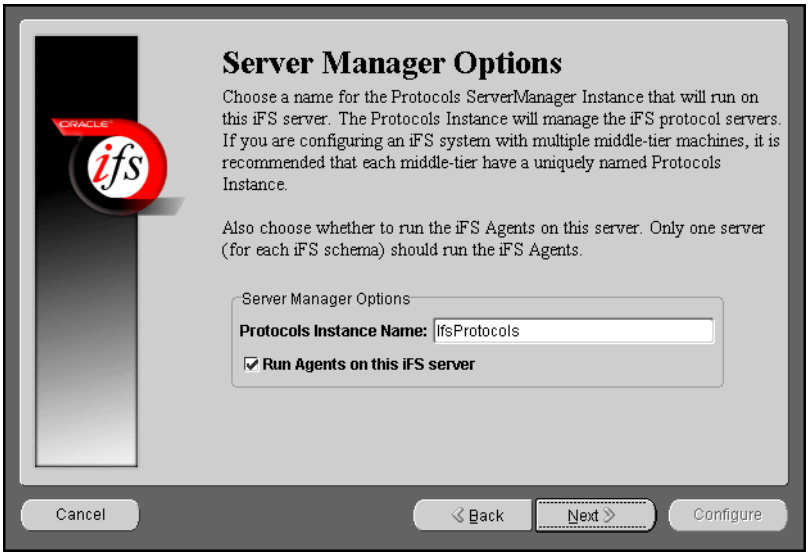
  - interMedia Option: If you have installed interMedia Text, then select this option to use interMedia Text for searching document contents.

  - 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

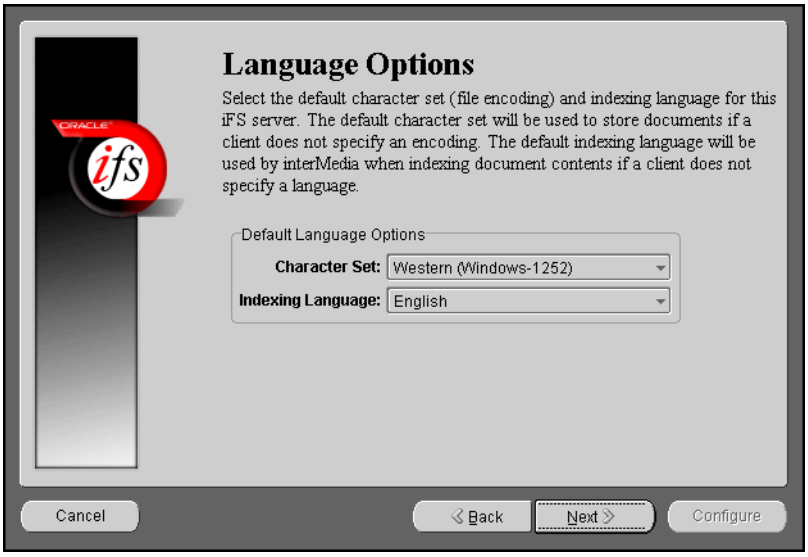


Server Manager Options screen allows you to enter a name for the Protocols Server Manager Instance that will run on this Oracle Internet File System server.

- **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

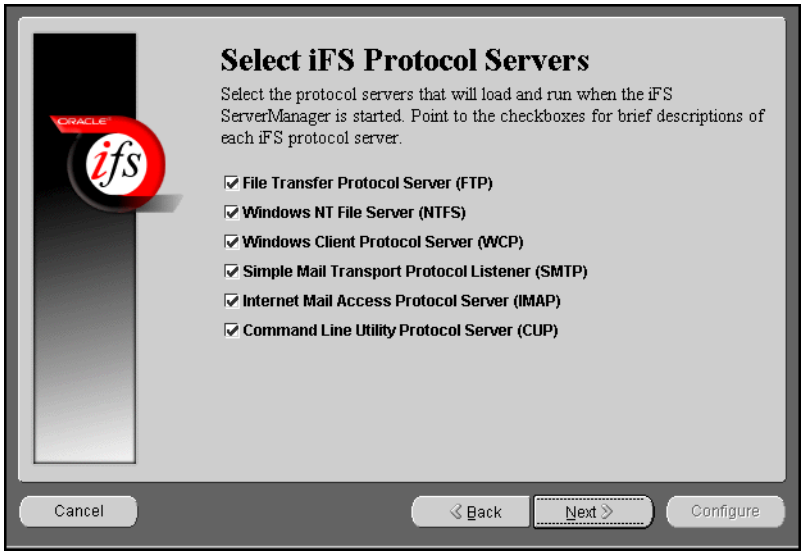


Language Options screen allows you to select the Character set and indexing language for this Oracle Internet File System server.

- **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



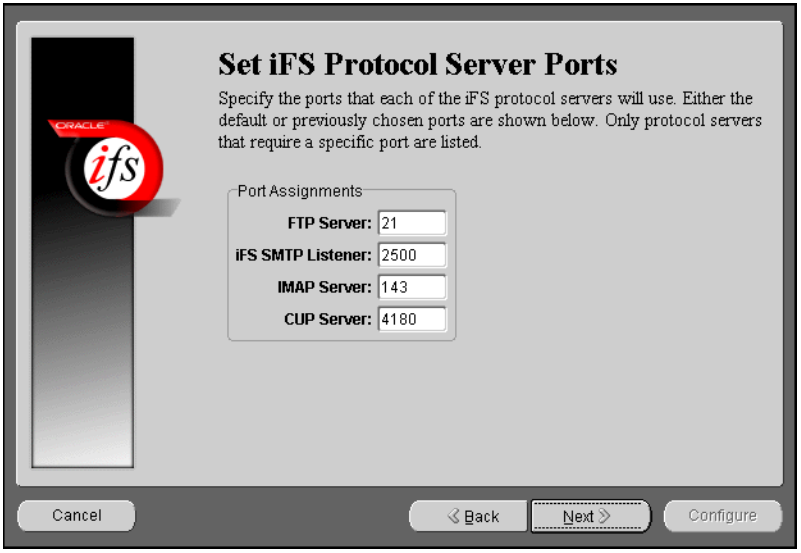
Select *i*FS Protocol Servers screen allows you to select the protocol servers to configure for this Oracle Internet File System server. The following protocol servers are available:

- 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)

See Also: *Oracle Internet File System Setup and Administration Guide* in the Oracle9*i* Application Server Documentation Library

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



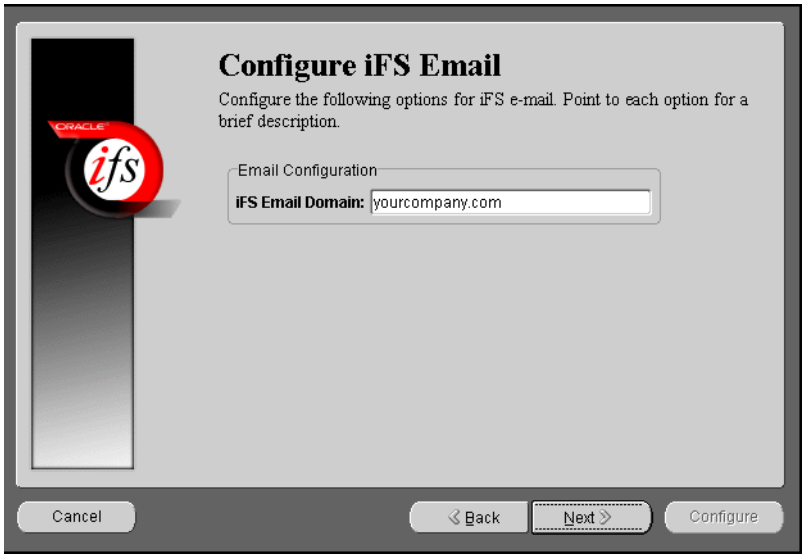
Set *i*FS Protocol Server Ports screen allows you to set port numbers for the protocol servers you selected in the previous screen. The following is a list of protocol servers and their default port numbers:

- **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

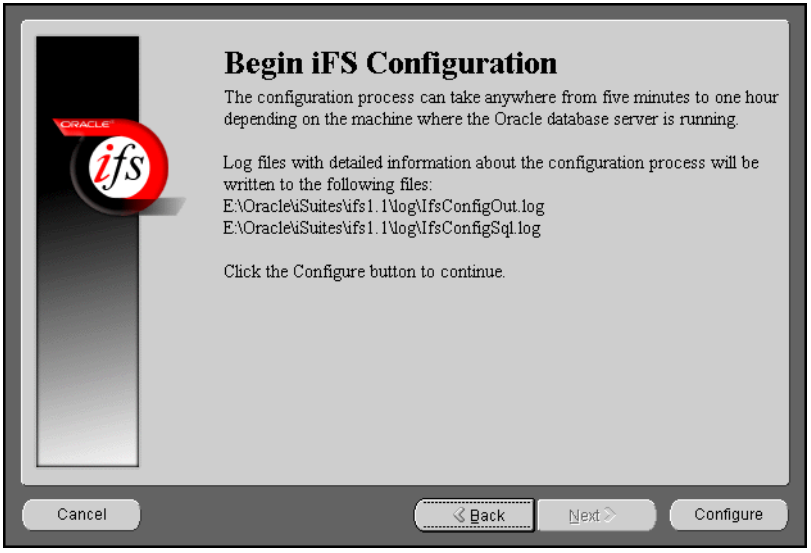


Configure *i*FS Email screen allows you to enter the *i*FS Email domain.

- **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.

To configure Oracle HTTP Server, use the following script:

```
prompt> ORACLE_HOME\ifs1.1\bin\ifsapachesetup
```

Be sure to run this script as the user used to install Oracle9*i* Application Server.

Oracle Portal

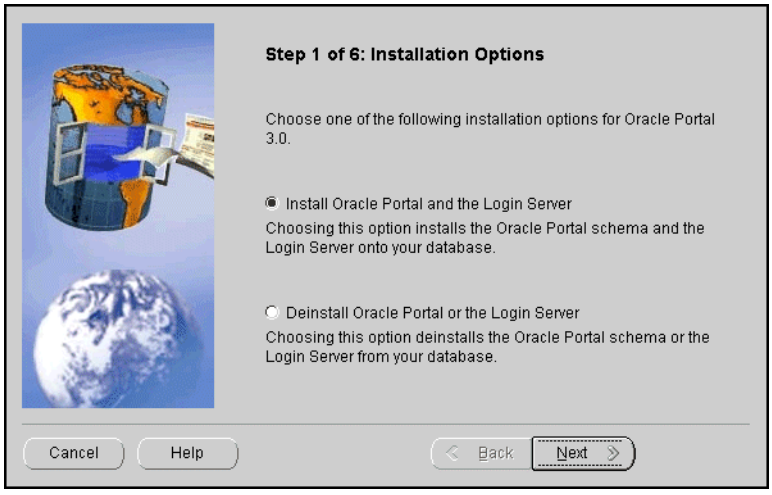
The following command launches the Oracle Portal Configuration Assistant:

```
prompt> <ORACLE_HOME>\assistants\opca\launch.bat
```

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.

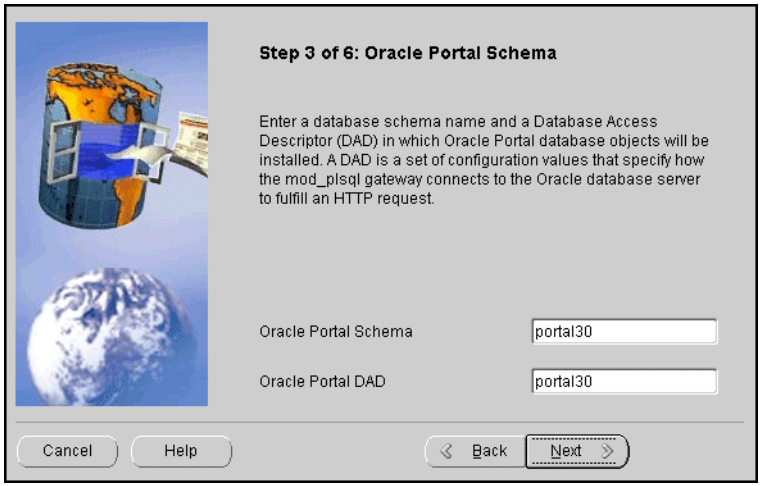
- **SYS Password**: Enter the `SYS` password for the database on which you want to install Oracle Portal database objects. When an Oracle database is created, the user `SYS`, identified by the password `CHANGE_ON_INSTALL`, is automatically created and granted the `DBA` role.
- **Connection Information**: Enter the connect information in the following format: `HOSTNAME:PORT:SID`

  Example: `oasdocs:1521:oasdocs`

  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 `oasdocs`.

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

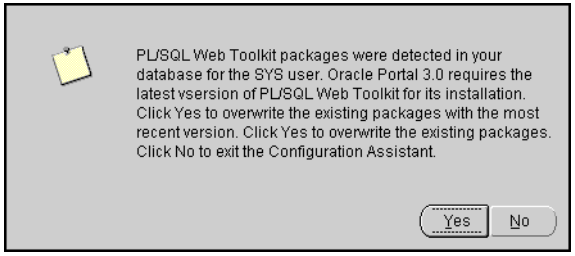
Field	Description
Default Tablespace	Used to store any database objects or components created by the Oracle Portal user. Required minimum: 100 MB
Temporary Tablespace	Improves the concurrence of multiple sort operations, reduce their overhead, or avoid Oracle space management operations altogether. Used 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



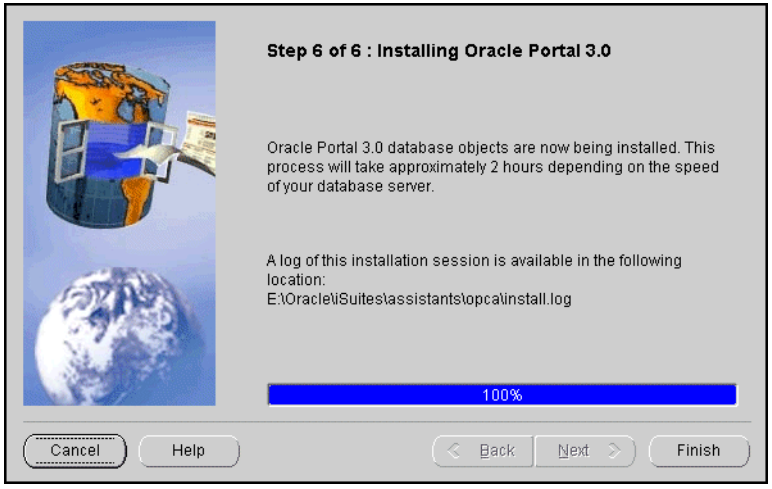
PL/SQL Web Toolkit screen appears only if the configuration assistant detects that PL/SQL Web Toolkit packages already exist on your machine. Click **Yes** to overwrite the existing packages, or click **No** to keep the existing PL/SQL Web Toolkit packages.

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.

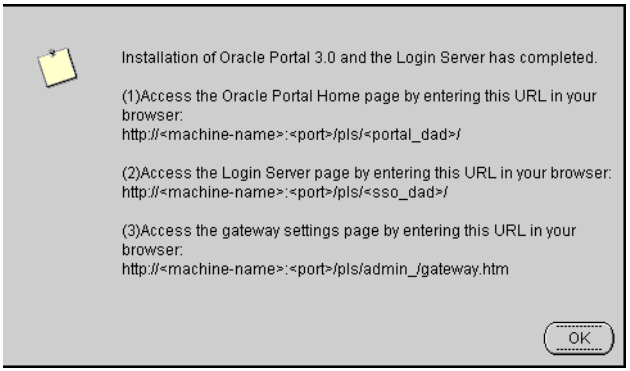
Figure A–21 Installing Oracle Portal Screen



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

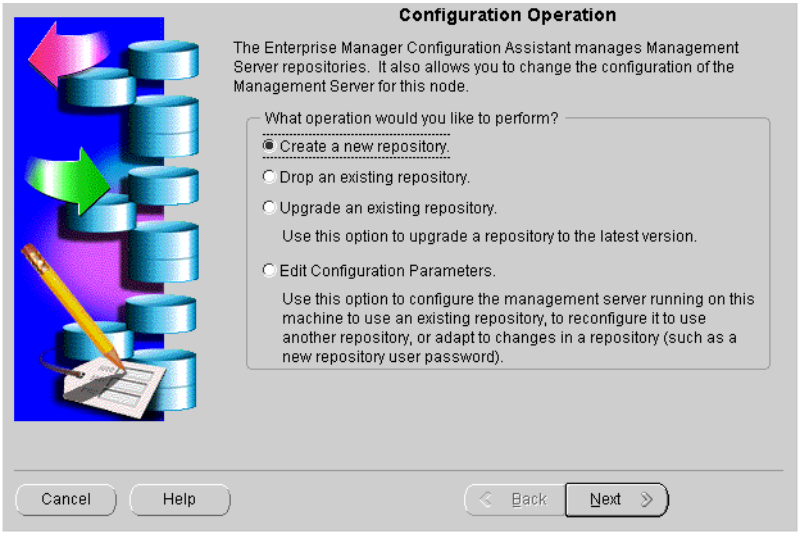
The following command launches the Oracle Enterprise Manager Configuration Assistant:

```
prompt> <ORACLE_HOME>\bin\emca.bat
```

The following steps guide you through the Oracle Enterprise Manager Configuration Assistant:

1. Select "Create a new repository" and click **Next**.

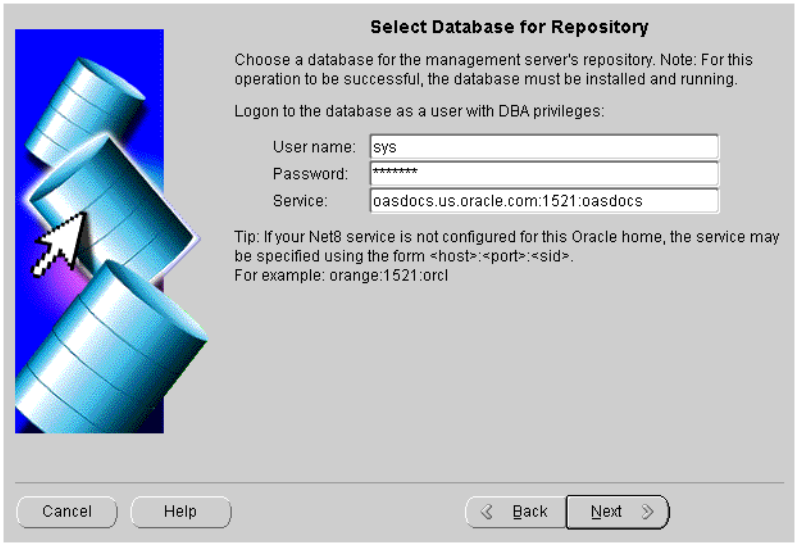
Figure A–23 Configuration Operation



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

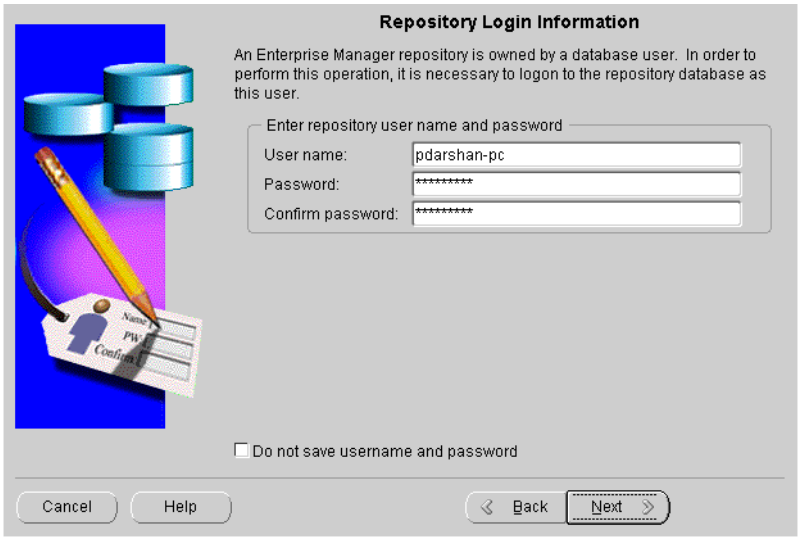


Select Database for Repository screen allows you to enter database information for the management server's repository. Be sure to log in as a user with `DBA` privileges.

- **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

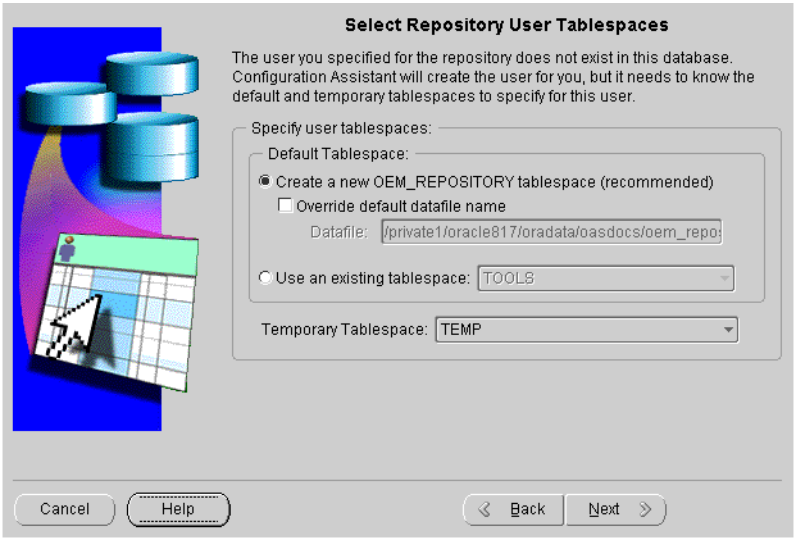


Repository Login Information screen allows you to enter the login username and password for the database user.

- **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 to either create a new OEM_REPOSITORY tablespace, or use an existing tablespace, and click **Next**.

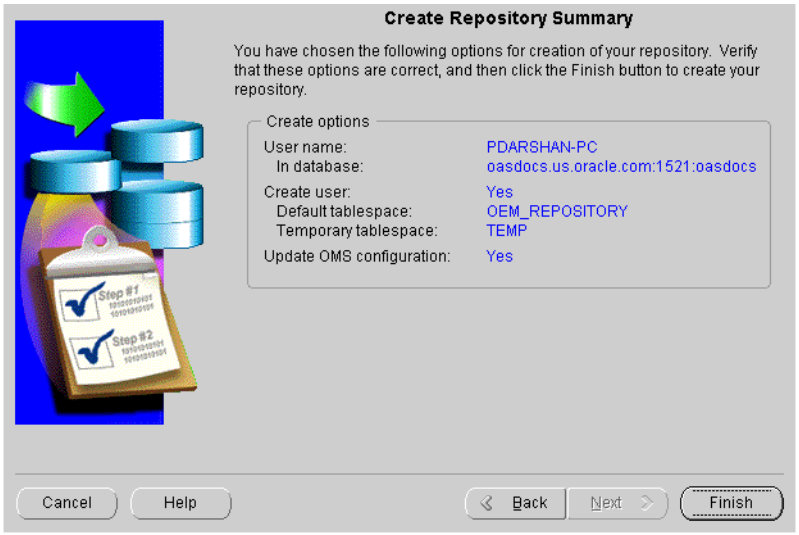
Figure A–26 Select Repository User Tablespaces Screen



Select Repository User Tablespaces screen allows you to choose between creating a new OEM_REPOSITORY tablespace, or using an existing one. The two choices do the following:

5. Review the repository summary, and click **Finish**.

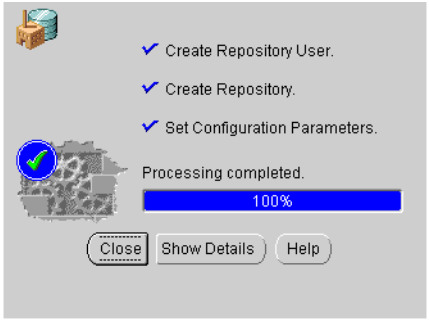
Figure A–27 Create Repository Summary



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.

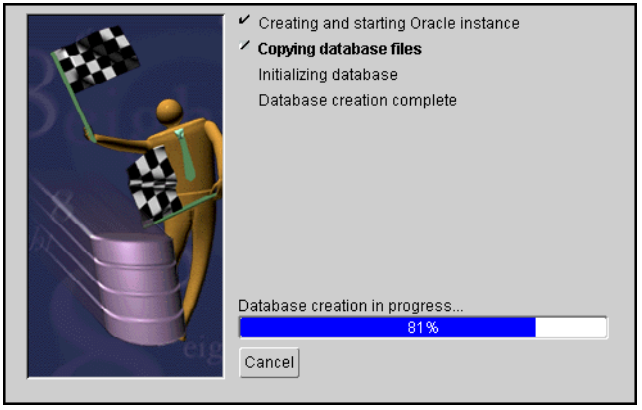
Oracle Database

The following command launches the Oracle Database Configuration Assistant:

```
prompt> <ORACLE_HOME>\bin\DBAssist.bat
```

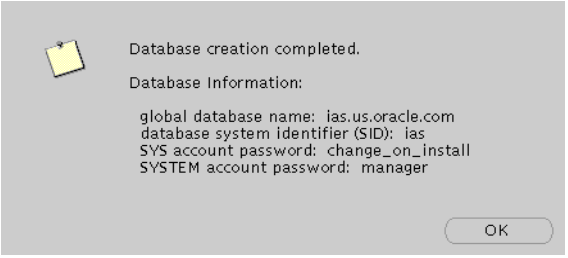
The Oracle Database Configuration Assistant creates a database that is used as a container for Oracle 8*i* JVM. The following screen appears as the configuration assistant creates the database:

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

The following topics provide an overview, and describe the installation process for the Oracle Portal-to-Go client:

- About Oracle Portal-to-Go Client
- Installation
- Configure the Web Integration Developer

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.

> **See Also:** "Configure the Web Integration Developer" on page B-3 for post-installation configuration instructions.

Note: The Web Integration Developer includes its own Java Virtual Machine (JVM). It does not require any Java setup.

Installation

> **See Also:** "Oracle Portal-to-Go Client Requirements" on page 1-4 for hardware requirements for installation.

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

The following topics describe steps necessary to install Oracle Database Cache on the same machine as the origin database:

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.

Bypassing Oracle Database Cache Configuration Assistant

1. When the Oracle Database Cache Configuration Assistant launches, it will fail. The following error is displayed:

   ```
   Starting tnslsnr: please wait...
   Failed to open service <OracleicacheTNSListner>, error 1060.
   .
   .
   .
   ```

2. Allow the Starting Oracle HTTP service to complete, click **Next**. You will be notified that Oracle9*i* Application Server was successfully installed, but some configuration tools failed. Quit the installer by clicking **Exit**.
3. Set the default home to Oracle Database Cache home.
4. Reboot the system.

Modifying the listener.ora File

Modify the **listener.ora** file on the Oracle Database Cache installation.

1. Change the port number in the following entry:

   ```
   (DESCRIPTION =
        (PROTOCOL_STACK =
        (PRESENTATION = GIOP)
        (SESSION = RAW)
   )
   (ADDRESS =
        (PROTOCOL = TCP) (HOST = <machine_name.us.oracle.com) (PORT = 2481)
   )
   ```

Note that the port number you pick must not conflict with any port numbers you have on your system.

2. Start you listener.
3. Run the following command from the command line to launch the Oracle Database Cache Configuration Assistant:

   ```
   prompt> wtacca -create -typical
   ```

   Complete the configuration using the Configuration Assistant, and then post-installation tasks.

   See Also: "Oracle Database Cache" on page A-2 for information about running the configuration assistant.

   See Also: "Oracle Database Cache" on page 5-32 for post-installation tasks.

D

Enabling SSL for Apache

This appendix describes the method of enabling SSL for Apache. The following topics guide you through the necessary steps:

- Generate the Certification Request
- Modify httpd.conf File to Enable SSL

Generate the Certification Request

Perform the following steps to generate a certificate request:

1. Make the following changes to the `openssl.cnf` file to generate the certificate request:

```
#
#OpenSSL example configuration file
#This is mostly being used for generation of certificate requests.
#

#This definition stops the following lines choking if HOME isn't defined.
HOME =
RANDFILE=$ENV::HOME/.rnd
oid_section=new_oids
```

   Use the commands below to generate the certification request:

```
...\Apache\open_ssl\bin\openssl md5 *>rand.dat
...\Apache\open_ssl\bin\openssl genrsa -rand rand.dat -des3 1024 > key.pem
...\Apache\open_ssl\bin\openssl req -new -key.pem -out csr.pem -config
openssl.cnf
```

   When you run the final command, a certificate request is generated. The following is an example of a certification request:

```
Country Name (2 letter code) [AU]: US
State or Province Name (full name)[Some-State]: California
Locality name (eg, city) []: Redwood Shores
Organization Name (eg, company) [Internet Widgits Pty Ltd}: Oracle
Organizational Unit Name (eg, section) []: EITQA
Common Name (eg, YOUR name) []:pdarshan-pc.us.oracle.com
Email Address []: username@oracle.com
```

   Please enter the following "extra" attributes to be sent with your certification request:

```
A challange password []:
An optional company name []:
```

Be sure to take note of the following:

- These commands create two files: `key.pem` and `csr.pem` (certificate request).
- For Common Name, include the FULL name of the HOST and DOMAIN you are running the command on.
- Remember the password you enter. This password is used every time Oracle HTTP Server is started.

2. Send the Certification Request. In the CSR area, paste the certification request from `csr.pem` file.
3. When you receive the certificate, paste it into a file named `portalcert.crt`.

   Be sure that you get the Root Trial CA certificate by going to the URL mentioned in the Certificate Authority email. Export that certificate from the browser to a file named `rootcacert.crt`.
4. Copy the following in appropriate directories:
   - Certificate file `portalcert.crt` into the `...\Apache\Apache\conf\ssl.crt` directory.
   - `key.pem` file into the `...\Apache\Apache\conf\ssl.key` directory.
   - Root Trial CA file `rootcacert.crt` into the `...\Apache\Apache\conf\ssl.crt` directory.

Modify httpd.conf File to Enable SSL

Make the following changes to the `httpd.conf` file to enable SSL:

1. **Port changes**: Be sure your entries are similar to the ones in the example below:

```
#
# This port is used when starting without SSL
Port 80
# This port is used when starting with SSL
<IfDefine SSL>
Port 80
Port 443
</IfDefine>

##
##SSL Support
##
##When we also provide SSL we have to listen to the standard HTTP port
##(see above) abd to the HTTPS port
##
<IfDefine SSL>
Listen 80
Listen 443
</IfDefine>

##
##SSL Virtual Host Context
##

<VirtualHost_default_:443>
```

2. **SSL Certificate related entries**: For Entry for Certificate, search for `SSLCertificateFile` and make this entry as below pointing to your certificate that came from the certificate authority. This is illustrated in the following example:

```
SSLCertificateFile\conf\ssl.crt\portalcert.crt

Entry for Server Private Key

SSLCertificateKeyFile conf\ssl.key\key.pem

Entry for Server Certificate Chain: (The Root Trial CA Certificate)

Entry for Certificate Authority (CA): as below

#Certificate Authority (CA):
#Set the CA certificate verification path where to find CA
#certificates for client authentication or alternatively one
#huge file containing all of this (file must be PEM encoded).
#Note: Inside SSLCACertificatePath you beed hash symlinks
#to point to the certificate files. Use the provided
#Makefile to update the hash symlinks after changes.
#SSLCACertificateFile conf\ssl.crt\ca-bundle.crt
SSLCACertificateFile conf\ssl.crt
SSLCACertificateFile conf\ssl.crt\rootcacert.crt
```

3. Restart Apache.

E

Installing Documentation Library

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. The following topics describe the contents of the CD-ROM, and provides instructions for installing and viewing the documentation:

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 E–1 Oracle9i Application Server

Part Number	Title
NA	Quick Tour
A87353-01	Overview Guide
A83709-04	Migrating from Oracle Application Server

Table E–2 Communication Services

Part Number	Title
NA	Apache 1.3.12 User's Guide
NA	Apache JServ Documentation *(links to http://java.apache.org/jserv)*
NA	Apache mod_perl Documentation *(links to http://perl.apache.org)*
NA	mod_ssl Documentation *(links to http://www.modssl.org)*
NA	OpenSSL Documentation *(links to http://www.openssl.org)*
A86263-02	Using the PL/SQL Gateway
A83720-01	Oracle8*i* Oracle Servlet Engine User's Guide
A87355-01	Oracle Plug-in for Microsoft IIS Configuration and User's Guide

Table E–3 Content Management Services

Part Number	Title
NA	Oracle Internet File System Quick Tour
A81197-05	Oracle Internet File System Setup and Administration Guide
A75154-04	Oracle Internet File System User's Guide
A75172-04	Oracle Internet File System Developer's Guide
NA	Oracle Internet File System Class Reference
NA	Oracle Internet File System Java Reference API
NA	Oracle Internet File System XML Reference

Table E–4 Business Logic Services

Part Number	Title
NA	Oracle Business Components for Java Developing Business Components
NA	Oracle Business Components for Java Tutorial - Building BC4J
NA	Oracle Business Components for Java Reference API
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 E–4 Business Logic Services (Cont.)

Part Number	Title
NA	Forms Developer Quick Tour
A86202-01	Deploying Forms Applications to the Web
A73074-01	Form Builder 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 E–5 Presentation Services

Part Number	Title
NA	Apache JServ Documentation *(links to http://java.apache.org/jserv)*
A83726-01	OracleJSP Developer's Guide and Reference
NA	OracleJSP Developer's Toolkit

Table E–6 Developer's Kits

Part Number	Title
A86030-01	Oracle8*i* Application Developer's Guide - XML
A83730-01	Oracle8*i* XML Reference Guide
A83723-01	Oracle8*i* SQLJ Developer's Guide and Reference
A83724-01	Oracle8*i* JDBC Developer's Guide and Reference
A86082-01	Oracle Internet Directory Application Developer's Guide

Table E–7 Portal Services

Part Number	Title
NA	Oracle Portal Quick Tour
A86188-02	Oracle Portal Tutorial
A86707-02	Oracle Portal Configuration Guide
A86183-02	Oracle Portal Building Advanced Portals
A86634-02	Oracle Portal-to-Go Configuration Guide
A86635-02	Oracle Portal-to-Go Implementation Guide

Table E–8 Caching Services

Part Number	Title
NA	Quick Tour
A86617-01	Oracle Database Cache Concepts and Administration Guide

Table E–9 System Services

Part Number	Title
NA	Oracle Enterprise Manager Console Quick Tour
NA	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
A85249-01	Oracle SNMP Support Reference Guide

Table E–10 Business Intelligence Services

Part Number	Title
A86662-01	Oracle Discoverer 3*i* Viewer Configuration Guide for UNIX
A87361-01	Oracle Discoverer 3*i* Viewer Configuration Guide for Windows
NA	Reports Developer Quick Tour
A86784-02	Publishing Reports to the Web
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

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.

   See Also: "Starting Oracle Universal Installer" on page 2-21

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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