Oracle® WebDB™

Installation Guide

Release 2.2

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Oracle WebDB Installation Guide, Release 2.2

Part No. A77053-01

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Primary Authors: Susan Barton, Susan Léveillé, David Mathews

Contributors: Robert Giljum, Pushkar Kapasi, Steven Leung, Thiagarajan Natarajan, Frank Rovitto, Arun Arat Tharakkal, Todd Vender, Harry Wong

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Oracle WebDB Installation, Release 2.2

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Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, please indicate the part number, chapter, section, and page number (if available). You can send comments to us by electronic mail to webdbdoc@us.oracle.com

If you have problems with the software, please contact your local Oracle World Wide Support Center.

Preface

Welcome to Oracle WebDB! This guide provides information about installing Oracle WebDB Release 2.2.

This preface includes the following sections:

Section	Location
"Intended Audience"	on page vii
"Structure"	on page viii
"Conventions"	on page ix
"Related Publications"	on page x

Intended Audience

This guide is intended for users who are responsible for installing Oracle WebDB.

Structure

The *Oracle WebDB Installation Guide* is comprised of the following chapters:

Chapter	Contents
Chapter 1, "Overview"	Provides information about the Oracle WebDB system requirements and WebDB architecture.
Chapter 2, "Installing WebDB 2.2 on Windows NT"	Provides Windows NT-specific information for a typical or custom Oracle WebDB installation. Deinstallation information is also provided.
Chapter 3, "Installing WebDB 2.2 on Solaris"	Provides Solaris-specific information for an Oracle WebDB installation. Deinstallation information is also provided.
Chapter 4, "Oracle WebDB Migration"	Provides information about upgrading from Oracle WebDB 2.1 to Oracle WebDB 2.2. Also covered is migration of WebDB sites and how to drop a WebDB site from your database.
Chapter 5, "Configuring the WebDB Listener and PL/SQL Gateway"	Provides complete information about configuring the Oracle WebDB Listener and PL/SQL gateway for optimal performance.
Chapter 6, "Configuring Variables and General Configuration"	Provides important information on setting up Oracle WebDB environment variables and general configuration issues. **Note** Setting up the environment is an essential task for ensuring a successful WebDB installation.
Chapter 7, "Integrating interMedia Text in WebDB Site Builder"	Provides instructions on setting up *inter*Media Text to perform text searching in Web sites created with WebDB.
Chapter 8, "Setting Up the WebDB CGI Executable and WebDB Cartridge to OAS"	Provides instructions on manually installing and configuring the WebDB CGI Executable and WebDB Cartridge.

Chapter	Contents
Chapter 9, "Troubleshooting"	Provides solutions to problems or errors you may encounter while using Oracle WebDB.

Conventions

The following typographical conventions are used in this guide:

Convention	Meaning
boldface	Used for emphasis. Also used for button names, labels, links, and other user interface elements.
italics	Used to introduce new terms. Also used enclosed in angled brackets (<>) to represent a variable. Substitute an appropriate value.
`courier`	Used to represent text you need to type. Also used for file names and directories.

Related Publications

You may also wish to refer to the following publications which are available in Adobe Portable Document Format (PDF) in the `\docs\us` directory on your WebDB CD-ROM, or orderable from Oracle.

Oracle WebDB publications

Part Number	Title	Description
A77054-01	*Oracle WebDB Release Notes*	Describes last minute changes to the product or documentation.
A77075-01	*Oracle WebDB Tutorial*	Provides step-by-step lessons that teaches you the basics of WebDB.
A77057-01	*Creating and Managing Components - Task Help*	Provides procedural help on the various tasks you can perform with WebDB.
A77055-01	*Creating and Managing Components - Field-Level Help*	Provides screen-specific help for each WebDB page.
A77056-01	*Creating and Managing Sites - Task Help*	Provides procedural help on the various tasks you can perform in WebDB sites.
A77058-01	*Creating and Managing Sites - Field-Level Help*	Provides screen-specific help for each WebDB site page.

Other Oracle publications

Part Number	Title
A58230-01	*Oracle Net8 Administrator's Guide*
A60172-02	*Oracle Application Server Administration Guide*
A67843-01	*Oracle8i interMedia Text Reference*
A67845-01	*Oracle8i interMedia Text Migration*

1

Overview

This chapter contains the following sections:

- Section 1.1, "System Requirements" on page 1-2
- Section 1.2, "Overview of WebDB Architecture" on page 1-2

1.1 System Requirements

The following are the minimum requirements for running Oracle WebDB 2.2:

Operating Systems:	Windows NT 4.0 with Service Pack 4 or above
	Solaris 2.5.1 and above
Databases:	Oracle 7.3.4, 8.0.5, 8.0.6, 8*i* (release 8.1.5)
Web Browsers:	Netscape 4.0.8 and above
	Microsoft Internet Explorer 4.0.1 with Service Pack 1 and above
Other Products:	*inter*Media Text support is only available with Oracle8*i* databases. See "Integrating interMedia Text in WebDB Site Builder" on page 7-1 for more information.

1.2 Overview of WebDB Architecture

WebDB features and functions are generated from PL/SQL stored procedures and tables stored in the Oracle database. The client requires no software other than a Web browser.

The application server's operating system can be Windows NT, Solaris, or any other platform supported by WebDB.

1.2.1 WebDB Listener

The WebDB HTTP Listener is a lightweight Web server that has the following functions:

- Used for building and deploying PL/SQL-based Web applications
- Has the ability to serve static files

The Listener includes a built-in gateway to the PL/SQL engine in the Oracle databases on which WebDB is supported. The gateway allows PL/SQL-based applications such as WebDB to execute.

The PL/SQL gateway's function is similar to that of the Oracle Application Server (OAS) PL/SQL Cartridge, with some additions. Like the cartridge, the PL/SQL gateway uses Database Access Descriptors (DADs) to capture the database connection information for an application. DADs are used for resolving URLs to the correct PL/SQL procedure that is to be invoked. You can access and update the DADs within WebDB itself.

Additional Information: See Chapter 5, "Configuring the WebDB Listener and PL/SQL Gateway".

1.2.2 Using Other Web Servers

If you already have a Web server and do not want to use the PL/SQL Gateway, WebDB provides the following:

- **WebDB Cartridge**

  If you want to run WebDB using Oracle Application Server 4.0, WebDB provides a WebDB cartridge that you can add to the Oracle Application Server. The cartridge runs the PL/SQL stored procedures that comprise WebDB to generate dynamic HTML.

  Additional Information: See "Configuring the WebDB Cartridge with OAS" on page 8-6 for more instructions.

- **WebDB Common Gateway Interface (CGI)**

  If you want to use other Web servers such as those provided by Netscape, Microsoft, or Apache Web server, WebDB provides a CGI executable that can be used with any of these servers. A beta version of NSAPI is also available.

  Additional Information: For instructions on how to configure the CGI, see "Setting Up the WebDB CGI Executable and WebDB Cartridge to OAS" on page 8-1.

2

Installing WebDB 2.2 on Windows NT

This chapter contains the following sections:

- Section 2.1, "Prerequisites" on page 2-2
- Section 2.2, "WebDB on Windows NT Install" on page 2-3
- Section 2.2.1, "Preliminary Steps" on page 2-3
- Section 2.2.2, "WebDB on Windows NT Typical Install" on page 2-8
- Section 2.2.3, "WebDB on Windows NT Custom Install" on page 2-24
- Section 2.3, "Deinstalling WebDB on Windows NT" on page 2-42

2.1 Prerequisites

On Windows NT, you can install WebDB into a local or remote Oracle 8.0.5, 8.0.6, or 8*i* database. If you are installing WebDB into Oracle 7.3.4, the Oracle 7.3.4 database must be local.

If you are installing in an Oracle Home for the 7.3.4, 8.0.5, or 8.0.6 database, the install program will ask you shut down all Oracle services during the installation process, and restart them afterwards.

Before you install WebDB into Oracle 7.3.4, 8.0.5, 8.0.6, or 8*i* on Windows NT:

- Review the Release Notes that are provided on your product CD.
- You must have the SYS user password on the database where you plan to install WebDB 2.2.
- The database where you plan to install WebDB must be up and running.
- You must have administrative privileges on the Windows NT machine where you are installing WebDB.
- You must ensure that the `MAX_ENABLED_ROLES` parameter is in your INIT.ORA file and set to at least 25.
- You should have tablespaces available with sizes of at least 25-30 MB each. These tablespaces will be used as Temporary and Default tablespaces by the schema in which you install WebDB.
- For each Web site you create with WebDB, you should have a tablespace of at least 10 MB.

In addition, if you are installing WebDB into Oracle8*i* on Windows NT:

- You must install WebDB 2.2 into a non-8*i* Oracle Home: for example, an Oracle Home where you have installed an Oracle product other than Oracle8*i*. If a non-8*i* Oracle Home does not already exist, the installation program allows you to create one during the installation process.
- You must add a TNS names alias that points to the database where you are installing WebDB 2.2. You add the alias to the `tnsnames.ora` file in the new Oracle Home. If the TNS names alias does not already exist, the installation program will allow you to create it during the installation process.

Note: The installation program verifies that the above two conditions are met.

If you are installing WebDB into Oracle 7.34 on Windows NT:

- You must install WebDB into an existing Oracle Home for the 7.3.4 database that contains SQL*Loader.

2.2 WebDB on Windows NT Install

The Oracle WebDB 2.2 install program is designed to allow installation of all WebDB components or installation of selected components. Complete the preliminary steps below before referring to the section that applies to your environment to continue the install process:

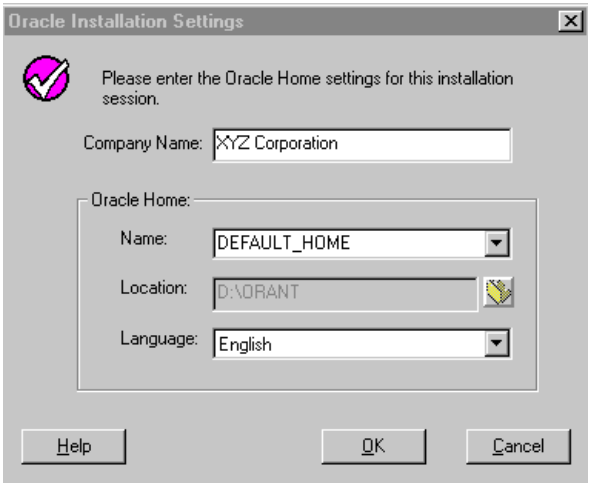
- Section 2.2.2, "WebDB on Windows NT Typical Install"
- Section 2.2.3, "WebDB on Windows NT Custom Install"

2.2.1 Preliminary Steps

The steps in this section are common for both a Windows NT typical install and a Windows NT custom install.

To complete the preliminary steps for installing Oracle WebDB on Windows NT:

1. Insert the CD labeled **WebDB** into your CD-ROM drive.
2. From the **Start** menu on the NT desktop, choose **Run.**
3. Type D:\NT\SETUP.EXE (substitute the appropriate letter of your CD-ROM drive for "D"), then click **OK**.
4. In the Oracle Installation Settings window, type the information requested for each field, then click **OK**. If you have questions about any field in this window or any other installation window, click **Help.**



- In the **Company Name** field, type the name of your company.

An **Oracle Home** corresponds to the environment in which an Oracle product runs. You typically define an Oracle Home for an Oracle database during installation.

IMPORTANT: If you are installing on Oracle8*i*, you must install WebDB into an Oracle Home that is different from the Oracle Home for the 8*i* database.

The Oracle Home can be one where you have installed an Oracle product other than Oracle8*i* or a new Oracle Home. Go to Step 5 for information about creating a new Oracle Home.

If you are installing WebDB for the first time in an Oracle Home for the 7.3.4, 8.0.5, 8.0.6 database, the install program will ask you shut down all Oracle services during the installation process, then restart them.

- The **Name** list contains all currently defined Oracle Homes. To create a new Oracle Home, go to Step 5.
- **Location** is the path to the Oracle Home location where Oracle products are installed. You must choose a valid path that is not in the Windows directory. Different homes cannot share the same home location.

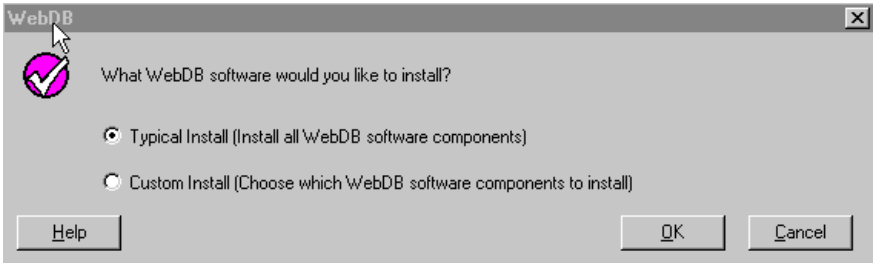
Note The default **Location** updates with the correct path based on the Oracle Home you choose in the Name field.

- The **Language** list contains supported languages for installing WebDB. Choose **English**.

5. **To create a new Oracle Home**, type a new name in the **Name** field. The name can be anything you choose. Then, you **must** type a path to the new home in the **Location** field. If the directory doesn't exist, the installation program will create it.

   The installation program also automatically creates the new home and installs all required files (for example, SQL*Plus and SQL*Loader).

6. Click **OK**. In the next screen, choose a Typical or Custom install.



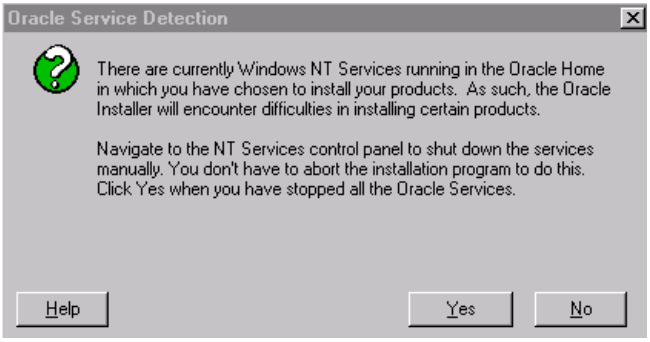
- If you choose **Typical Install**, the install program checks for the following software components. If they are not already installed, the program installs them with default settings chosen by WebDB:

Software Component	Purpose
WebDB 2.2	
WebDB Listener 2.2	Allows you to use your Web browser to access the database.
PL/SQL Web Toolkit 4.0.8	Allows you to write Web-enabled applications.
Required Support Files 8.0.5.1	Required by the WebDB Listener.
SQL*Loader 8.0.5	Installed in the Oracle Home where you install WebDB.
SQL*Plus 8.0.5	Installed in the Oracle Home where you install WebDB.

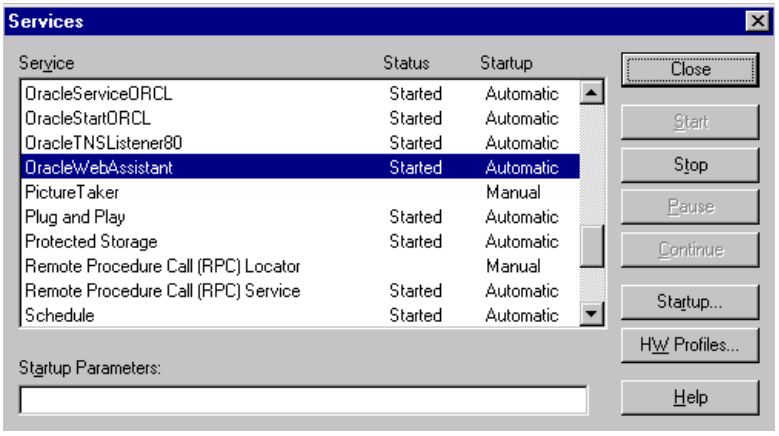
See "WebDB on Windows NT Typical Install" on page 2-8 for further instructions.

- If you choose **Custom Install**, you can install the WebDB Listener and WebDB in separate steps. See "WebDB on Windows NT Custom Install" on page 2-24 for further instructions.

7. Click **OK**. The following message appears if you are trying to install in the same Oracle Home location as the Oracle 8.0.5 or 7.3.4 database installation.



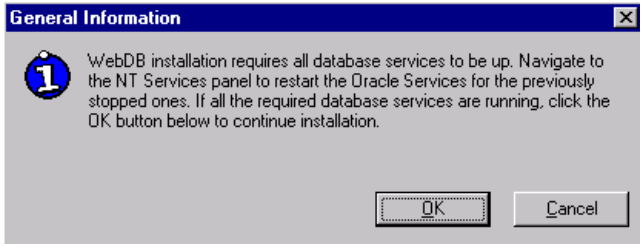
8. Without stopping the installation, navigate to the Windows NT desktop, click **Start**, **Settings**, **Control Panel**, then **Services**. You should see a window similar to the following:



Highlight an Oracle Service and click the **Stop** button. Repeat this step for every Oracle Service that is currently started.

9. Navigate back to the screen shown in Step 7 and click **Yes** to continue installation.

10. The installation program continues installing required dependencies into the Oracle Home. When it is finished, the following message appears:



11. Without stopping the installation, navigate back to the Services window shown in Step 8.

12. Highlight an Oracle Service in the Services list, then click **Start** to restart it. Repeat this step until you have restarted all stopped Oracle services.

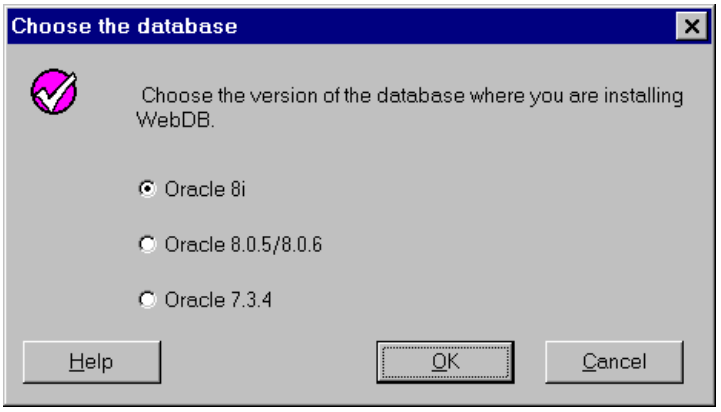
13. Navigate back to the screen shown in Step 10 and click **OK** to continue installation.

2.2.2 WebDB on Windows NT Typical Install

Make sure that you have performed the steps in Section 2.2, "WebDB on Windows NT Install" before continuing with this section.

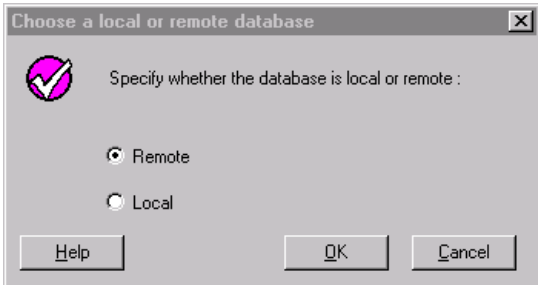
To perform a typical install of Oracle WebDB on Windows NT:

1. If you selected **Typical Install** in Step 6 on page 2-5, you must specify the database where you are installing WebDB.

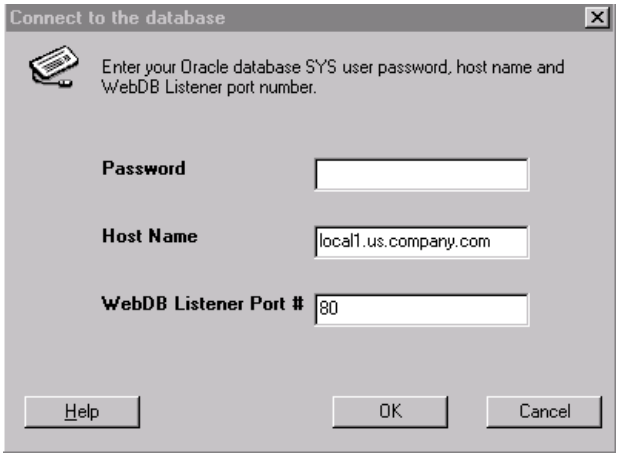


   - Click **Oracle 8*i*** if you are installing WebDB into a local or remote version of the Oracle8*i* database.
   - Click **Oracle 8.0.5** or **8.0.6** if you are installing WebDB into a local or remote version of the Oracle database.
   - Click **Oracle 7.3.4** if you are installing WebDB into a local version of the Oracle 7.3.4 database.

2. Click **OK**. If you selected **Oracle 8.0.5 or 8.0.6** in the previous step, specify whether the database is local or remote.



3. Click **OK**.
4. The following window displays if you selected:
   - **Oracle 8.0.5** or **8.0.6** in Step 1 and **Local** in Step 2 or
   - **Oracle 7.3.4** in Step 1



   - **Password** is the SYS user password that you use to log on to the Oracle database where you are installing WebDB.
   - **Host Name** is the name of the machine on which the WebDB Listener will be installed. You can obtain the host name on Windows NT by typing `hostname` at a DOS command line prompt.

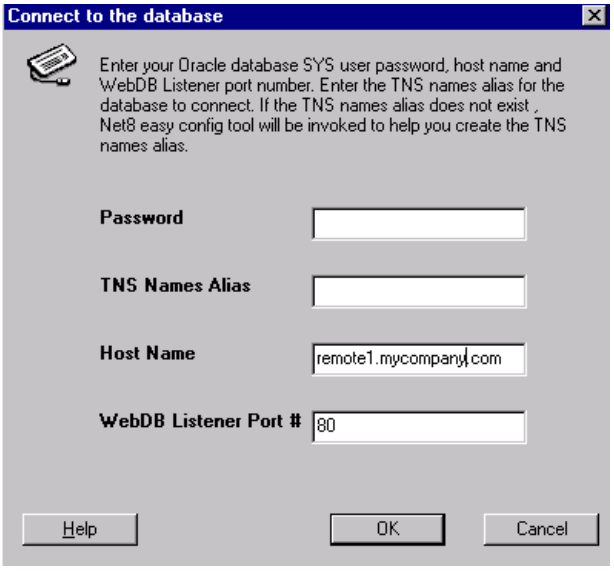
     Note Make sure you enter the fully qualified domain name; for example,

     `hostname.mycompany.com`.

   - The **WebDB Listener Port #** is used by the WebDB Listener to transmit data between the database and Web browser. The default port number is 80. Choose another port number if 80 is being used by another application. After you finish entering the fields in this window, go to Step 21 on page 2-18.

5. The install window displays an additional field, **TNS Names Alias** if you selected:

   - **Oracle 8i** in Step 1 or
   - **Oracle 8.0.5** or **8.0.6** in Step 1 and **Remote** in Step 2



TNS Names Alias is a connect string to a database. It is required if you are installing WebDB into:

- A remotely installed 8.0.5 or 8.0.6 database (that is, a database with a different Oracle Home than the Oracle Home where WebDB will be installed)
- The Oracle8*i* database (always remote)

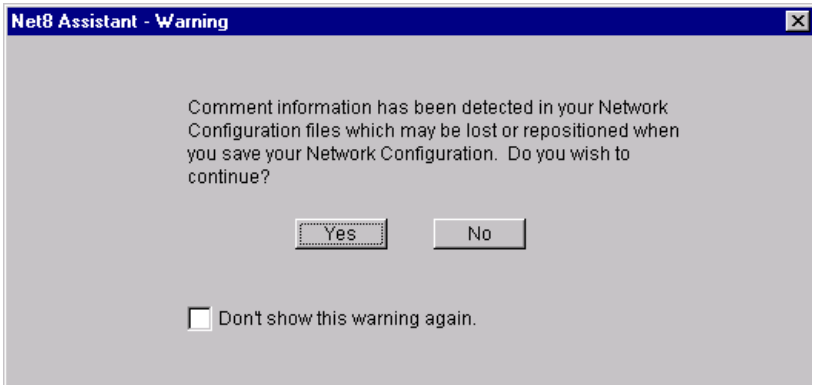
If you have not already defined a TNS names alias to the database in your `tnsnames.ora` file, you can create a new one by typing a new name in the **TNS Names Alias** field; for example, `newalias`.

Note: Make a note of this name. The installation program will start the Oracle Net8 Easy Configuration wizard to help you create the new TNS names alias using this name.

---

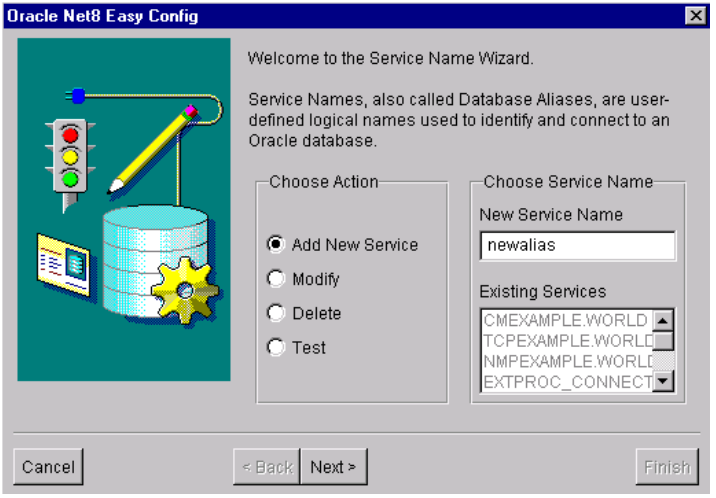
6. Click **OK**. The following message displays if you typed:
   - An incorrect TNS names alias to a remote database, or
   - A nonexistent TNS names alias in the previous window with the intention of using the Oracle Net8 Easy Configuration wizard to create a new TNS names alias using this name.

7. If the message does not display, this means you already have a TNS names alias configured for your database. Go to Step 19 on page 2-17 to continue the installation.
8. Click **OK**. The first window of the Net8 Easy Configuration wizard displays. The wizard guides you through the steps for creating a new TNS names alias or modifying an existing one. To do so, the wizard will modify the `tnsnames.ora` file for the Oracle Home you specified earlier in Step 4 on page 2-3.
9. If you have added comments to the `tnsnames.ora` file or installed WebDB into a new Oracle Home, you may see the following message warning that this information may be reorganized or deleted if you continue.



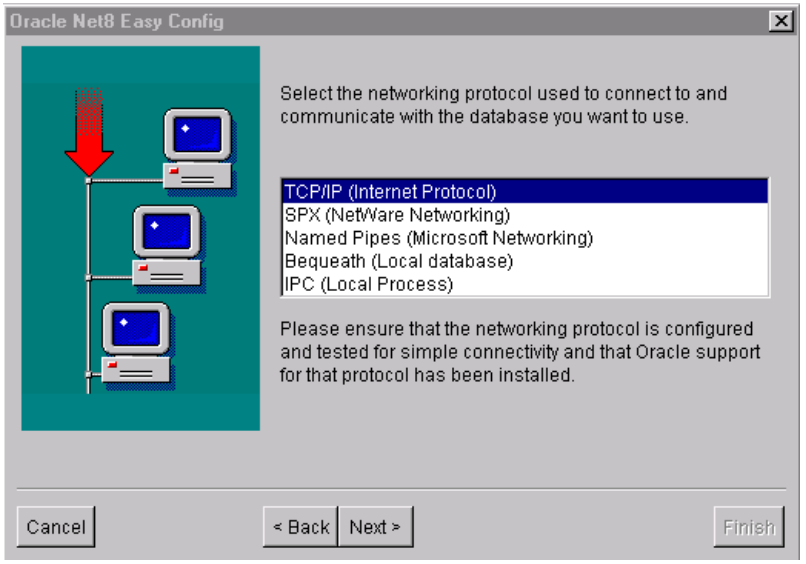
- Click **Yes** to continue.
- (*Not recommended*) Click **No** to stop the configuration assistant and create a TNS names alias manually. You can create a TNS names alias manually by following the instructions in "Creating a TNS Names Alias" on page 6-3.

10. In the next window, ensure **Add New Service** is selected. Choosing this option enables you to create a new TNS names alias for the database.

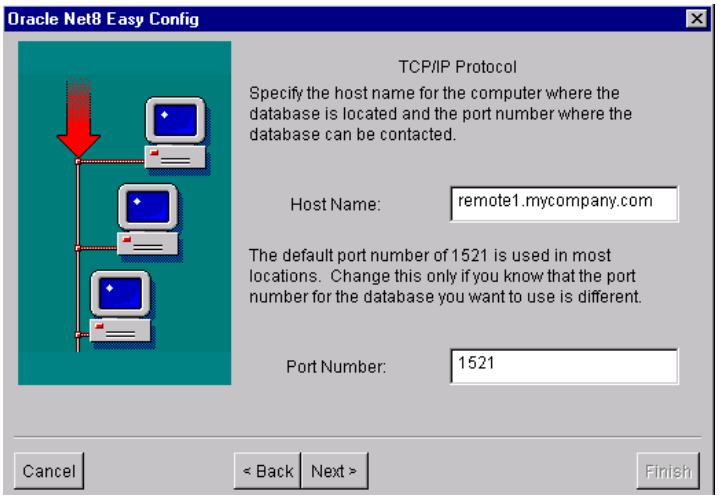


11. In **New Service Name**, type the name of the TNS names alias you specified in the **TNS Names Alias** field in Step 5 on page 2-10.

12. Click **Next**. In the next window, choose the networking protocol that you want to use to communicate with the database.



13. Click **Next**. The contents of the next window change depending on your selection in the previous step. For example, if you selected **TCP/IP (Internet Protocol)** in the previous step, the following window displays:

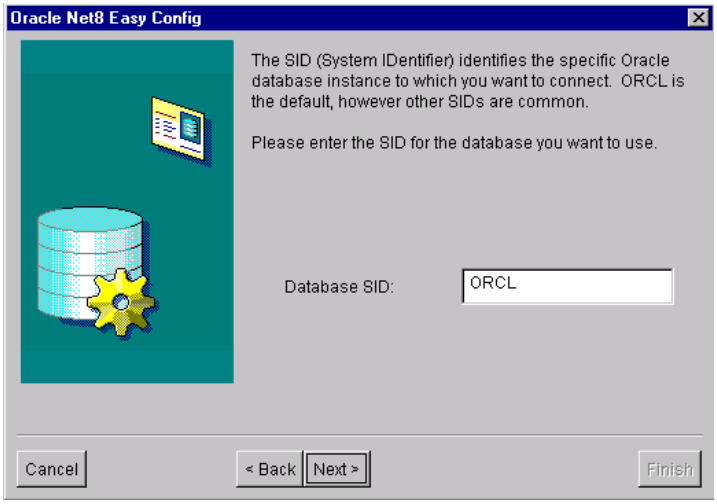


14. Type the host name of the machine where the database is installed and a database port number.

    Note This port is for the database and is different from the Listener port name you specified in a previous installation window. Specify 1521 as the database port number unless you know it has changed.

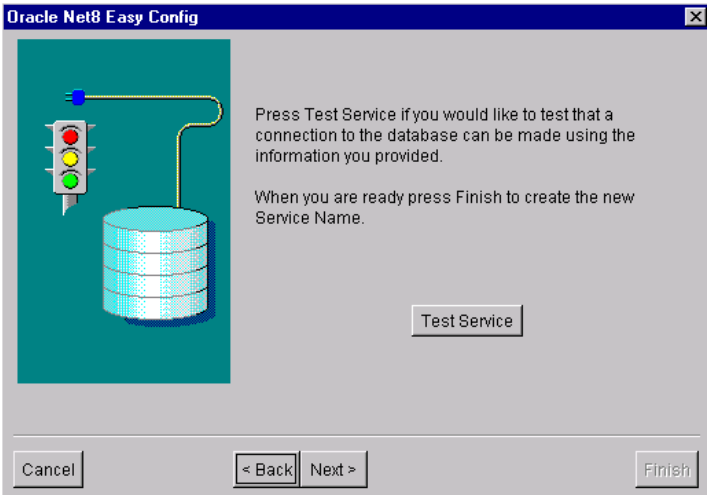
15. Click **Next**. In the next window, type the System Identifier (SID) for the database where you are installing WebDB.

> **IMPORTANT: In Windows NT, make sure that the Oracle database SID is for the database into which you are installing Oracle WebDB. If the SID you enter is for another database, connection to the appropriate database may fail.**

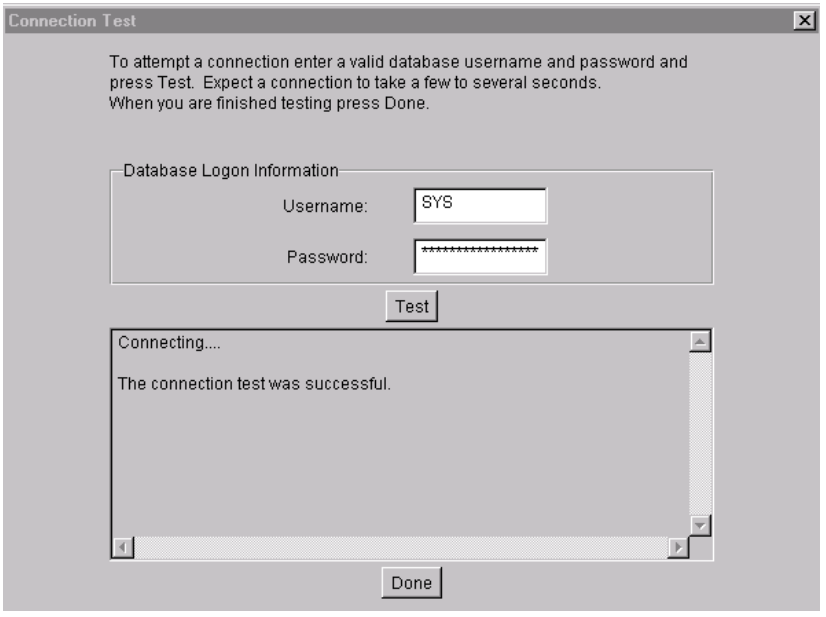


Note: The SID is shown in the INSTANCE_NAME parameter in the `INITSID.ORA` database initialization parameter file. In most cases, the Database SID is ORCL.

16. Click **Next**. In the next window, click **Test Service** to test the new TNS names alias you created.

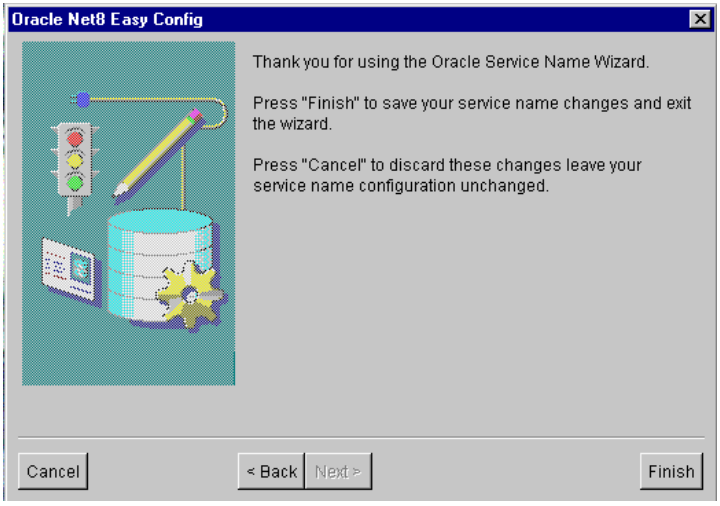


17. Type the SYS user name and password for the database where you are installing WebDB and click **Test**. If the TNS names alias works correctly, you should see a success message similar to the following:

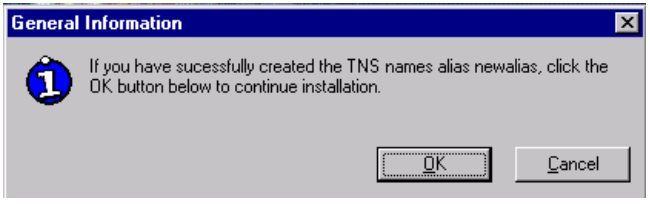


18. Click **Done**, then **Next**.

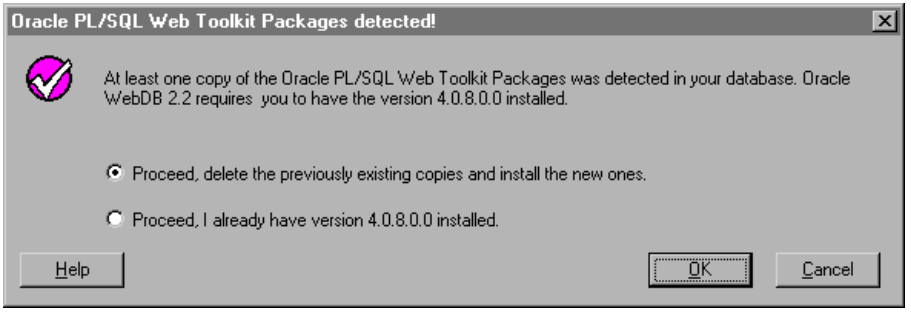
19. Click **OK**. In the last Net8 Easy Configuration window, click **Finish**.



20. The following message asks you to confirm that you have successfully created and tested the TNS names alias.



21. Click **OK**. If the install program detects a version of the PL/SQL Web Toolkit, the following window displays.

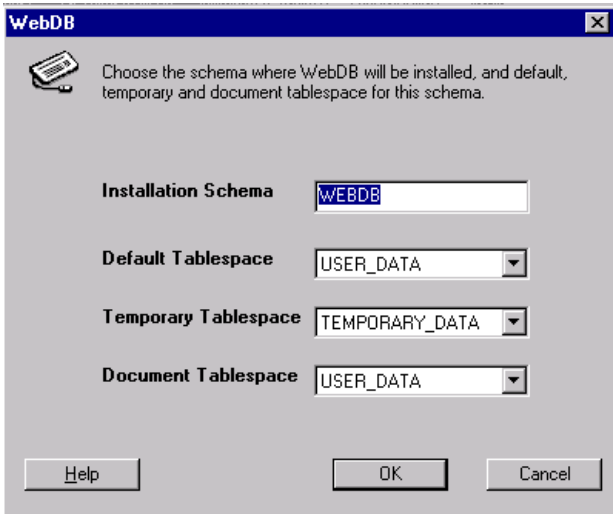


- Choose **Proceed, delete the previously existing copies and install the new ones** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0.8 version instead.

  Version 4.0.8 of the PL/SQL Web Toolkit must be installed in order to install WebDB 2.2.

- Choose **Proceed, I already have version 4.0.8.0.0 installed** if a 4.0.8 version of the PL/SQL Toolkit already exists in the database. Installation will proceed using this version.

22. In the next window, specify the database schema where you will install WebDB 2.2 and the tablespaces that will be used by this schema.



- The **Installation Schema** is the database schema where WebDB will be installed. You must specify a schema that does not already exist. The installation program will automatically create the new schema for you.

  You type the installation schema name to log on to WebDB for the first time.

- The **Default Tablespace** is used to store any database objects or components created by the WebDB user.

  The install program attempts to choose the best tablespace to use for WebDB. If you don't have one of the following default tablespaces in your database, the install program uses the SYSTEM tablespace:

  TOOLS
  USER_DATA
  USER
  USERS
  USR_DATA
  USERDATA
  USR

- The **Temporary Tablespace** is used for creation of temporary table segments for operations performed by the WebDB user such as sorting table rows.

  If you don't have one of the following temporary tablespaces in your database, the install program will create temporary storage in the SYSTEM tablespace:

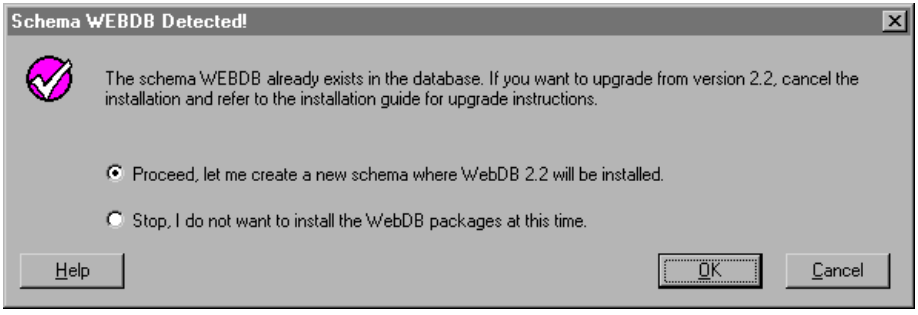
  TEMP_DATA
  TEMPORARY_DATA
  TEMP
  TEMPORARY

  The **Document Tablespace** is used to store any items uploaded onto a WebDB Web site. These item types can include files, images, folders, and stored procedures.

  Note The Document Tablespace will gradually fill as end users add items to WebDB Web sites. You should choose a tablespace large enough to accommodate these additions or a tablespace that automatically extends itself.

You can choose the same Default, Temporary, or Document Tablespace. For example, you can choose USER_DATA as the Default Tablespace and the Document Tablespace.

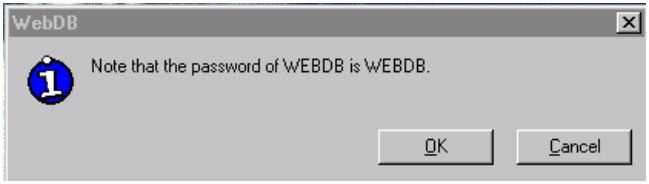
23. Click **OK**. If the **Installation Schema** you specified in the previous step already exists, you must specify a new schema in which to install WebDB 2.2.



- Choose **Proceed, let me create a new schema where WebDB 2.2 will be installed,** to install WebDB 2.2 into a new schema. Click **OK** to return to the previous page where you can specify a different **Installation Schema**.

- Choose **Stop, I do not want to install the WebDB packages at this time**, then **OK** if you don't want to install WebDB into a schema other than WebDB. Choosing this option terminates installation.

24. After you specify a valid **Installation Schema**, a message displays the user id and password that you use to log on to WebDB initially after it is installed. In the following example, the user id is WebDB and the password is WebDB.



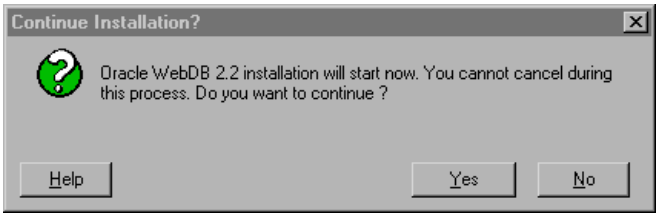
25. Choose which language or languages to install in addition to English. After installation, end users can use options in their Web browsers to choose which of these languages will be used to display WebDB. 2.2

You can choose multiple languages by pressing the Shift or Ctrl keys as you choose.

Important: The language(s) you select from this list must be supported on the database where you are installing WebDB.

---

26. Click **OK**. A message asks if you want to continue installation.

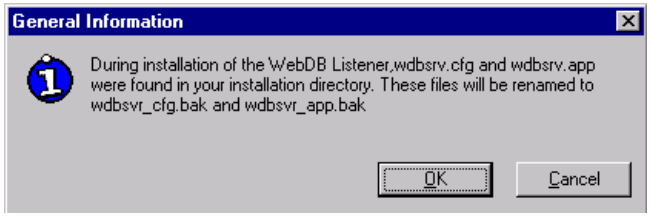


27. Click **Yes** to proceed.

> **Note:** Please be patient, as this operation may take several minutes to complete.

28. During installation, the `wdbsvr.cfg` and `wdbsvr.app` files are backed up if they already exist. These files contain configuration information for the WebDB Listener. You can update the contents of these files after installation by navigating to the WebDB Listener settings page. see "Configuring the WebDB Listener and PL/SQL Gateway" on page 5-1 for more information.

    Note If necessary, the install program automatically updates the `connect_string` parameter to point to the appropriate database where you are installing WebDB.



29. Click **OK** to back up the `wdbsvr.cfg` and `wdbsvr.app` files.

30. When installation completes, a success message displays.

    The message displays two URLs that you type into your Web browser's location or address field to navigate to pages for adjusting the WebDB Listener settings.

    Important Make a note of the URLs and user name and password in the message.

31. Check the log file for errors that may have occurred during installation; for example, PL/SQL compile errors. The log file is located in

```
<ORACLE_HOME>\orainst\wdb_install_packages.log
```

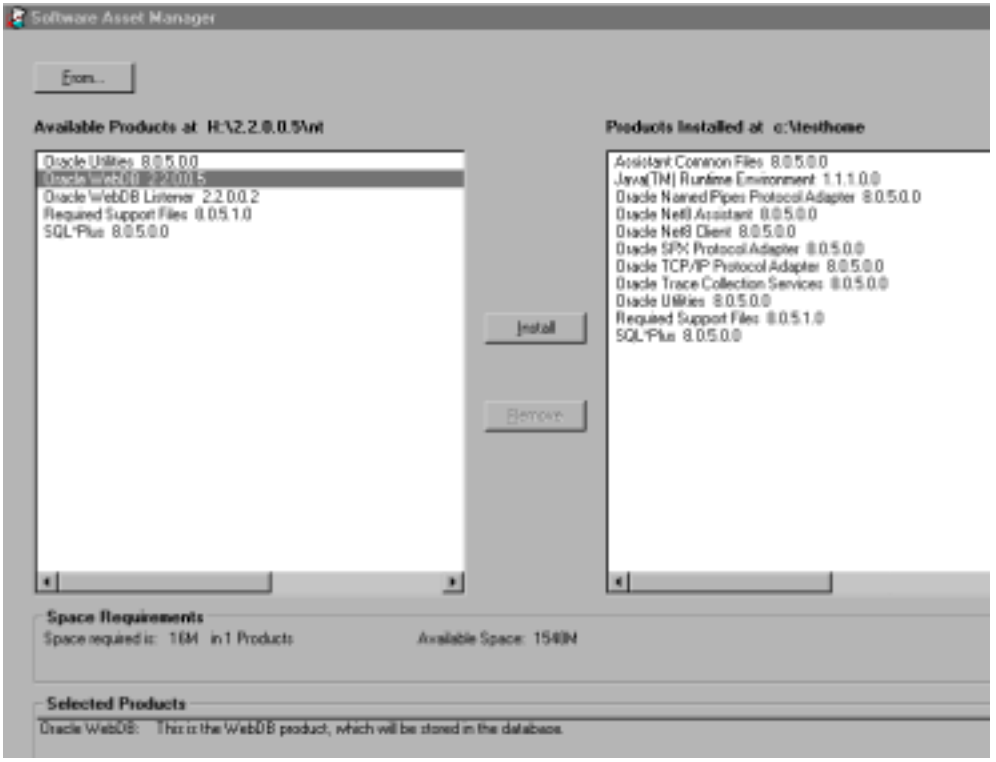
where **<ORACLE_HOME>** is the Oracle Home location where you installed WebDB.

Additional Information: If you encounter any problems after installation, see "Troubleshooting" on page 9-1 for more information.

2.2.3 WebDB on Windows NT Custom Install

The steps in this section are for a Windows NT custom install. You can choose to custom install either Oracle WebDB or Oracle WebDB Listener.

1. Make sure that you have performed the steps in Section 2.2.1, "Preliminary Steps" on page 2-3 before continuing with this section.
2. If you selected **Custom Install** in Step 6 on page 2-5, the Software Asset Manager window displays.
   - **Available Products** lists the WebDB software components you can install.
   - **Products Installed** lists the Oracle Software already installed on your machine
3. Select (highlight) one or more WebDB software components to install, then click **Install.**



4. Refer to the appropriate section to continue the custom installation after completing the above three steps in this section:
   - Section 2.2.3.1, "Oracle WebDB Custom Install on Windows NT"
   - Section 2.2.3.2, "WebDB Listener Custom Install on Windows NT"

2.2.3.1 Oracle WebDB Custom Install on Windows NT

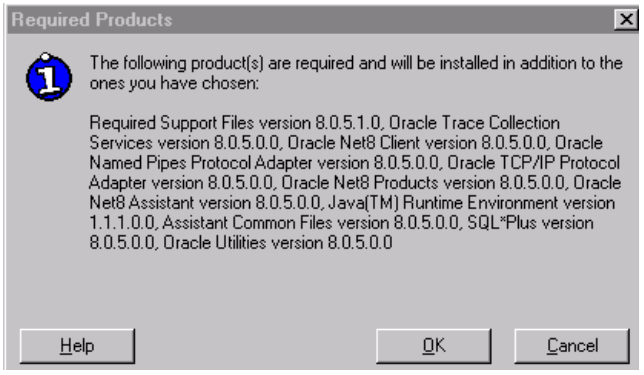
This section covers installing the Oracle WebDB Listener only. If you want to install the entire Oracle WebDB product, see "WebDB on Windows NT Typical Install" on page 2-8.

To install the Oracle WebDB product:

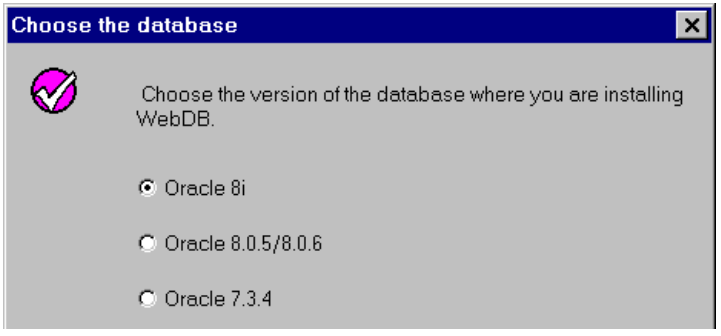
1. If you selected **Oracle WebDB** in the Software Asset Manager window, WebDB attempts to install the following software components:

Software Component	Purpose
WebDB 2.2	
PL/SQL Web Toolkit 4.0.8	Allows you to write Web-enabled applications.
Required Support Files 8.0.5.1	Required by the WebDB Listener.
SQL*Loader 8.0.5	Installed in the Oracle Home where you install WebDB.
SQL*Plus 8.0.5	Installed in the Oracle Home where you install WebDB.

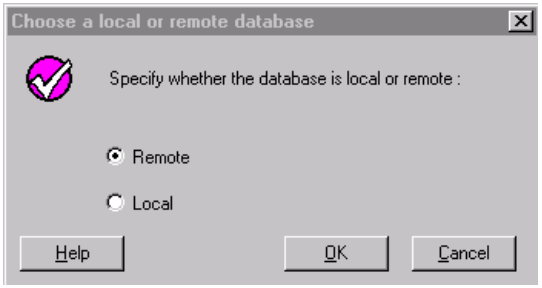
If any of the above components or other dependencies are not installed in the Oracle Home you specified in Step 4 on page 2-3, a message similar to the following displays.



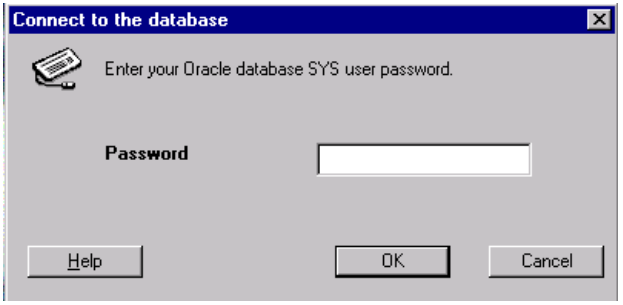
2. Click **OK**. The components and dependencies shown in the message are required prior to installing WebDB and will be installed along with the WebDB packages.
3. The next window asks you for information about the database where you are installing WebDB:



   - Click **Oracle 8*i*** if you are installing WebDB into a local or remote version the Oracle8*i* database. Go to Step 7.
   - Click **Oracle 8.0.5** or **8.0.6** if you are installing WebDB into a local or remote version of the Oracle database.
   - Click **Oracle 7.3.4** if you are installing WebDB into the Oracle 7.3.4 database. Go to Step 6.
4. Click **OK**. If you selected **Oracle 8.0.5 or 8.0.6** in the previous step, specify whether the database is local or remote.



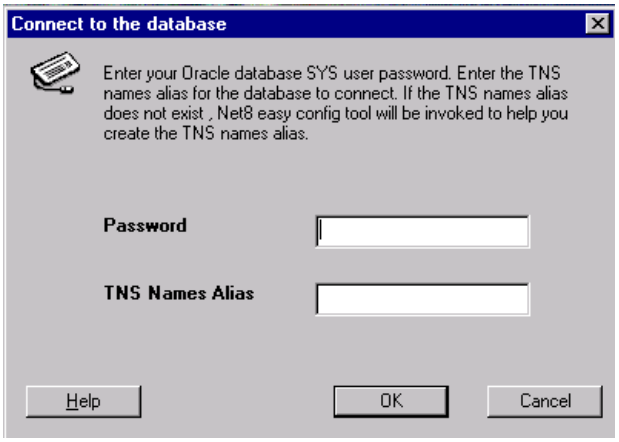
5. Click **OK**.
6. The following window displays if you selected:
   - **Oracle 8.0.5** or **8.0.6** in Step 3 and **Local** in Step 4 or
   - **Oracle 7.3.4** in Step 3



   - **Password** is the SYS user password that you use to log on to the Oracle database where you are installing WebDB.

After you finish entering a password, go to Step 23 on page 2-34.

7. The install window displays an additional field, **TNS Names Alias,** if you selected:
   - **Oracle 8i** in Step 3 or
   - **Oracle 8.0.5 or 8.0.6** in Step 3 and **Remote** in Step 4



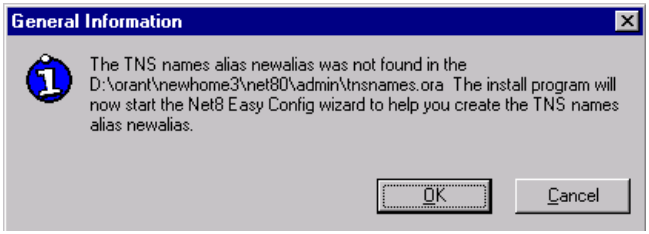
TNS Names Alias is a connect string to a database. If you have not already defined a TNS names alias to the Oracle8*i*, 8.0.5, or 8.06 database in your `tnsnames.ora` file, you can create a new one by typing a new name in the **TNS Names Alias** field; for example, `newalias`.

Important: Make a note of this name. The installation program will start the Oracle Net8 Easy Configuration wizard to then help you create the new TNS names alias using this name, beginning in Step 10 on page 2-29.

---

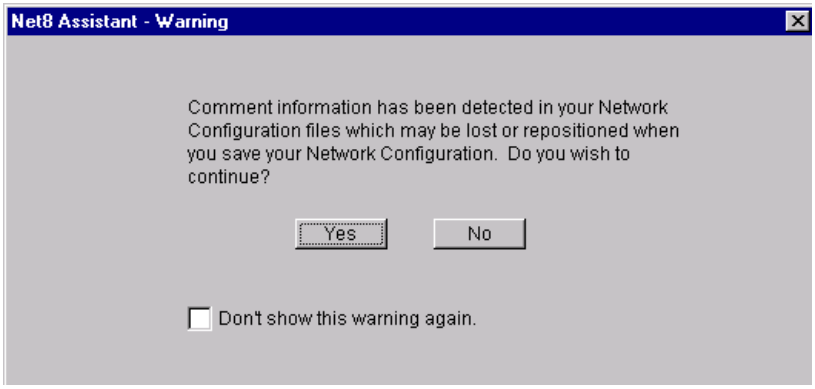
8. Click **OK**. The following message displays if you typed:
   - An incorrect TNS names alias to a remote database, or
   - A nonexistent TNS names alias in the previous window with the intention of using the Oracle Net8 Easy Configuration wizard to create a new TNS names alias using this name.

9. If the message does not display, go to Step 23 on page 2-34



10. Click **OK**. The first window of the Net8 Easy Configuration Assistant displays. The configuration assistant is a wizard that guides you through the steps for creating a new TNS names alias or modifying an existing one. To do so, the configuration assistant will modify the `tnsnames.ora` file for the Oracle Home you specified in Step 4 on page 2-3.

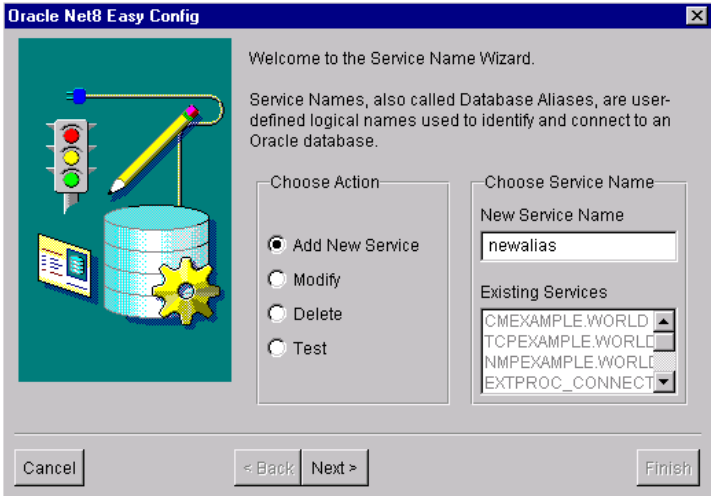
11. If you have added comments to the `tnsnames.ora` file or installed WebDB into a new Oracle Home, you may see the following message warning you that this information may be reorganized or deleted if you continue.



- Click **Yes** to continue.
- Click **No** to stop the configuration assistant.

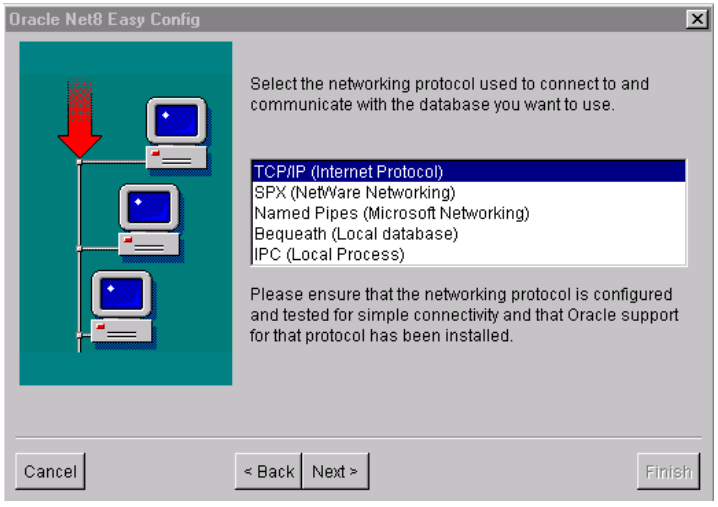
Note You still can create a TNS names alias manually by following the instructions in "Configuring Variables and General Configuration" on page 6-1.

12. In the next window, ensure **Add New Service** is selected. Choosing this option enables you to create a new TNS names alias for the database.

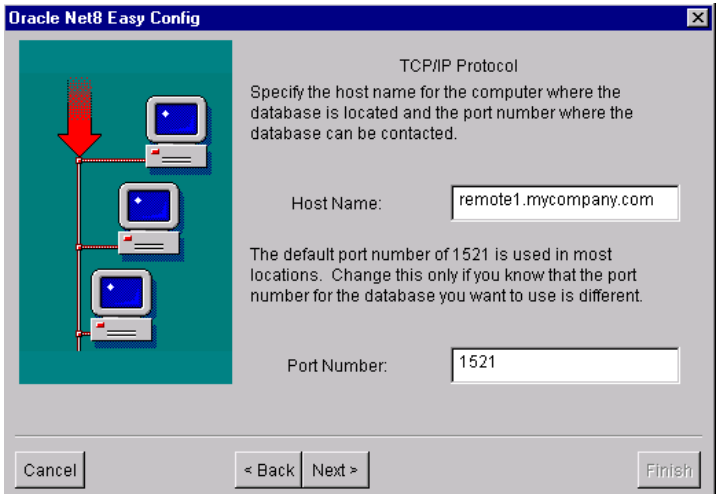


13. In **New Service Name**, type the name of the TNS names alias you specified in the **TNS Names Alias** field in Step 7 on page 2-28.

14. Click **Next**. In the next window, choose the networking protocol that you want to use to communicate with the database.



15. Click **Next**. The contents of the next window change depending on your selection in the previous step. For example, if you chose **TCP/IP (Internet Protocol)** in the previous step, the following window displays:

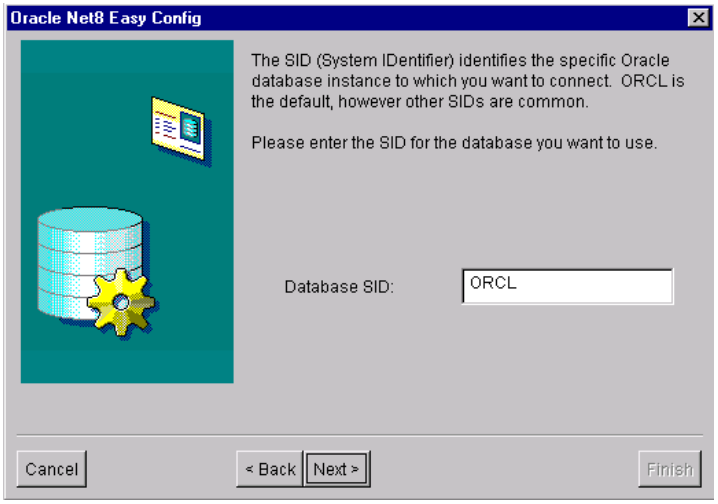


16. Type the host name of the machine where the database is installed and a port number.

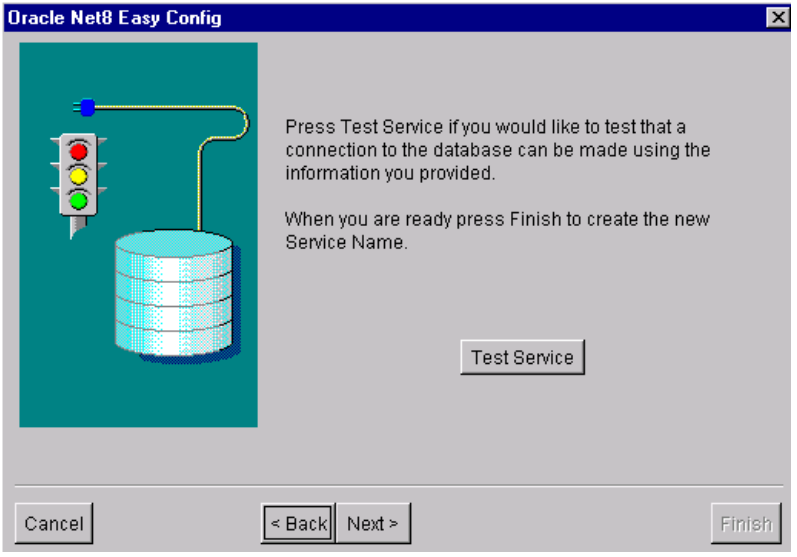
    Note This port is for the database and is different from the Listener port name you specified in a previous installation window. Specify **1521** as the database port number unless you know it has changed.

17. Click **Next**. In the next window, type the System Identifier (SID) for the database where you are installing WebDB.

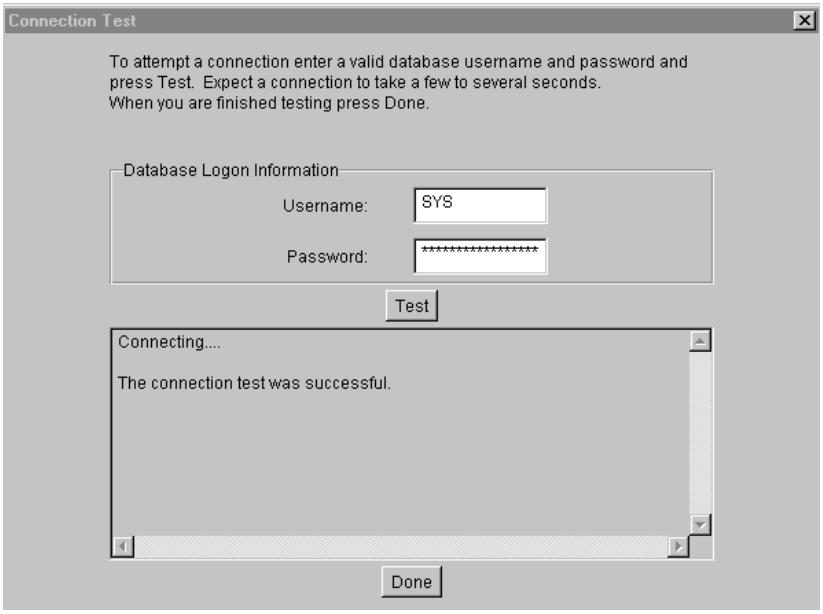
Note: The SID is shown in the INSTANCE_NAME parameter in the `INITSID.ORA` database initialization parameter file. In most cases, the Database SID is ORCL.



18. Click **Next**. In the next window, click **Test Service** to test the new TNS names alias you created.



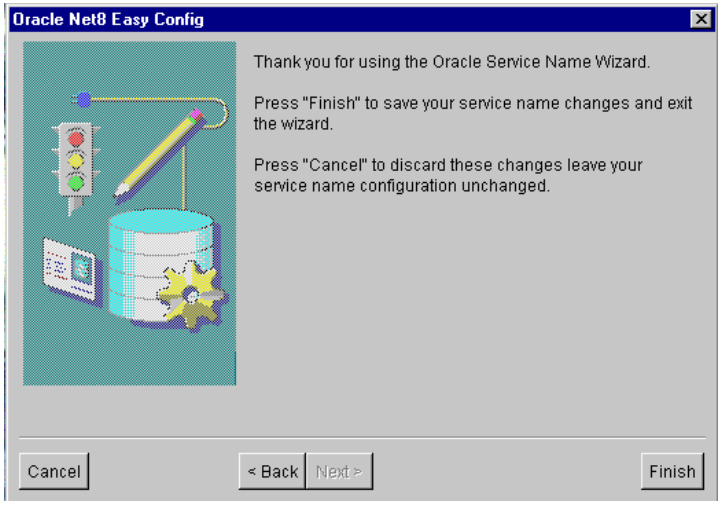
19. Type the SYS user name and password for the database where you are installing WebDB and click **Test**. If the TNS names alias works correctly, you should see a success message similar to the following:



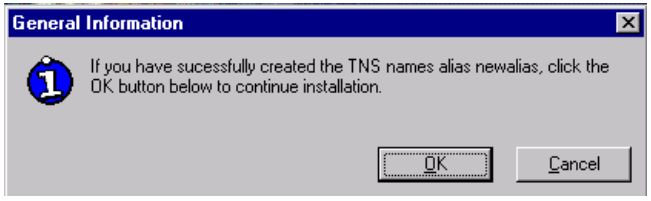
Additional Information: If the Test Service fails, this indicates that the connection to the Oracle database was not successful. To troubleshoot, see "Creating a TNS Names Alias" on page 6-3.

20. Click **Done**, then **Next**.

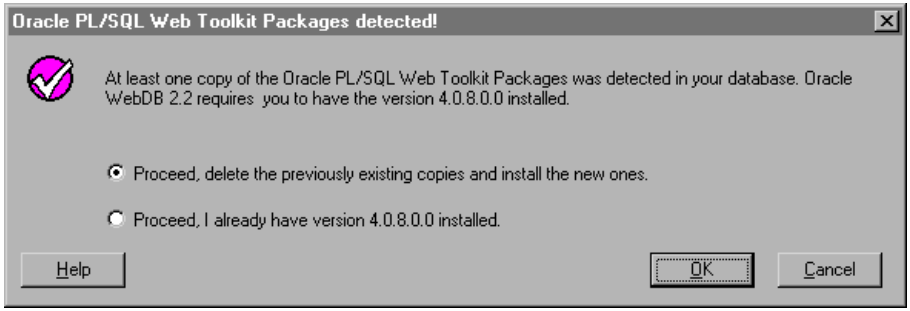
21. In the last Net8 Easy Configuration window, click **Finish**.



22. The following message asks you to confirm that you have successfully created and tested the TNS names alias.

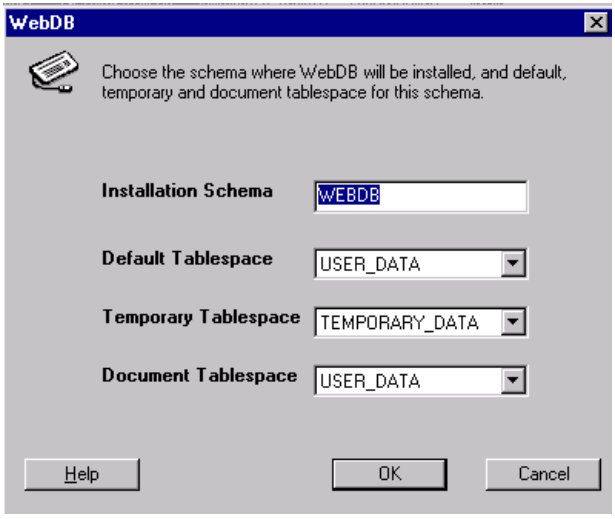


23. Click **OK**. If the install program detects a version of the PL/SQL Web Toolkit in the database, you are asked if you want to delete it and install the 4.0.8 version. Version 4.0.8 of the PL/SQL Web Toolkit must be installed in order to install WebDB.



- Choose **Proceed, delete the previously existing copies and install the new ones** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0.8 version instead.
- Choose **Proceed, I already have the 4.0.8.0.0 installed** if a 4.0.8 version of the PL/SQL Web Toolkit already exists in the database. Installation will proceed using this version.

24. Click **OK**. In the next window, specify the database schema where you will install WebDB and the tablespaces for this schema.



- The **Installation Schema** is the database schema where WebDB will be installed. You must specify a schema that does not already exist. The installation program will automatically create the new schema for you.

  You type this schema name to log on to WebDB for the first time.

- The **Default Tablespace** is used to store any database objects or components created by the WebDB user.

  The install program attempts to choose the best tablespace to use for WebDB. If you don't have one of the following default tablespaces in your database, the install program uses the SYSTEM tablespace:

  TOOLS
  USER_DATA
  USER
  USERS
  USR_DATA
  USERDATA

- The **Temporary Tablespace** is used for creation of temporary table segments for operations performed by the WebDB user such as sorting table rows. If you don't have one of the following temporary tablespaces in your database, the install will create temporary storage in the SYSTEM tablespace:

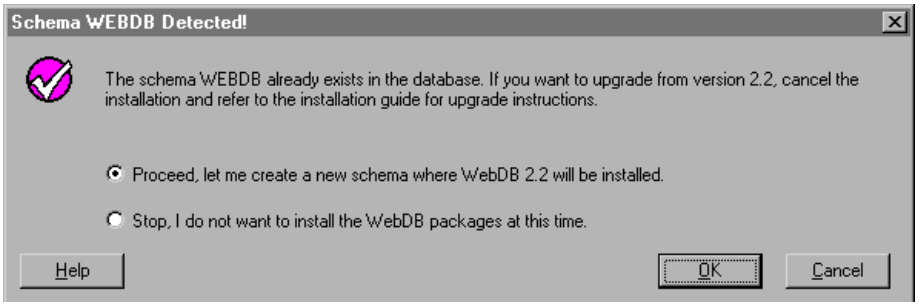
  TEMP_DATA
  TEMPORARY_DATA
  TEMP
  TEMPORARY

- The **Document Tablespace** is used to store any items uploaded to a WebDB Web site. These item types can include files, images, folders, and stored procedures.

  Note The Document Tablespace will gradually fill as end users add items to WebDB Web sites. You should choose a tablespace large enough to accommodate these additions, or a tablespace that automatically extends itself.

You can choose the same Default, Temporary, or Document Tablespace. For example, you can choose USER_DATA as the Default Tablespace and the Document Tablespace.

25. Click **OK**. If the **Installation Schema** you specified in the previous step already exists, you must specify a new schema in which to install WebDB 2.2.



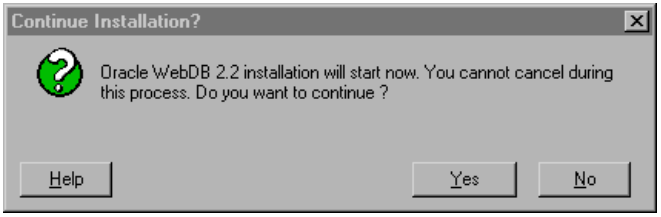
- Choose **Proceed, but let me create a new schema where WebDB 2.2 will be installed,** then **OK** to return to the previous page where you can specify a different **Installation Schema**.
- Choose **Stop, I do not want to install the WebDB packages at this time,** then **OK** if you don't want to install WebDB into a different schema. Choosing this option stops installation.

26. In the next window, choose which language or languages to install in addition to the default language, English. After installation, end users can use options in their Browsers to choose which of these languages will be used to display WebDB.

    You can choose multiple languages by pressing the Shift or Ctrl keys as you choose.

    Note Ensure that the database where you are installing WebDB supports the languages you select.

27. Click **OK**. A message asks if you want to continue installation.



28. Click **Yes** to proceed.

Note: Please be patient, as this operation may take several minutes to complete.

---

29. Check the log file for errors that may have occurred during installation. The log file is located in

```
<ORACLE_HOME>\orainst\wdb_install_packages.log
```

where ORACLE_HOME is the Oracle Home where you have installed WebDB.

Note: If connection to the database fails, you may need to edit the `connect_string` parameter in the `wdbsvr.app` file which is located in the `<ORACLE_HOME>\wdb\listener\cfg` directory to point to the appropriate database where you have installed WebDB. Then, you will need to stop and restart WebDB.

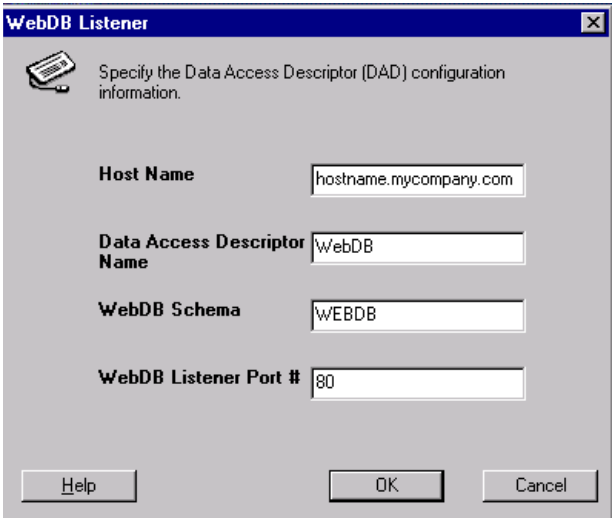
Additional Information: If you need help, see "Troubleshooting" on page 9-1.

2.2.3.2 WebDB Listener Custom Install on Windows NT

This section covers installing the Oracle WebDB Listener only. If you want to install the entire Oracle WebDB product, see "WebDB on Windows NT Typical Install" on page 2-8.

To install the Oracle WebDB Listener product:

1. If you selected **WebDB Listener** in the Software Asset Manager window (see Step 3 on page 2-24), you are prompted for WebDB Listener configuration information.



- The **Host Name** is the name of the machine on which the WebDB Listener will be installed. You can obtain the host name by typing `hostname` at a DOS command line prompt.

  Note Make sure you enter the fully qualified domain name; for example,

  `hostname.mycompany.com`.

- The **Data Access Descriptor Name** is a virtual directory that will be used in WebDB URLs. In the following URL:

  `http://myserver:2000/webdb`

  myserver is the Host Name

  2000 is the Listener Port Number
  w*ebdb* is the Data Access Descriptor Name

- The **WebDB Schema** is the name of the database schema in which WebDB was installed.
- The **WebDB Listener Port #** will be used by the WebDB Listener to transmit data between the database and Web browser.

  The default port number is 80. Choose another port number if 80 is being used by another application.

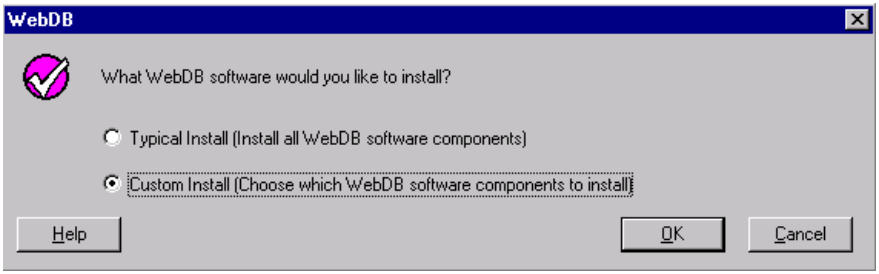
2. Click **OK**. A success message displays when installation completes.
3. In the Data Access Descriptor for WebDB, ensure that there is a Connect String (TNS names alias) specified for the database where WebDB is installed.

2.3 Deinstalling WebDB on Windows NT

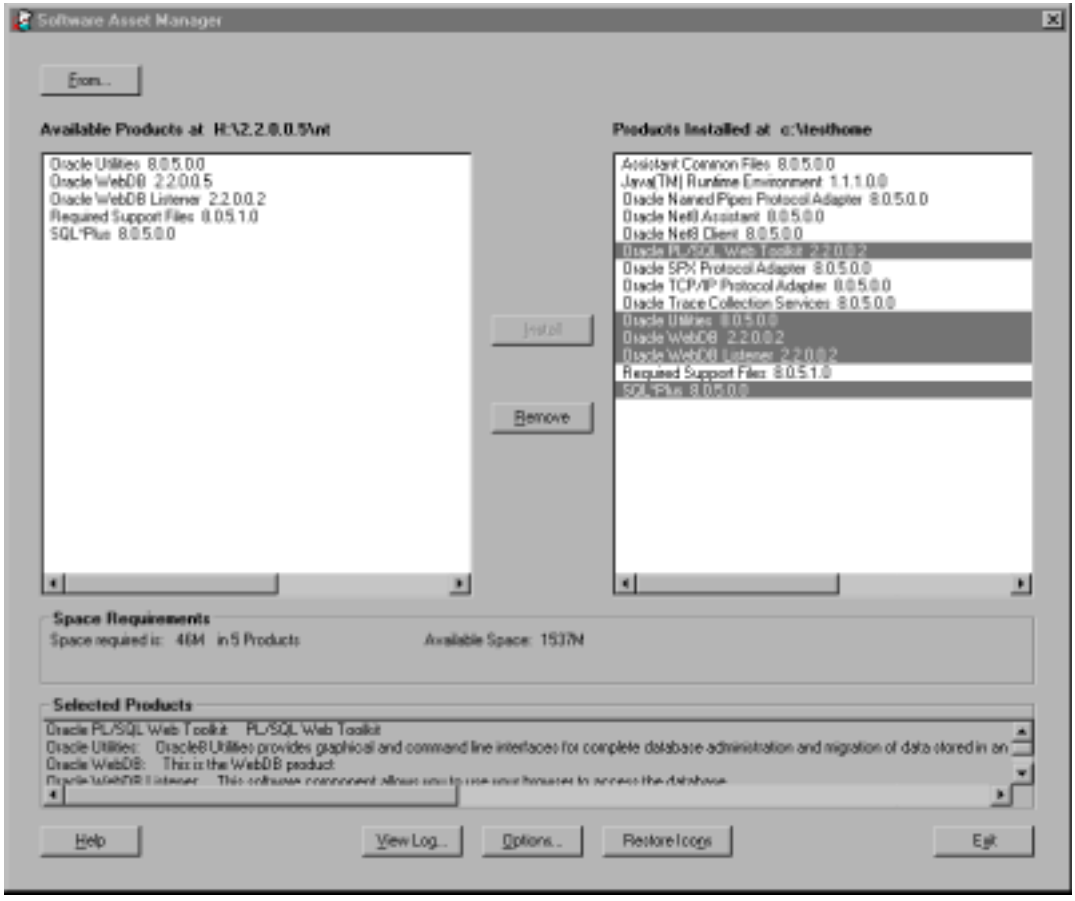
To deinstall WebDB 2.2 or other software components such as:

- WebDB Listener 2.2
- PL / SQL Web Toolkit 4.0.8
- Required Support Files 8.0.5.1
- SQL*Loader 8.0.5
- SQL*Plus 8.0.5

1. Follow Steps 1-4 beginning on page 2-3.
2. Click **OK**. In the next screen, choose **Custom Install**



3. In the Software Asset Manager, select the product or products you want to deinstall (located in the right frame of the window).



4. Click **Remove**.

5. The contents of the next window are different depending on the product or products you are deinstalling. Follow the instructions in the next window and any after that until you deinstall the product.

3

Installing WebDB 2.2 on Solaris

This chapter contains the following sections:

- Section 3.1, "Prerequisites" on page 3-2
- Section 3.2, "WebDB on Solaris Install" on page 3-3
- Section 3.3, "Installing WebDB Packages on Solaris" on page 3-7
- Section 3.4, "Installing WebDB Listener on Solaris" on page 3-15
- Section 3.5, "Deinstalling WebDB on Solaris" on page 3-19

3.1 Prerequisites

Before you install WebDB on Solaris:

- Review the Release Notes that are provided on your product CD.
- You must have the SYS user password on your Oracle database.
- The database where you plan to install WebDB must be up and running.
- You must install WebDB 2.2 into a new Oracle Home. The installation program allows you to create a new Oracle Home during the installation process.
- You must add a TNS names alias that points to the database where you are installing WebDB 2.2. You add this alias to the `tnsnames.ora` file. This file can be located anywhere on the machine where you are installing the WebDB Listener.

  To create a TNS names alias, see "Configuring Variables and General Configuration" on page 6-1.
- You must set the TNS_ADMIN environment variable to point to the location of `tnsnames.ora` file.

  In the C shell, for example, you could type the following at a command line prompt:

  ```
  setenv TNS_ADMIN path
  ```

  where:

  path is the path to the `tnsnames.ora` file.

  Note This command differs depending on the shell.
- You must set the LD_LIBRARY_PATH environment variable to $ORACLE_HOME/lib.
- If you are installing WebDB 2.2 into the Oracle 7.3.4 database, you will be asked to specify the Oracle Home for the database.
- You must check the `MAX_ENABLED_ROLES` parameter in your INIT.ORA file to ensure it is set to at least 25.
- You should have tablespaces available with sizes of at least 25-30 MB each. These tablespaces will be used as Temporary and Default tablespaces by the schema in which you install WebDB.

  For each Web site you create with WebDB, you should have a tablespace of at least 10 MB.

- You must set your terminal (using the `set TERM` command) to one of these types:

  3151 386 386s 386u 386x

  ansi avx3

  dec dgd2 dgd4

  hft hftc hp iris ncd

  sun sun5 tandm

  vt100 vt220

  wy150 wy50

  xsun xsun5

3.2 WebDB on Solaris Install

On Solaris, you can choose to install all Oracle WebDB product components at the same time or install components separately. This section covers installing the entire Oracle WebDB product. If you want to install components separately, refer to the appropriate section:

- Section 3.3, "Installing WebDB Packages on Solaris"
- Section 3.4, "Installing WebDB Listener on Solaris"

The install program allows you to install the following WebDB software components:

Software Component	Notes
WebDB 2.2	The PL/SQL Web Toolkit version 4.0.8, Required Support Files version 8.0.5.1, SQL*Loader, and SQL*Plus are automatically installed with WebDB 2.2.
WebDB Listener 2.2	Allows you to use your Web browser to access the database.

To install all Oracle WebDB components on Solaris:

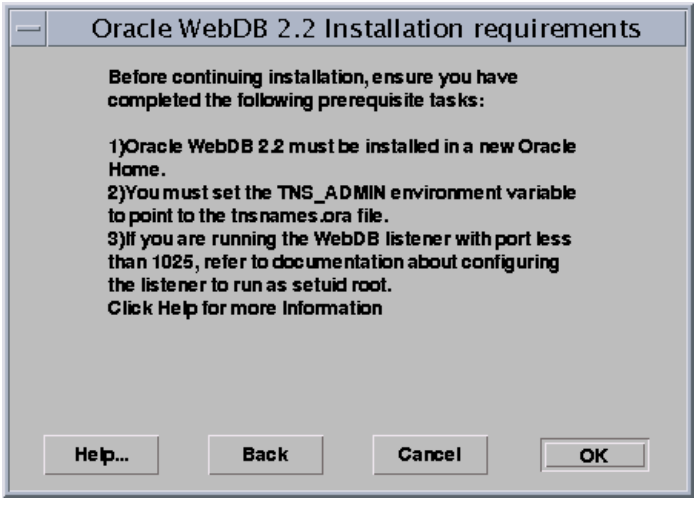
1. Insert the CD labeled WebDB.
2. Navigate to the /orainst/ directory.
3. Type the following command:

   ```
   orainst /m
   ```

4. You may see a message asking you if you want to update the oratab file. The oratab file stores information about Oracle product instances on your machine. If you want to update the file, set the ORATAB_FAIL environment variable to true. For more information, click **Help.**

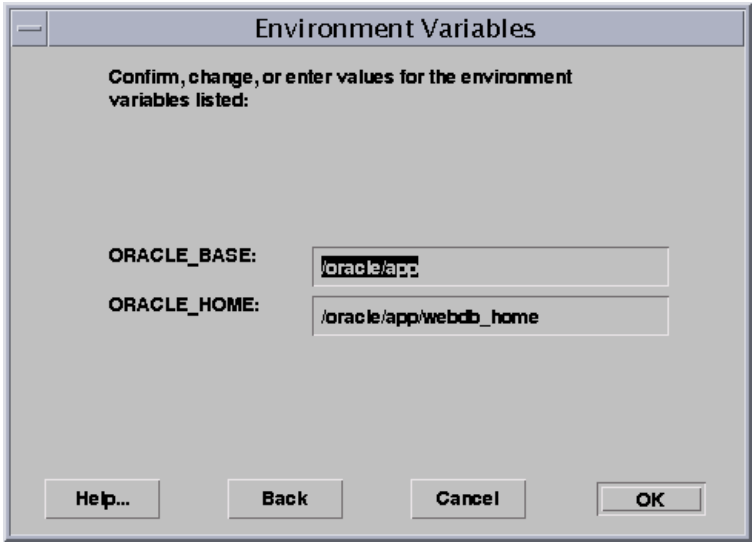
   Click **OK** to continue installation without updating the oratab file.

5. In the next window, you must confirm that you have completed the prerequisite tasks described in "Installing WebDB 2.2 on Solaris" on page 3-2.



6. Click **OK** if you have completed these requirements. Click **Cancel** to exit the installation program if you have not.

7. In the next window, set paths for the ORACLE_BASE and ORACLE_HOME environment variables.



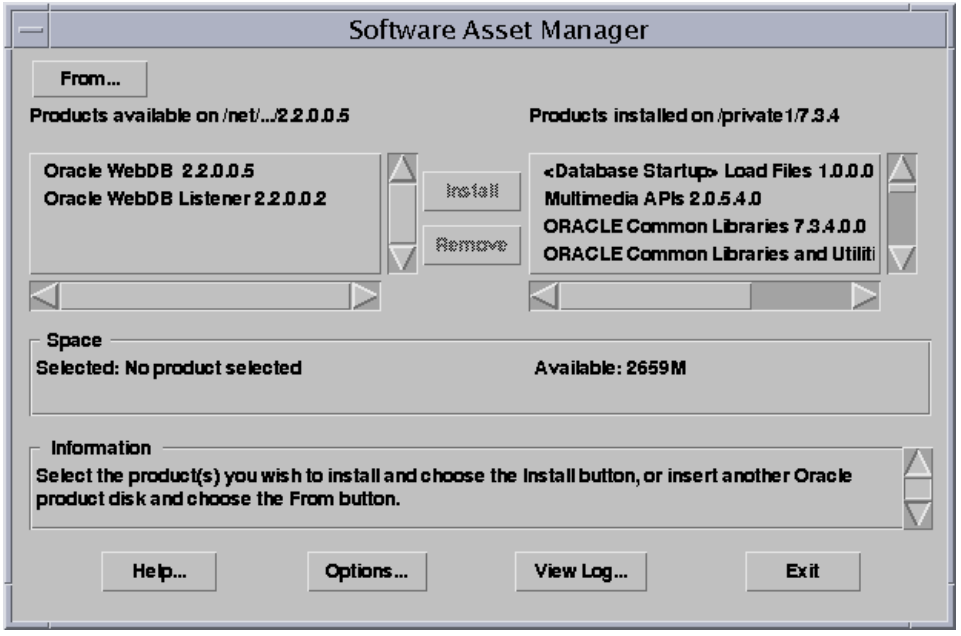
- **ORACLE_BASE** is the directory where you install Oracle products. A product directory (/ORACLE_BASE/product) and a configuration directory (/ORACLE_BASE/admin) are located under ORACLE_BASE. The product directory contains the ORACLE_HOME and all product files.
- **ORACLE_HOME** is the directory where WebDB product files will be installed.

IMPORTANT: You **must** install WebDB in a new Oracle Home that is different from the Oracle Home for any other Oracle products that are currently installed.

To create a new Oracle Home, type the path to the new home in the ORACLE_HOME field. The Oracle Home must be in a directory under the Oracle Base. The installation program automatically creates the new home and all associated files, and provides the required permissions in the location specified by this variable.

For example, if the ORACLE_BASE is /oracle/app, you could create a new Oracle Home by typing /oracle/app/webdb_home.

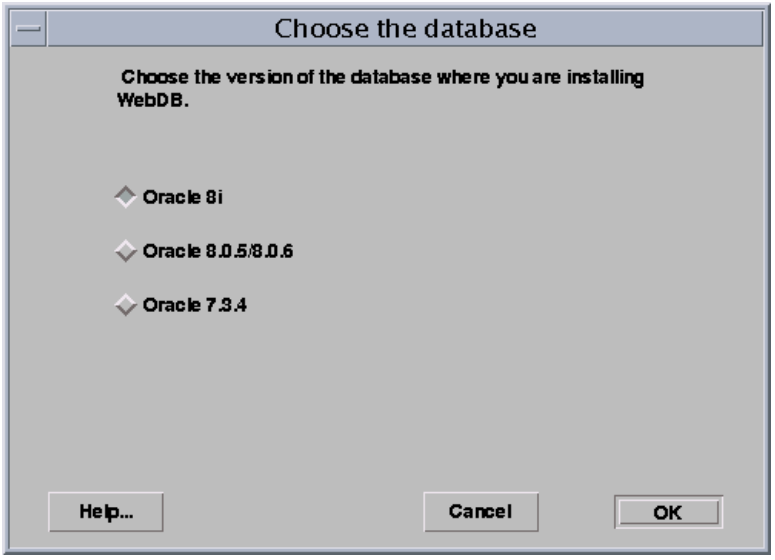
8. The Software Asset Manager window displays.
   - **Products available** lists the WebDB software components you can install.
   - **Products installed** lists the Oracle Software already installed on your machine. Since you are installing WebDB in a new Oracle Home, this list should not have any products listed.
9. Select (highlight) one or more WebDB software components to install, then click **Install.** You can install both products at the same time by highlighting them both.



3.3 Installing WebDB Packages on Solaris

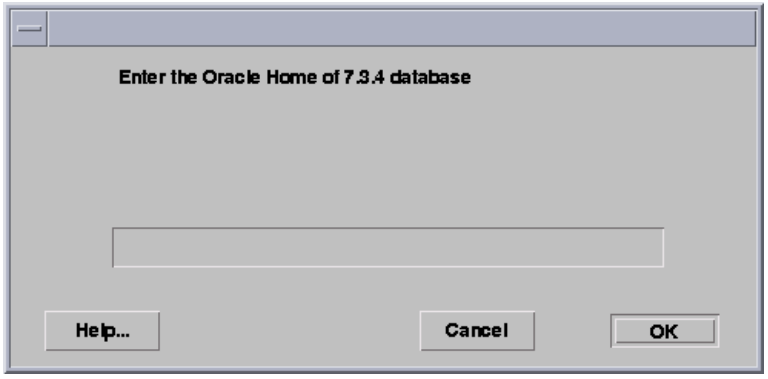
This section covers the steps required for installing the Oracle WebDB packages. If you want to install both the packages and the WebDB Listener, see Section 3.2, "WebDB on Solaris Install" on page 3-3.

1. If you chose **Oracle WebDB** in the Software Asset Manager (see Step 9 on page 3-6), you must specify the database where you are installing WebDB.

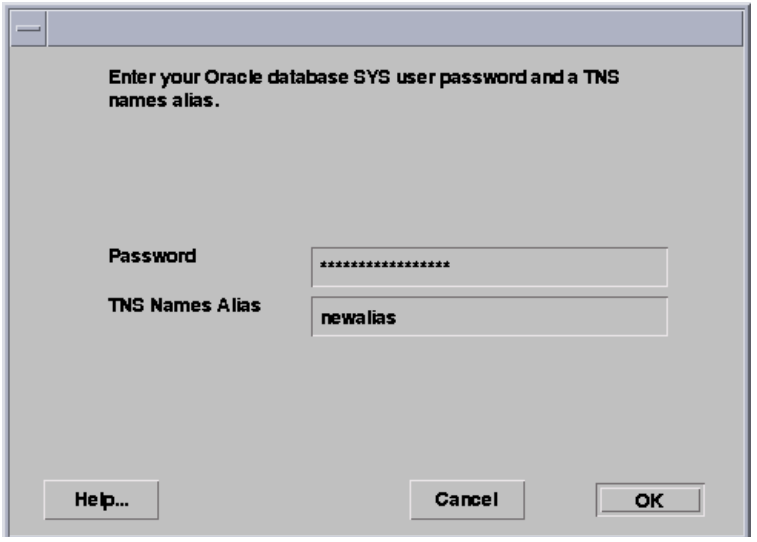


- Click **Oracle 8*i*** if you are installing WebDB into a local or remote version of the Oracle8*i* database. Go to Step 3.
- Click **Oracle 8.0.5** or **8.0.6** if you are installing WebDB into a local or remote version of the Oracle database. Go to Step 3.
- Click **Oracle 7.3.4** if you are installing WebDB into a local version of the Oracle 7.3.4 database.

2. Click **OK**. If you selected Oracle 7.3.4 in the previous window, specify the Oracle Home where the Oracle 7.3.4 database is installed, and click **OK**.



3. In the next window, enter the SYS user password that you use to log on to the Oracle database where you are installing WebDB.



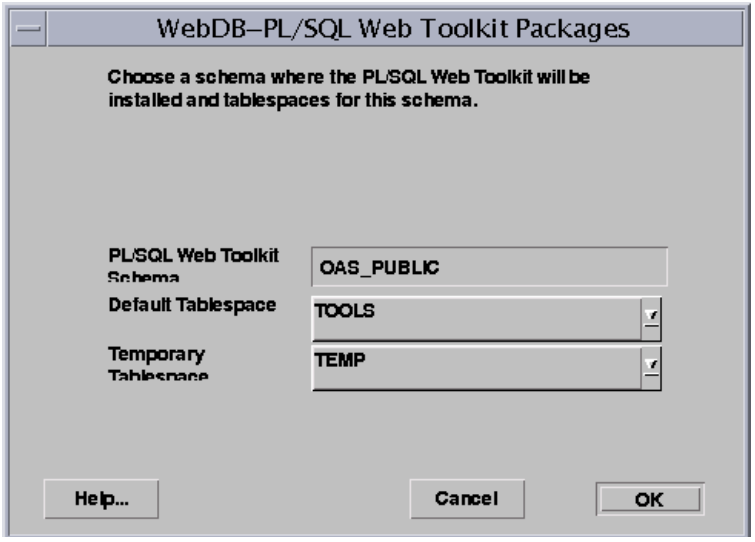
- **Password** is the SYS user password that you use to log on to the Oracle database where you are installing WebDB.
- **TNS Names Alias** is a connect string defined for the database where you are installing WebDB.

Note This is the TNS names alias that you added to the `tnsnames.ora` file to fulfill one of the installation prerequisites. For more information, see the installation prerequisites under "Installing WebDB 2.2 on Solaris" on page 3-1.

See "Creating a TNS Names Alias" on page 6-3 for more information.

4. Click **OK.** If the installation program detects a version of the PL/SQL Web Toolkit in the database, you must delete them and install the 4.0.8 version.
   - Choose **Proceed, delete the previously existing copies and install the new ones** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0.8 version instead.

     Note Version 4.0.8 of the PL/SQL Web Toolkit must be installed in order to install WebDB.
   - Choose **Proceed, I already have version 4.0.8 installed** if a 4.0.8 version of the PL/SQL Toolkit already exists in the database.
5. Click **OK**. In the next window, specify a schema where the PL/SQL Toolkit will be installed.



- **PL/SQL Web Toolkit Schema** is the name of the database schema where the PL/SQL Web Toolkit will be installed.
- The **Default Tablespace** will be used to store any database objects or components created by the PL/SQLWeb Toolkit user.

  The install program attempts to choose the best tablespace to use for WebDB. If you don't have one of the following default tablespaces in your database, the install program uses the SYSTEM tablespace:

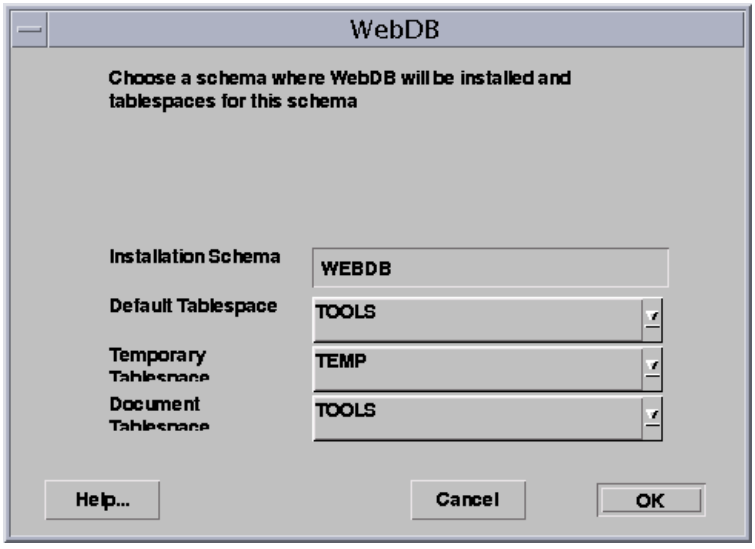
  TOOLS
  USER_DATA
  USER
  USERS
  USR_DATA
  USERDATA

- The **Temporary Tablespace** will be used for creation of temporary table segments for operations performed by the PL/SQL Web Toolkit schema such as sorting table rows.

  If you don't have one of the following temporary tablespaces in your database, the install will create temporary storage in the SYSTEM tablespace:

  TEMP_DATA
  TEMPORARY_DATA
  TEMP
  TEMPORARY

6. Click **OK**. In the next installation window, specify a schema where WebDB 2.2 will be installed.



- The **Installation Schema** is the database schema where WebDB will be installed. You must specify a schema that does not already exist. The installation program will automatically create the new schema for you.

  You use this schema name to log on to WebDB for the first time.

- The **Default Tablespace** will be used to store any database objects or components created by the WebDB user.

  The install program attempts to choose the best tablespace to use for WebDB. If you don't have one of the following default tablespaces in your database, the install program uses the SYSTEM tablespace:

  TOOLS
  USER_DATA
  USER
  USERS
  USR_DATA
  USERDATA

- The **Temporary Tablespace** will be used for creation of temporary table segments for operations performed by the WebDB user such as sorting table rows.

If you don't have one of the following temporary tablespaces in your database, the install will create temporary storage in the SYSTEM tablespace:

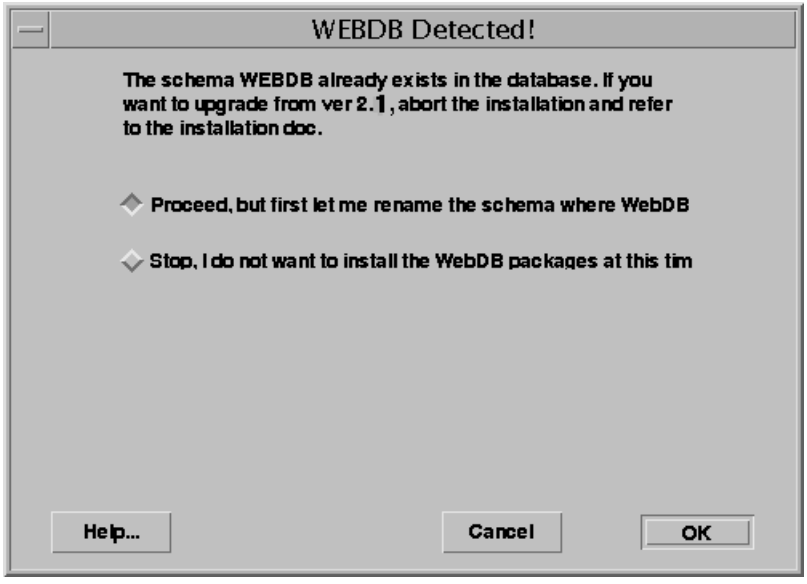
TEMP_DATA
TEMPORARY_DATA
TEMP
TEMPORARY

- The **Document Tablespace** will be used to store any items uploaded to a WebDB Web site. These item types can include files, images, folders, and stored procedures.

  Note The Document Tablespace will gradually fill as end users add items to WebDB Web sites. You should choose a tablespace large enough to accommodate these additions.

  You can choose the same Default, Temporary, or Document tablespace. For example, you can choose USER_DATA as the Default Tablespace and the Document Tablespace.

7. Click **OK**. If the **Installation Schema** you specified in the previous step already exists, you must specify a new schema in which to install WebDB 2.2.



- Choose **Proceed, but first let me rename the schema where WebDB 2.2 will be installed** to install WebDB 2.2 into a new schema. Click **OK** to return to the previous page where you can specify a different **Installation Schema**.
- Choose **Stop, I do not want to install the WebDB packages at this time**, then click **OK** if you don't want to install WebDB into a schema other than WebDB. Choosing this option stops installation.

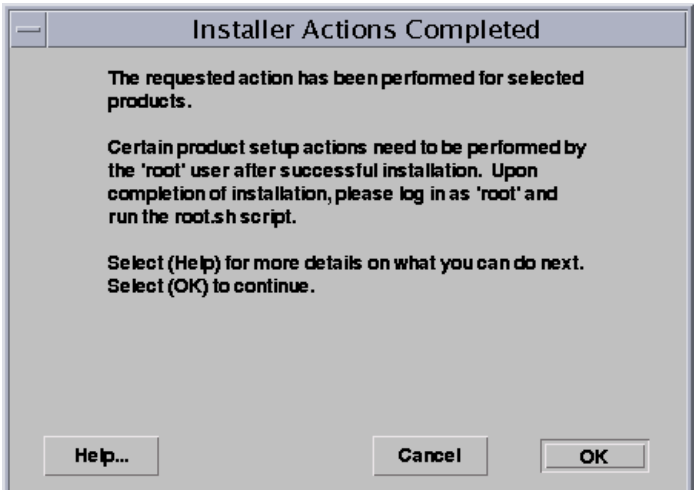
8. After you choose a valid **Installation Schema**, a message displays the user id and password that you will use to log on to WebDB after it is installed.
9. Click **OK.** In the next window, choose which language or languages to install in addition to the default, English.

   You can choose multiple languages. After installation, end users can select which of these languages will be used to display WebDB.

10. Click **OK t**o start installation. Press Ctrl + C to cancel installation.

> **Note:** Please be patient, as this operation may take awhile to complete.

11. When installation completes, a success message displays. Make a note of the user name and password in the message.
12. Click **OK**. The following message asks you to run the root.sh script as a root administrative user after you exit the installation program.



13. Click **OK**.
14. Check the log file for errors that may have occurred during installation; for example, PL/SQL compile errors. The log file is located in

    `oracle_home/orainst/wdb_install_packages.log`

    where **oracle_home** is the Oracle Home where you installed WebDB.

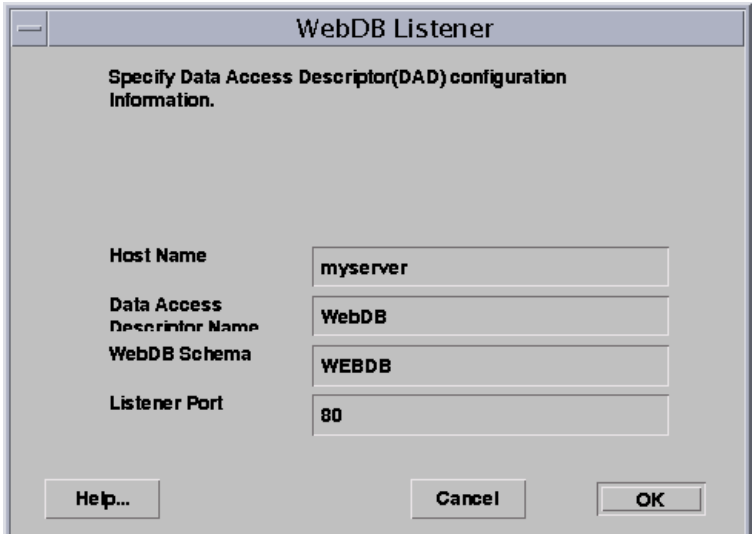
    Note: If connection to the database fails, you may need to edit the connect_string parameter in the wdbsvr.app file to point to the appropriate database where you have installed WebDB. Then, you will need to stop and restart WebDB.

15. See "Troubleshooting" on page 9-1 for more information.

3.4 Installing WebDB Listener on Solaris

This section covers the steps required for installing the Oracle WebDB Listener. If you want to install both the Listener and the WebDB packages, see Section 3.2, "WebDB on Solaris Install" on page 3-3.

1. If you choose to install the **WebDB Listener** in the Software Asset Manager (see Step 9 on page 3-6), you are prompted for Listener configuration information.



- The **Host Name** is the name of the machine on which the WebDB Listener will be installed. You can obtain the host name by typing **hostname** at a command line prompt.
- The **Data Access Descriptor Name** is a virtual directory that will be used in WebDB URLs. In the following URL:

  `http://myserver:2000/webdb`

  myserver is the Host Name

  2000 is the Listener Port Number

  w*ebdb* is the Data Access Descriptor Name
- The **WebDB Schema** is the name of the database schema in which WebDB is installed.

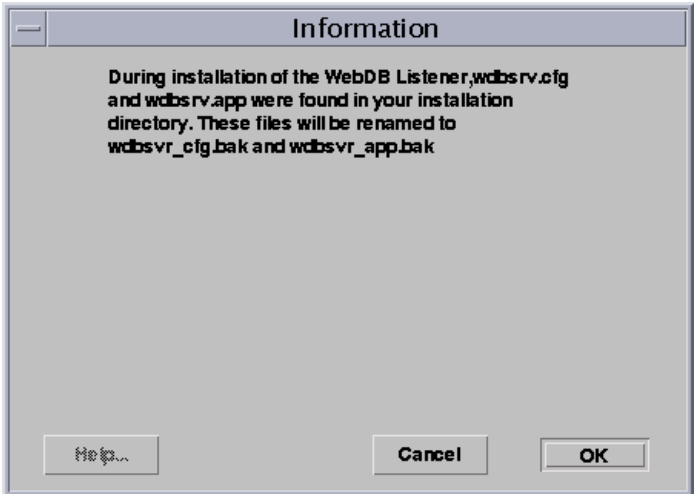
- The **Listener Port** will be used by the WebDB Listener to transmit data between the database and Web browser.

  The default port number is 80. Choose another port number if 80 is being used by another application.

  Important: You must have Root administrative privileges in order to run the WebDB Listener on a privileged port (less than 1025). You can also run the Listener as setuid root. See "Running the WebDB Listener as setuid root" on page 3-18.

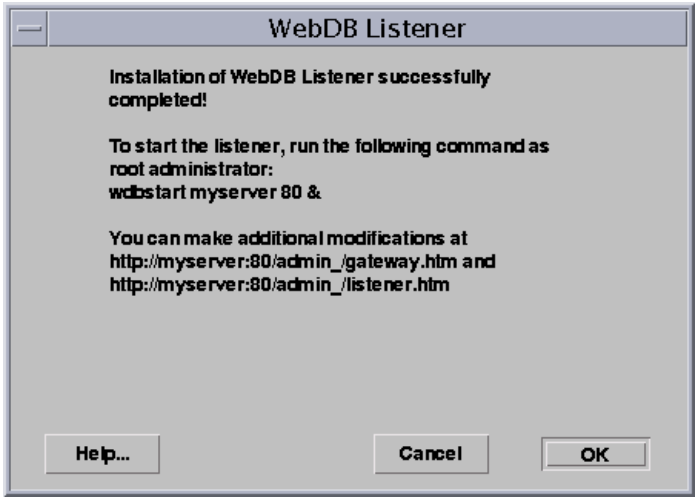
  ---

2. Click **OK.** Installation of the WebDB Listener begins. During installation, you may be asked if you want to back up the `wdbsvr_cfg` and `wdbsvr_app` files, if they already exist. These files are used to configure the Listener. For more information, see "Configuring Variables and General Configuration" on page 5-1.



3. Click **OK** to back up the files.

4. A success message displays when installation of the Listener completes.



The message displays:

- A command for starting the WebDB Listener manually.
- Two URLs to navigate to pages for adjusting the WebDB Listener settings. For more information, see "Configuring the WebDB Listener and PL/SQL Gateway" on page 5-1.

Make a note of the URLs shown in the message.

5. Click **OK**.
6. In the Data Access Descriptor for WebDB, ensure that there is a **Connect String** (TNS names alias) specified for the database where WebDB is installed.

Notes:

- If connection to the database fails, you may need to edit the `connect_string` parameter in the WebDB gateway settings file, `wdbsvr.app`, file to point to the appropriate database where you have installed WebDB. Then, you will need to stop and restart WebDB.
- If the WebDB Listener fails to start, you may need to set the WV_GATEWAY_CFG environment variable to point to the WebDB Gateway configuration file. See "Environment Variable Check List" on page 6-2.

3.4.1 Running the WebDB Listener as setuid root

If you specified a privileged port for the WebDB Listener (less than 1025) when installing WebDB 2.2 on Solaris, you must run the Listener as a root administrative user, or as setuid root.

Running the Listener as setuid root allows you to run the Listener on a privileged port while logged on to Solaris as the Oracle user.

To set up your environment to run as setuid root:

1. Create symbolic links to all the libs in `Oracle_Home/lib` (where Oracle Home is the Oracle Home where you installed WebDB 2.2) from `/usr/lib`.
2. Log on to Solaris as the root user.
3. From the command line, type the following commands and press the Enter key:

```
chown root Oracle Home/bin/wdblsnr

chmod +s Oracle Home/bin/wdblsnr
```

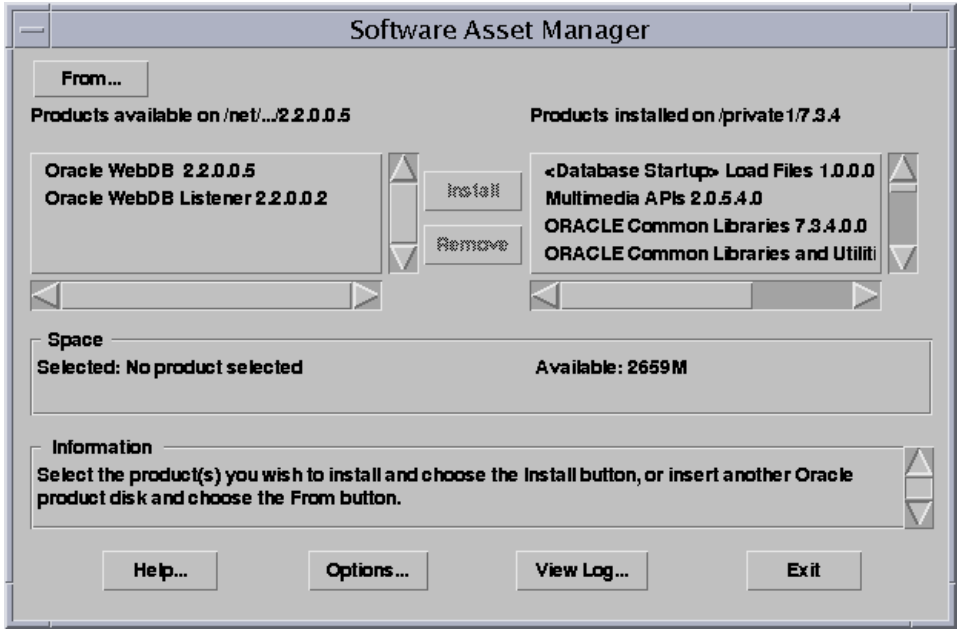
3.5 Deinstalling WebDB on Solaris

When removing any WebDB components, Oracle recommends that you use the installation program since removing a component any other way may not update the installer's inventory file. Thus, if you try to install WebDB components on a subsequent install and the component is reflected in the inventory file, the component may not install and you may get a partial installation.

To deinstall WebDB 2.2 or other software components such as:

- WebDB Listener 2.2
- PL / SQL Web Toolkit 4.0.8
- Required Support Files 8.0.5.1
- SQL*Loader 8.0.5
- SQL*Plus 8.0.5

1. Follow Steps 1-8 beginning on page 3-4.
2. Click **OK**. In the next screen, select the product or products you want to deinstall in the **Products installed** list on the right side of the window.



3. Click **Remove**.
4. The contents of the next window are different depending on which product you are deinstalling. Follow the instructions in the next window and any after that until you deinstall the selected product(s).

4

Oracle WebDB Migration

This chapter contains the following sections:

- Section 4.1, "Migrating from Oracle WebDB 2.1 to 2.2" on page 4-2
- Section 4.2, "Migrating WebDB 2.1 Sites to Version 2.2" on page 4-5
- Section 4.3, "Dropping a WebDB Site" on page 4-7
- Section 4.4, "Dropping Users Who Create Sites"

4.1 Migrating from Oracle WebDB 2.1 to 2.2

Oracle WebDB provides upgrade scripts that allow you to migrate from Oracle WebDB version 2.1 to Oracle WebDB 2.2.

> **IMPORTANT:** Before performing a WebDB migration, ensure that you have your ORACLE_HOME environment variable configured to point to your Oracle database.

4.1.1 Upgrading Oracle Web Application (OWA) from Version 4.0.7 to 4.0.8

Before performing a WebDB or site migration, you *must* upgrade your Oracle Web Application (OWA) from version 4.0.7 to 4.0.8.

Complete the following steps to do this:

1. Insert your product Oracle WebDB 2.2 CD and navigate to the `2.2.0.0.5\owa40` directory.
2. Start SQL*Plus and log on as the SYS user with the appropriate password.
3. Execute `owaload.sql` using the following syntax:

   ```
   <userid> <tablespace> <temp_tablespace> <log_file> <userid_password>
   ```

   where

Parameter	Description
user id	The user logging onto OWA. Type `oas_public`.
tablespace	The name of the tablespace containing OWA.
temp_tablespace	The name of the temporary tablespace.
log_file	The full path for the location of the OWA log file.
userid_password	The password to log on as the `oas_public` user.

Once `owaload.sql` is run as directed, OWA is upgraded to version 4.0.8.

4.1.2 Running the WebDB Upgrade Script from Windows NT or Solaris

These scripts apply to the WebDB 2.1 product installed on your Windows NT or Solaris machine.

To migrate Oracle WebDB version 2.1 to version 2.2:

1. Ensure that you back up the contents of the schema in which you installed WebDB 2.1. You can do this by exporting the contents to a file using the export utility on Solaris or Windows NT.
2. Insert your product Oracle WebDB 2.2 CD and navigate to the `/upgrade/webdb/21-22` directory.
3. While in the `/upgrade/webdb/21-22` directory, execute the upgrade script with the appropriate command:

> **Note:** With the exception of the connect string (TNS names alias), all are required parameters when running the command.

Windows NT

```
upgrad22.cmd <sys_password> <user> <password> <db_o8> <connect_string>
<logfile>
```

Solaris

```
upgrad22.csh <sys_password> <user> <password> <db_o8> <connect_string>
<logfile>
```

where:

Parameter	Description
sys_password	The SYS user password for logging on to the Oracle database where you want to migrate WebDB 2.1 to WebDB 2.2.
user	The name of the Oracle installation schema that owns the WebDB objects you want to migrate.
password	The password for the WebDB installation schema you want to migrate.

Parameter	Description
db_o8	Specify TRUE if you are migrating WebDB from an Oracle8 database and FALSE for migrating to an Oracle 7 database. **Default:** TRUE
connect_string	*(to connect to a remote database only)* A connect string or TNS names alias for the remote database you are connecting to. If you are migrating WebDB to a local database, do *not* specify a connect string.

log_file	Name of the log file where you want to log information during the migration process.
	
	Log files are generated in the following locations:
	
	■ **Windows NT**
	`D:\<ORACLE_HOME>\ORAINST\log_file.log`
	
	■ **Solaris**
	`/<user1>/log_file.log`
	
	where user1 is the user's UNIX Home directory

4. Press the **Enter** key to run the upgrade script.

Note: Upgrading WebDB from one version to another will take several minutes.

4.2 Migrating WebDB 2.1 Sites to Version 2.2

WebDB 2.2 provides scripts that you can use to migrate the Site Building packages included in Oracle WebDB 2.1 to version 2.2.

You can run the scripts from the SQL*Plus command prompt.

Important:

- Before performing a site migration, you *must* complete the steps to upgrade Oracle Web Application (OWA) from version 4.0.7 to 4.0.8. See Section 4.1.1, "Upgrading Oracle Web Application (OWA) from Version 4.0.7 to 4.0.8" on page 4-2.
- Running the scripts from the Windows NT or Solaris prompt is not available.

4.2.1 Running the Site Migration Script from SQL*Plus

To run the migration scripts from the SQL*Plus prompt:

1. Insert your product Oracle WebDB 2.2 CD and navigate to the `/upgrade/sites/21-22` directory.
2. Log on to SQL*Plus as the SYS user and with the appropriate password.
3. Execute `upgrd220.sql` using the following syntax:

```
SQL> @upgrd220.sql [site schema] [site admin] [default tablespace]
[temporary tablespace] [site language] [site schema password@DB
connectstring]
[log file name]
```

where:

Parameter	Description
site schema	The WebDB Site Builder schema to upgrade.
site admin	The WebDB Site Builder administrator schema. **Default:** `[site schema]_admin`
default tablespace	Install webdb objects in this tablespace. **Default:** `USERS`

Parameter	Description
temporary tablespace	Use this tablespace for temporary objects. **Default:** TEMP
site language	The language installed for the site. **Default:** us
site schema password	The WebDB Site Builder schema password. **Default:** [site schema]
DB connectstring	The connect string (TNS names alias) for the remote database. If your database is local, the connect string is not required. **Default:** none
log file name	The filename for the migration script's log file.

4. Run the following commands from the SQL*Plus prompt:

```
sqlldr userid=<site_schema>/<password> control=wwvsbus.ctl log=<dir>wwvsbus.log
sqlldr userid=<site_schema>/<password> control=help.ctl log=<dir>help.log
sqlldr userid=<site_schema>/<password> control=helpctxs.ctl log=<dir>helpctxs.log
sqlldr userid=<site_schema>/<password> control=helprela.ctl log=<dir>helprela.log
sqlldr userid=<site_schema>/<password> control=helpindx.ctl log=<dir>helpindx.log
```

where <dir> is the directory where you want the log files to be created and <password> is the password for the site_schema.

Notes:

- Do *not* use your computer while the site migration process is in effect.
- Upgrading a WebDB site from one version to another can range from several minutes to about an hour depending on how much content is contained on your WebDB site.

Additional Information: If you want to import or export a WebDB site from one server to another, see the "Moving a WebDB site to a new server" topic in the "Creating and Managing Sites - Task Help." This topic is below the "Setting Up and Maintaining a WebDB Site" book node.

4.3 Dropping a WebDB Site

Upon installing a WebDB site, three database schemas are created. For example, if the schema name chosen for the new WebDB site is MYSITE, then the relevant schemas would be:

- MYSITE
- MYSITE_PUBLIC
- MYSITE_ADMIN

If you want to drop or delete a WebDB site from your database, you must delete these schemas and the data associated with them.

To drop WebDB sites, do the following in SQL*Plus:

1. Log on to SQL*Plus as the SYS user and with the appropriate password.
2. Enter the following command to display a list of users:

   ```
   select username from all_users;
   ```

3. In the list of users, search for the names of the WebDB sites you want to drop. For each <sitename>, you should have the following users:

   ```
   <sitename>
   <sitename>_public
   <sitename>_admin
   ```

4. Enter the following commands from the SQL*Plus prompt to drop all schemas for the site:

   ```
   drop user <sitename> cascade;
   drop user <sitename>_public cascade;
   drop user <sitename>_admin cascade;
   ```

> **Note:** Be patient, as this operation may take awhile, depending on the size of the WebDB site(s) that is being dropped.

5. Repeat Steps 3 and 4 for all the sites that you want to drop.

> **Note:** Make sure that you really want to drop a site or site users since you cannot recover once they have been dropped.

6. Your next step is to drop the URL link from the WebDB interface by performing these steps:
   a. Log on to SQL*Plus as the "webdb" user.
   b. Delete the schema by executing the following command:

      ```
      Delete from wwv_modules$ where schema = upper('<sitename>');
      ```

      Note: Do this for each WebDB site you have dropped above.
   c. Execute the command by typing:

      ```
      COMMIT;
      ```

      The URL to the WebDB site is dropped.

4.4 Dropping Users Who Create Sites

If you drop a user from the Oracle database, any WebDB site that was created by that user, will stop working. To resolve this:

1. Log on to SQL*Plus as the SYS user with the following command:

   ```
   sqlplus sys/<sys_password>
   ```

2. Execute the following command:

   ```
   grant execute on sys.dbms_sys_sql to <site_schema>
   ```

   where

   - `sys_password` is the SYS user password for the database.

- `site_schema` is the schema that owns the site.

You should now be able to access the WebDB site with an authenticated (valid) database username / password.

5

Configuring the WebDB Listener and PL/SQL Gateway

After you have installed Oracle WebDB, you may need to configure the WebDB Listener and PL/SQL Gateway settings to ensure optimal performance.

This chapter contains the following sections:

- Section 5.1, "Access From Within WebDB" on page 5-2
- Section 5.2, "Access from Outside WebDB" on page 5-2
- Section 5.3, "Starting and Stopping the WebDB Listener" on page 5-2
- Section 5.4, "Configuring Oracle WebDB Listener" on page 5-4
- Section 5.5, "Configuring Oracle WebDB PL/SQL Gateway" on page 5-5
- Section 5.6, "Using the WebDB Listener to Run Multiple Virtual Hosts" on page 5-6
- Section 5.7, "Accessing Static Files with the WebDB Listener" on page 5-7
- Section 5.8, "Running PL/SQL Applications Using the WebDB Listener" on page 5-9
- Section 5.9, "Manually Editing the Listener and Gateway Configuration Settings" on page 5-10

5.1 Access From Within WebDB

To configure the Listener or PL/SQL Gateway from within WebDB, click at the bottom of any WebDB page, then **Listener Settings**. A page displays fields for changing PL/SQL Gateway settings. To change Listener Settings, click the hypertext link **Change Listener Settings** at the top of the page.

Click the small help icon at the top of either page to display field-level help.

5.2 Access from Outside WebDB

To configure the Listener from outside WebDB, type the following URL into your Web browser's location or address field:

```
http://servername:port/admin_/listener.htm
```

To configure the PL/SQL Gateway from outside WebDB, type the following URL into your Web browser's location or address field:

```
http://servername:port/admin_/gateway.htm
```

where:

- **servername** is the name of the server on which you installed WebDB.
- **port** is the port you specified during installation of WebDB.

5.3 Starting and Stopping the WebDB Listener

You can manually start and stop the WebDB Listener from a command line prompt. In fact, if you have multiple Listeners on a single machine, this is the only way to start or stop them individually.

5.3.1 Windows NT

To start or stop the WebDB Listener on Windows NT:

1. To avoid any conflict between multiple Listeners, you must first reset the WebDB Listener Service from "Automatic" startup to "Manual" from the Windows NT Control Panel Services.

2. To start or stop the WebDB Listener in Windows NT, execute the appropriate command:

```
wdblsnr -console host port start
wdblsnr -console host port stop
```

where:

host is the name of the server on which you installed WebDB.

port is the port you specified during installation of WebDB.

5.3.2 Solaris

To start or stop the WebDB Listener on Solaris, execute the appropriate command:

```
wdbstart host port start
wdbstart host port stop
```

where:

host is the name of the server on which you installed WebDB.

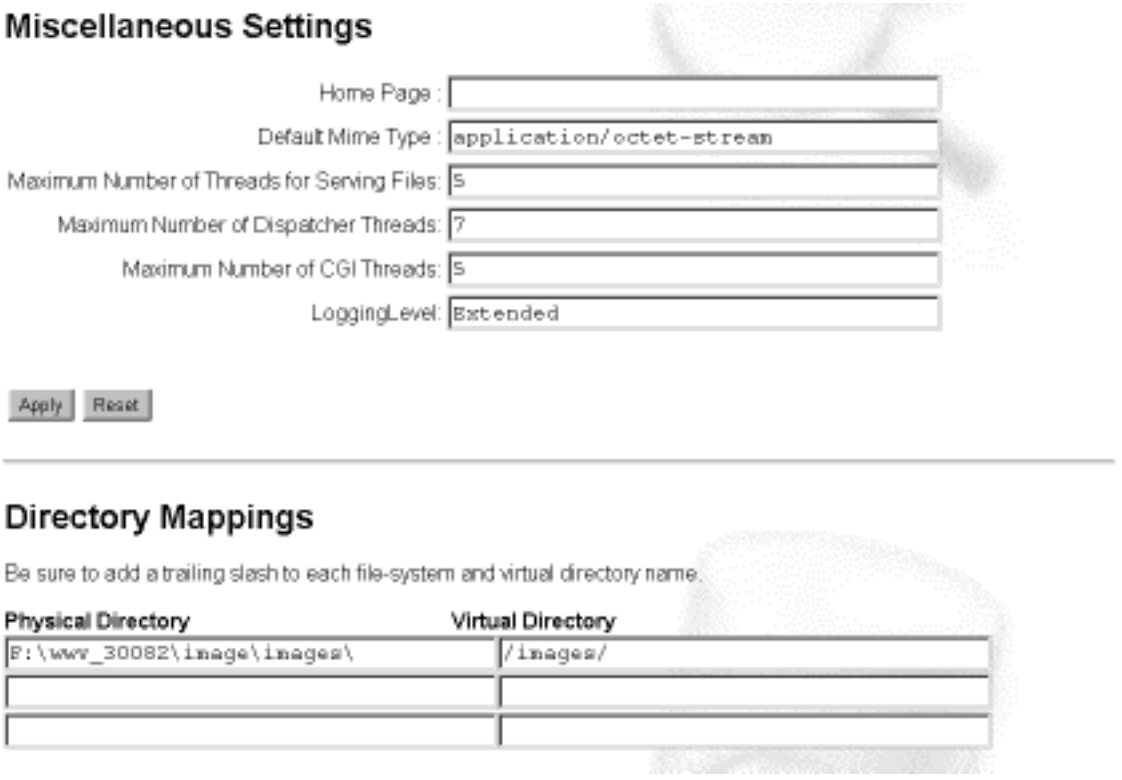
port is the port you specified during installation of WebDB.

Additional Information: If you encounter a problem starting the WebDB Listener, see Chapter 9, "Troubleshooting" for help.

5.4 Configuring Oracle WebDB Listener

Listener settings that you can configure include directory mappings, MIME types, and the URL for the WebDB Home page. The WebDB Listener configuration file, `wdbsvr.cfg`, is located in the `<ORACLE_HOME>\listener\cfg` directory.

The following is the Oracle WebDB Listener Settings page:



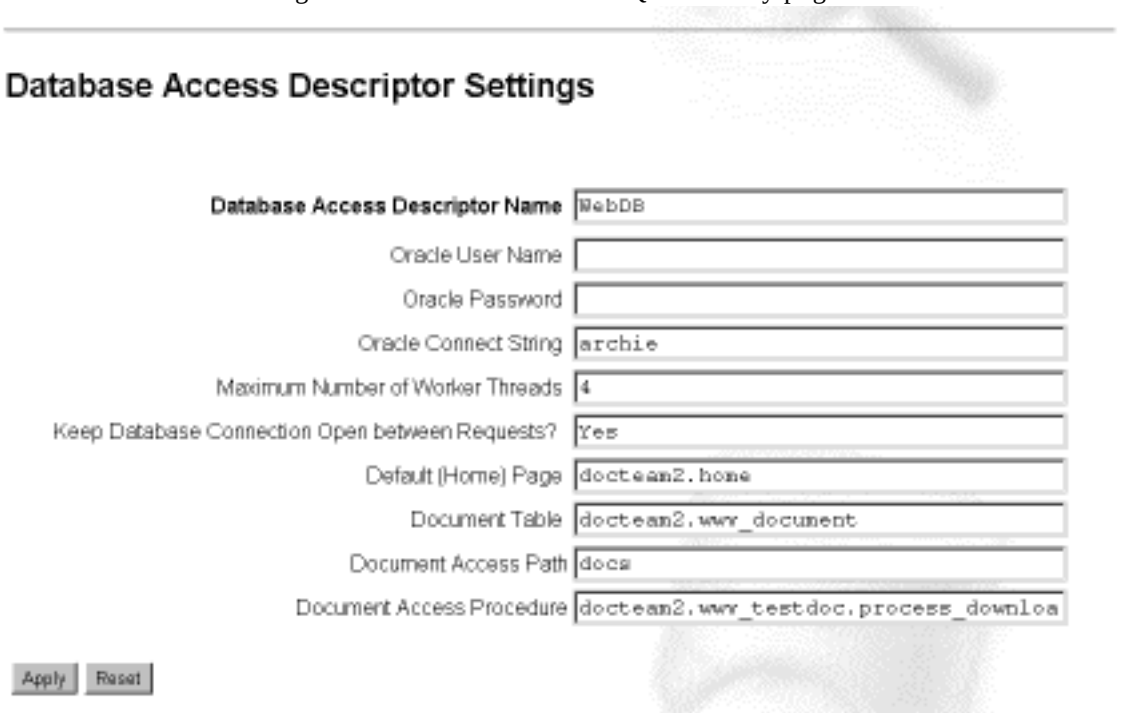
Tip: To display a specific HTML page after users log on to WebDB, enter a URL in the Home Page field. This setting overrides the DAD's Default (Home) page setting on the Oracle PL/SQL Gateway Settings page.

5.5 Configuring Oracle WebDB PL/SQL Gateway

The WebDB PL/SQL Gateway settings that you can configure include the Database Access Descriptor (DAD) settings for each instance you installed in the database and for each Web site you created using Oracle WebDB, including sites for public access.

The WebDB PL/SQL Gateway configuration file, `wdbsvr.app`, contains these settings.

The following is the Oracle WebDB PL/SQL Gateway page:



To get information for the current page, click the small Help icon on that page.

Note: For security reasons, you may want to restrict access to the Oracle WebDB PL/SQL Gateway Settings page to authorized users. To do this edit the wdbsvr.app configuration file. See the administrators parameter section in "Editing WebDB Gateway Settings (wdbsvr.app)" on page 5-11 for details.

5.6 Using the WebDB Listener to Run Multiple Virtual Hosts

You can set up WebDB to run multiple virtual hosts or instances of the WebDB Listener on the same machine. The best way to do this is to run the WebDB Listener from the command line.

The following example lists two commands that start two instances of the Listener, one bound to `www.oracle.com` and the other to `web.oracle.com`.

Windows NT

```
start wdblsnr -console www.oracle.com 80 start
start wdblsnr -console web.oracle.com 80 start
```

Solaris

```
wbstart www.oracle.com 80 start
wbstart web.oracle.com 80 start
```

The two instances will share the same configuration file because they are run with the `WV_GATEWAY_CFG` environment variable set to the same value.

On Windows NT, the WebDB Listener is controlled from the Services control panel by setting the `WV_GATEWAY_CFG` environment variable. However, Windows NT allows you to configure only one instance of the WebDB Listener from the Services Control Panel.

You can resolve this problem by writing a script that will easily set the correct environment variable and read the appropriate configuration file before starting an instance of the Listener. Create a script for each virtual host so that its associated Listener will read the correct configuration file.

On Windows NT, the contents of a simple batch file which starts two instances of the Listener might look like this:

```
SET WV_GATEWAY_CFG=D:\orant\listener\cfg\wdbsvr.app
start wdblsnr -console www.oracle.com 80 start
SET WV_GATEWAY_CFG=D:\orant\listener\cfg\wdbsvr2.app
start wdblsnr -console web.oracle.com 80 start
```

You can have this batch file run at startup on Windows NT by editing the Windows NT registry with regedit in the following way:

```
\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run
```

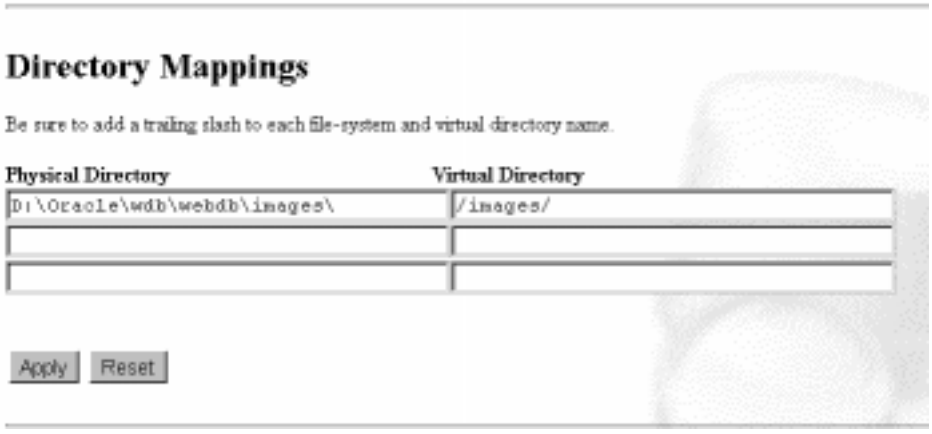
5.7 Accessing Static Files with the WebDB Listener

The WebDB Listener can access static files from your local file system. This is useful if you want to launch another WebDB application from this static HTML page. The Listener's virtual directory mappings must be configured to map URLs to your local file system.

The settings for these directory mappings can be configured from the Oracle WebDB Listener Settings page at:

`http://yourhostname:port/admin_/listener.htm or from within WebDB`

The following is the configuration panel for the WebDB Listener directory mappings:



To access static files with the WebDB Listener:

1. Choose a physical directory on your file system and copy the files you wish to access on the Web into that directory.
2. In the **Physical Directory** field, type the name of that directory.
3. In the corresponding **Virtual Directory** field, type a short name (virtual directory) to associate to the physical directory and click **Apply**.

   For example, if the URL is `http://myhost/public/test.html`, the WebDB Listener will access `test.html` from the `D:\Public` directory on your local file system.

Note: Be sure to add a trailing slash to each file-system and virtual directory name.

4. The WebDB Listener can access any type of file as long as your Web browser recognizes that file via the Listener's MIME type settings. The Listener includes default MIME types for most of the major file types. To configure new MIME types, type the string for the MIME type in the left column and the associated file extension in the right column as shown below. Once configured, the Listener sends the browser the correct MIME type and handles the file accordingly.

MIME Types

Mime Type	File Extensions
audio/x-wav	wav
text/html	htm html
image/jpeg	jpg jpeg JPG
image/gif	gif GIF
text/plain	txt ksh lst
application/pdf	pdf
application/powerpoint	ppt PPT
application/msword	doc dot DOC DOT
application/x-tar	tar TAR
application/zip	zip
text/edi	edi
application/excel	xls XLS
x-world/x-vrml	vrml
application/x-gzip	gz z
application/x-director	dcr
application/oracle-magic	yyy
application/oracle-video	mpi mpg osf

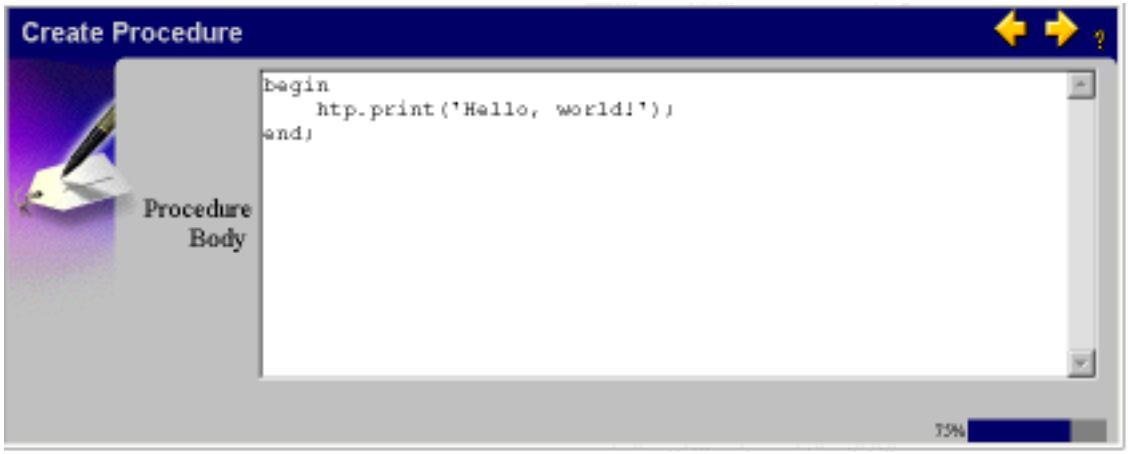
To verify that the directory mappings are recognized by the WebDB Listener, you can test them from your browser by typing:

```
http://<myserver>:<port>/<directory>/<htmlfilename>
```

5.8 Running PL/SQL Applications Using the WebDB Listener

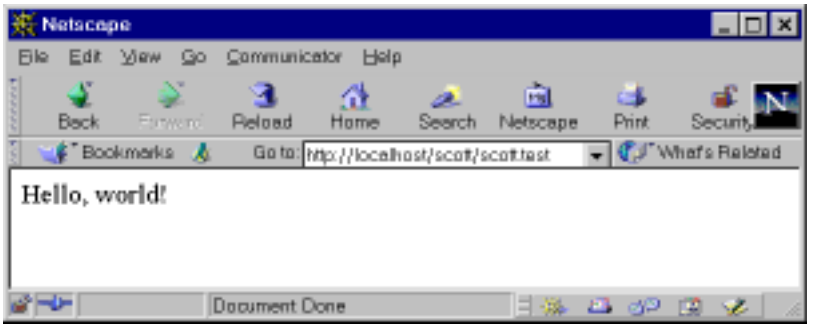
The WebDB Listener is designed to run the PL/SQL packages included in WebDB and is therefore also well-suited to running other types of PL/SQL applications over the Web.

For example, you can create a new procedure using the Oracle WebDB Procedure Object Builder, storing it in the SCOTT schema and naming it "test". The following PL/SQL code creates the procedure.



Because the procedure is owned by SCOTT, you can configure the Listener to run PL/SQL Web applications from the SCOTT schema. This is done by setting the **Database Access Descriptor Name** to "SCOTT" on the Oracle WebDB PL/SQL Gateway Settings page (see screen on page 5-5).

Once the changes are applied, pointing your Web browser's location or address field to `http://yourhostname:port/scott/scott.test` displays the following page.



5.9 Manually Editing the Listener and Gateway Configuration Settings

Note: This section is for advanced users only as manually editing configuration files without proper knowledge or guidance may cause adverse results to the WebDB Listener.

If you want greater control of the WebDB Listener and gateway settings, you can edit the WebDB Listener and PL/SQL Gateway configuration files in a text editor instead of using the WebDB Listener administration's user interface. All Listener and PL/SQL Gateway settings that you can specify within WebDB can be edited in the `wdbsvr.app` and `wdbsvr.cfg` files.

.

File	Windows NT Location	UNIX Location
Oracle PL/SQL Gateway `wdbsvr.app`	`<ORACLE_HOME>\listener\cfg`	`<ORACLE_HOME>/webdb/listener/cfg`
Oracle WebDB Listener `wdbsvr.cfg`	`<ORACLE_HOME>\listener\cfg`	`<ORACLE_HOME>/webdb/listener/cfg`

Notes:

- To enable a parameter in the configuration file, make sure to remove the semi-colon (;) at the beginning of the parameter name. The semi-colon "comments out" the parameter.
- These configuration files are organized into sections which are identified by brackets [ ].

5.9.1 Editing WebDB Gateway Settings (wdbsvr.app)

Use the information on the following table to help you configure the WebDB Listener settings appropriately. The table lists and describes the parameters contained in the `wdbsvr.app` file:

Parameter	Description
[WVGATEWAY]	Marks the start of the gateway section.
defaultDAD	Specify a path that points to the default DAD. If the end user types a WebDB URL without specifying the DAD name, the home page for the default DAD will be displayed. **Default =** WebDB
administrators	Allows you to specify those users who will have access to WebDB's administration pages (gateway.htm, listener.htm). By default, this is set to "all" which permits any user to access these pages. To enforce security on these pages, type a comma separated list of users (administrators). For example: `administrators = user1, user2, user3@webdb` Only the users who log on as user1, user2, and user3 with the correct password can access the gateway settings page on the webdb host (connect string). **Default =** `all`

Parameter	Description
adminPath	The virtual directory location containing the gateway files. For example, the end user can type the following to display the gateway page: `http://myhost/WebDB/admin_/gateway.htm?schema=WEBDB` where `/admin_` is the `adminPath` **Default =** `/admin_/`
debugModules	Used to generate complete logging information. This parameter is enabled only when a problem is encountered and logging information is required by an Oracle representative to help resolve the problem. **Default =** commented
[DAD_WebDB]	Marks the start of the first Database Access Descriptor (DAD) section. In this case, the DAD is named "WebDB." The WebDB's URL is based on this DAD name. You can change this name by typing a new name. **Default** = WebDB
connect_string	Type the tnsnames alias if you are using a remote database. Leave this parameter blank if the database is local. **Default** = blank
password	Refers to the Oracle database account password. The password is typically set at WebDB installation, but you can change it by typing a new password for this parameter. **Note:** There should always be an Oracle User Name and Password for PUBLIC Web site DADs. This enables public users to access the WebDB site without having to log on. **Default** = blank
username	Refers to the Oracle database account user name. The user name is typically set at WebDB installation or during creation of new WebDB sites. You can change it by typing a new name for this parameter. **Default** = WebDB
default_page	Refers to the WebDB default Home page. You can change it by typing a new name for this parameter. **Default =** `WEBDB.home`

Parameter	Description
document_table	(*For DADs related to the WebDB Site Builder features only.*) Type the name of the database table to be used for storing uploaded files. The default value for this parameter is based on the name of the schema in which you created the WebDB site. **Default =** `WEBDB.wwv_document`
document_path	(*For DADs related to the WebDB Site Builder features only.*) Type a path in the URL for the current installation that is used to indicate a document is being referenced. The default value for this parameter is based on the name of the schema in which you created the WebDB site. **Default =** docs
document_proc	(*For DADs related to the WebDB Site Builder features only.*) Type the procedure that will be used to upload and download documents. **Default** = based on the name of the schema in which you created the WebDB site. For example, WEBDB.wwv_testdoc.process_download
after_proc	To execute a particular stored procedure *after* execution of every other stored procedure. For example, `after_proc = webdb.show_footer` This stored procedure would display the footer *after* a stored procedure is executed. **Default** = commented (null)
before_proc	To execute a particular stored procedure *before* execution of every other stored procedure. For example, `before_proc = webdb.show_header` This stored procedure would display the header *before* a stored procedure is executed. **Default** = commented (null)
reuse	Allows you to choose whether, after processing one URL request, the database connection should be kept open to process future requests. In most configurations, specify Yes for maximum performance. **Default** = Yes

Parameter	Description
conmax	Type the number of simultaneous connections allowed to the database that will be used to service applications. **Tip** You'll need to adjust this number depending on your server, its capacity, and the number of connected users. As a rule of thumb, set this number at between 5 and 10 at a medium sized installation (approximately 200 users). **Default** = 4

Note: WebDB creates three DADs for each WebDB site: public, private, and administrator. Configure each DAD section in the file as required using the above table.

5.9.2 Editing WebDB Listener Settings (wdbsvr.cfg)

Use the information on the following table to help you configure the WebDB PL/SQL Gateway settings appropriately. The table lists and describes the parameters contained in the `wdbsvr.cfg` file:

Parameter	Description
[SERVER]	Marks the start of the Server section.
HomePage	Refers to the WebDB default Home page. You can change it by typing a new name for this parameter. **Note:** The setting for this parameter overrides the default DAD setting in the gateway configuration file, wdbsvr.app.
DefaultMimeType	Displays the MIME type that is used by the Listener when a MIME type for a given URL request can't be determined. **Default =** application/octet-stream

Parameter	Description
LoggingLevel	Displays how much logging information will be captured by logging files located in the Listener log directory. You can use this information for debugging purposes and for performance analysis. You may want to test the following Logging Level settings to determine how much logging information you want to capture: NONE, STANDARD, TEST, ETEST, EXTENDED, ERROR, DEBUG, EDEBUG **Default =** EXTENDED
MaxCGIThreads	Not used for WebDB CGI. This parameter is currently used by Oracle Reports. **Default =** 5
MaxFileThreads	Displays the number of threads that serve static files off the file system. As a rule of thumb, increasing the number of threads improves performance, although this is contingent on operating system limitations. **Default =** 5
MaxDispatcherThreads	Displays the number of threads used to dispatch HTTP requests. As a rule of thumb, increasing the number of threads improves performance, although this is contingent on operating system limitations. **Default =** 7
MaxQueueSize	Connection requests from clients are queued up to a maximum queue size. This parameter determines the maximum length of the queue for pending connections on the Listener socket. If a connection request arrives and the Listener queue is full, the client receives an error, "Connection Refused". **Default =** 64

Parameter	Description
ReceiveTimeOut	This parameter determines the number of seconds the Listener will wait to receive data from across the network before it signals a timeout. This parameter should be configured according to your network connection. If you have a really slow network connection, you may want to increase this parameter so that the Listener waits longer before timing out. For Example, to set the timeout to 2 minutes, add the following line `ReceiveTimeOut = 120` **Default** = 60 (seconds)
OnlyClient	This parameter can be used to restrict access to the WebDB Listener so that only a specific client can access it. This parameter can be set to a specific IP address and only a client having that specific IP address will have access to the Listener. For example, setting this value to the following: `OnlyClient = 144.25.84.254` will restrict access so that only a client with an IP address of 144.25.84.254 can access the Listener.
[DirMaps]	Marks the start of the directory mapping section. Is used to map virtual directories specified in your WebDB URL to physical directories on the filesystem.
[CGIDirMaps]	Marks the start of the CGI directory mapping section. Currently used with Oracle Reports and Oracle Forms.
[MIMETypes]	Marks the start of the MIME types section. Each line contains the type of file and the file extension(s) that WebDB recognizes. Default WebDB MIME Types are used when returning content to the browser as a result of a URL request.
audio/x-wav	wav
text/html	htm html
image/jpeg	jpg jpeg JPG
image/gif	gif GIF
text/plain	txt jsg 1st
application/pdf	pdf
application/powerpoint	ppt PPT

Parameter	Description
application/msword	doc dot DOC DOT
application/x-tar	tar TAR
application/zip	zip
text/edi	edi
application/excel	xls XLS
x-world/x-vrml	vrml
application/x-gzip	gz Z
application/x-director	dcr
application/oracle-magic	yyy
application/oracle-video	mpi mpg osf

Note: You can add additional MIME types to this list to support other file types that you plan to have on your database.

6

Configuring Variables and General Configuration

This chapter provides information about setting up your environment variables which is the last step to ensuring that Oracle WebDB is properly installed and operating successfully. Also discussed are general configuration issues.

The chapter contains the following sections:

- Section 6.1, "Environment Variable Check List" on page 6-2
- Section 6.2, "Creating a TNS Names Alias" on page 6-3
- Section 6.3, "Changing the Language for a WebDB Site" on page 6-5
- Section 6.4, "Date and Time Configuration" on page 6-7
- Section 6.5, "Viewing Arabic Characters" on page 6-7

6.1 Environment Variable Check List

Before starting the WebDB Listener, WebDB CGI executable, or the WebDB cartridge, you should ensure that the following environment variables are set correctly.

- WV_GATEWAY_CFG should point to the gateway configuration file, `wdbsvr.app`.

  Windows NT

  This value is set automatically during installation. To check it, click **Settings** on the Windows NT Start menu, then **Control Panel**, **System**, and finally the **Environment** tab on the System Properties dialog box. The system variable WV_GATEWAY_CFG should have the value:

  ```
  WV_GATEWAY_CFG=<ORACLE_HOME>\webdb\listener\cfg\wdbsvr.app
  ```

  Solaris

  The WV_GATEWAY_CFG variable is configured in a script file named wdbstart. The default value is:

  ```
  setenv WV_GATEWAY_CFG <ORACLE_HOME>/webdb/listener/cfg/wdbsvr.app
  ```

  On a single machine, multiple WebDB Listeners can be configured to run in different configurations by setting this parameter appropriately before starting the WebDB Listener.

  Additional information: see Chapter 5, "Configuring the WebDB Listener and PL/SQL Gateway" on page 5-1.

- LD_LIBRARY_PATH (Solaris only)

  This parameter is set to <ORACLE_HOME>/lib for the following script files:

  - `wdbstart` (for the WebDB Listener)
  - `wdbcgiw` (for WebDB CGI executable)

  where ORACLE_HOME is the location of your WebDB installation.

6.2 Creating a TNS Names Alias

You must create a TNS names alias if you plan to:

- Install WebDB 2.2 on Solaris
- Install WebDB on Windows NT in the Oracle8*i* (version 8.1.5) database
- Install the WebDB Listener in a different machine than WebDB

You can use Oracle Net8 Easy Configuration to set up a TNS names alias to your database. Net8 Easy Configuration is located on your product CD and can be installed using the Software Asset Manager (follow the steps for a Custom install on Windows NT or a Typical install on Solaris to display the Software Asset Manager).

In addition, you can manually set up a TNS names alias by following these steps:

1. Open the `tnsnames.ora` file in the Oracle Home where you have installed WebDB.
   - On Windows NT, the default location for the `tnsnames.ora` file is:

     `<ORACLE_HOME>\net80\admin`

   - On Solaris, the default location for the `tnsnames.ora` file is:

     `<ORACLE_HOME>/network/admin`

   Note: If you set up a TNS_ADMIN environment variable, its path points to the `tnsnames.ora` file containing the TNS names alias that WebDB uses.

2. Add a TNS names alias that points to your database.

   The following sample `tnsnames.ora` file contains a TNS names alias called USER1. The alias is to a non-8*i* database; for example, Oracle 7.3.4 or 8.0.5. The database is installed on the server Webdb_serv1.

```
# F:\ORACLEHOME\NETWORK\ADMIN\TNSNAMES.ORA Configuration
File:F:\OracleHome\network\admin\tnsnames.ora
# Generated by Oracle Net8 Assistant

EXTPROC_CONNECTION_DATA.US.ORACLE.COM =
  (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC0))
```

```
    )
    (CONNECT_DATA =
      (SID = PLSExtProc)
      (PRESENTATION = RO)
    )
  )

USER1 =
  (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = TCP)(PORT = 1521)(HOST = Webdb_serv1))
    )
    (CONNECT_DATA =
      (SID = ORCL)
    )
```

3. In your Web browser, go to:

   `http://servername:port/admin_/gateway.htm`

   where:

   - **servername** is the name of the server on which you installed WebDB.
   - **port** is the port you specified during installation of WebDB.

4. On the Change PL/SQL Gateway Settings page, scroll down to the **Oracle TNS names alias** field for the WebDB Data Access Descriptor (if you selected a typical install, the name of the DAD is WebDB). Enter the TNS names alias you added to the `tnsnames.ora` file in Step 2.

5. Click **Apply**.

6.3 Changing the Language for a WebDB Site

To make your WebDB site available in a language other than the one in which it was created:

1. Navigate to `support/sitenls` on your product CD or stage area.
2. Log on to SQL*Plus by typing:

   `<site_schema>/<site_schema_password>`

   where

   `site_schema` is the schema that owns the site.

   `site_schema_password` is the password for the schema.
3. These scripts should be run after a WebDB site has been successfully installed. Type the following from the SQL*Plus prompt:

   `@initnls` (You need to execute this script just once)

   `@sitenls <lang>` (You need to execute this script for every language that you want the site to be available in)

   where <`lang`> is one of the following:

<lang>	Language
ar	Arabic
cs	Czech
d	German
dk	Danish
e	Spanish
el	Greek
esa	Latin American Spanish
f	French
sf	Finnish
hu	Hungarian
i	Italian
iw	Hebrew

<lang>	Language
ja	Japanese
ko	Korean
n	Norwegian
nl	Dutch
pl	Polish
pt	Portugese
ptb	Brazilian-Portugese
ro	Romanian
ru	Russian
s	Swedish
sk	Slovak
tr	Turkish
th	Thai
zhs	Chinese/China
zht	Chinese/Taiwan

Note: The English version of the site is available by default, even if you installed the WebDB site in another language.

6.4 Date and Time Configuration

To view your local date and time format, ensure that your NLS_lang settings are set to the appropriate language.

On Windows NT, you can choose your language from Regional Settings (located on the Control Panel), and use this language as the default local setting. Then, reboot your machine.

6.5 Viewing Arabic Characters

To view Arabic characters in your browser, WebDB requires a bidirectional plug-in. One plug-in that you can download is Sindbad, Version 4 which can be downloaded from

`http://www.sakhrsoft.com/lproducts/linter/standard.htm`.

After you install the plug-in, load the Arabic files you want to view into the WebDB system table. Add your language as Arabic[ar-AR] and set your encoding to user-defined. There is an option in Sindbad which allows bidirectional viewing of the characters.

7

Integrating *inter*Media Text in WebDB Site Builder

The chapter contains the following sections:

- Section 7.1, "Prerequisites" on page 7-2
- Section 7.2, "Setting Up Your Environment for interMedia Text" on page 7-3
- Section 7.3, "Defining DEFAULT_LEXER Values" on page 7-5
- Section 7.4, "Creating interMedia Text Indexes" on page 7-6
- Section 7.5, "Updating interMedia Text Indexes" on page 7-8
- Section 7.6, "Dropping interMedia Text Indexes" on page 7-8

7.1 Prerequisites

Oracle8*i* *inter*Media Text creates indexes that let users perform fast and accurate text searching, from traditional full-text search to document theme analysis.

The base for *inter*Media Text is Oracle's ConText Cartridge. For more information, see *"Oracle8i interMedia Text Migration"* and *"Oracle8i interMedia Text Reference."*

Before you integrate *inter*Media Text into WebDB Site Builder, you must do the following:

- Install and configure the Oracle8*i* database to use *inter*Media Text. This is done using the Database Configuration Assistant. See the Oracle8*i* documentation for more information about installing and configuring an Oracle8*i* database to use *inter*Media Text.
- Install Oracle WebDB 2.2 according to the instructions in the appropriate sections of this chapter.
- Make sure that your system environment variable is set to the ORACLE_HOME in which your Oracle8*i* database is located. For example, `C:\Oracle\Ora815`.
- With the Oracle Home Selector in your Oracle Installation Products program group, set your Primary Oracle Home to the ORACLE_HOME in which your Oracle8*i* database is located.
- Create a WebDB Web site using the WebDB Site Creation Wizard. See "Creating WebDB Sites" in this guide for more information on completing this task.

Note: Reboot your computer where appropriate when completing the above prerequisites.

7.2 Setting Up Your Environment for *inter*Media Text

*inter*Media Text in Oracle8*i* uses external procedures to perform document filtering. You must configure the LISTENER.ORA, TNSNAMES.ORA, and SQLNET.ORA files in your Oracle8*i* Home directory to support these external procedures.

The LISTENER.ORA, TNSNAMES.ORA, and SQLNET.ORA files on your computer should look similar to the following examples:

7.2.0.1 LISTENER.ORA

```
LISTENER =
(DESCRIPTION_LIST =
    (DESCRIPTION =
         (ADDRESS_LIST =
                 (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC0))
         )
              (ADDRESS_LIST =
                   (ADDRESS=(PROTOCOL=TCP)(HOST=my-pc)(PORT=1521))
              )
         )
)

SID_LIST_LISTENER =
   (SID_LIST =
   (SID_DESC =
        (SID_NAME = PLSExtProc)
        (ORACLE_HOME = /oracle/home)
         (ENVS=LD_LIBRARY_PATH=/oracle/home/lib:/oracle/home/ctx/bin:
                               /oracle/home/bin:/oracle/home/ctx/lib)
       (PROGRAM= extproc)
)
(SID_DESC =
         (GLOBAL_DBNAME = ORCL)
         (ORACLE_HOME = /oracle/home)
         (SID_NAME = ORCL)
   )
)
```

Note: The above lines in bold apply to Solaris installations of WebDB only. Ignore these lines for Windows NT installations.

7.2.0.2 TNSNAMES.ORA

```
ORCL =
   (DESCRIPTION =
     (ADDRESS_LIST =
            (ADDRESS = (PROTOCOL = TCP)(HOST = my-pc)(PORT = 1521))
)
     (CONNECT_DATA =
            (SERVICE_NAME = ORCL)
     )
)
EXTPROC_CONNECTION_DATA =
      (DESCRIPTION =
            (ADDRESS_LIST =
                 (ADDRESS = (PROTOCOL = IPC)(Key = EXTPROC0))
)
(CONNECT_DATA =
            (SID = PLSExtProc)
            )
)
```

7.2.0.3 SQLNET.ORA

```
NAMES.INITIAL_RETRY_TIMEOUT = 30

NAMES.MAX_OPEN_CONNECTIONS = 3

NAMES.MESSAGE_POOL_START_SIZE = 10
```

Note: See the *"Net8 Administrator's Guide"* included with your Oracle8*i* documentation for more information about creating these configuration files.

7.3 Defining DEFAULT_LEXER Values

Before creating *inter*Media Text indexes in Oracle WebDB, make sure that the database has the correct DEFAULT_LEXER value defined for the language.

Follow these steps to set up a DEFAULT_LEXER value:

1. To do so, execute the following SQL command in SQL*Plus as ctxsys user:

```
SELECT PRE_NAME, PRE_OBJECT FROM CTX_USER_PREFERENCES
WHERE PRE_NAME  = 'DEFAULT_LEXER';
```

   The value for PRE_OBJECT returned by the above query may be any of the following:

LEXER TYPE	Description
BASIC_LEXER	for single byte database
CHINESE_VGRAM_LEXER	for a Chinese database
JAPANESE_VGRAM_LEXER	for a Japanese database
KOREAN_LEXER	for a Korean database

2. (*For single byte databases only*) Execute the following SQL command in SQL*Plus as the ctxsys user:

```
SELECT PRV_PREFERENCE, PRV_ATTRIBUTE,PRV_VALUE
FROM CTX_USER_PREFERENCE_VALUES
WHERE PRV_PREFERENCE LIKE 'DEFAULT%'
```

   Ensure that the language-specific attributes have correct values.

3. If the DEFAULT_LEXER is not properly defined, it needs to be recreated. Drop the existing DEFAULT_LEXER preference by running the following commands in SQL*Plus as the ctxsys user.

```
BEGIN
   CTX_DDL.DROP_PREFERENCE('DEFAULT_LEXER');
   CTX_DDL.DROP_PREFERENCE('DEFAULT_WORDLIST');
   CTX_DDL.DROP_STOPLIST('DEFAULT_STOPLIST');
END;
```

4. Execute the appropriate language-specific script located in the <ORACLE8i_HOME>\ctx\admin\defaults directory. The format of the files in this directory is drdef<language>.sql. For example, the US script is drdefus.sql. The Japanese script is drdefja.sql. You must run the language-specific script in SQL*Plus as the ctxsys user.

5. Execute the following SQL command in SQL*Plus as the ctxsys user:

```
SELECT PAR_NAME,PAR_VALUE FROM CTX_PARAMETERS
WHERE PAR_NAME in ('DEFAULT_LEXER','DEFAULT_STOPLIST','DEFAULT_WORDLIST');
```

PAR_NAME	PAR_VALUE
DEFAULT_LEXER	CTXSYS.DEFAULT_LEXER
DEFAULT_STOPLIST	CTXSYS.DEFAULT_STOPLIST
DEFAULT_WORDLIST	CTXSYS.DEFAULT_WORDLIST

If the values returned by the query do not match those in the above table, use the CTX_ADM package to set them. For more information, refer to the *inter*Media Text reference manual.

7.4 Creating *inter*Media Text Indexes

Once you have properly set up your environment for *inter*Media Text, you can create *inter*Media Text indexes in the following way:

On the WebDB Site Builder Administration page:

1. Click **Search** under the Toolbox section.
2. Click the ***inter*Media Text** tab.
3. Configure the *inter*Media Text fields as required:
   d. Check **Enable interMedia Text Features**.
   e. If desired, check **Enable Theme & Gists**.

   Note: Theme & Gists are currently supported on WebDB sites contained in English-language databases only.

   f. Choose a color for the **Search Highlight Text Color**.

g. Choose the number of **Hits Per Page**.

h. Specify the number of seconds for the **URL Connection Time-out**.

i. Specify the **HTTP Proxy**.

j. If necessary, specify the **No Proxy Servers for Domains Beginning With** information.

4. You can create the index in either of these ways:

   - Click **Create Basic Index**.
     The *inter*Media Text index is created on the server.

     Note: To get help for the current page, click the Help icon on the page.

   - Or, you can run the following command in SQL*Plus. Log on using the user name and password for the schema that owns the WebDB site. For example, if the schema is named "SCOTT", log on with user name and password, "SCOTT".

     ```
     ctxcrind.sql
     ```

   The following *inter*Media indexes are created:

Index Name	Description
CONTEXT_AUTHOR_INDEX	Index based on the items' author.
CONTEXT_DESC_INDEX	Index based on the items' description.
CONTEXT_KEYWORDS_INDEX	Index based on the items' keywords.
CONTEXT_TITLE_INDEX	Index based on the items' title.
FILE_INDEX	Index based on the items' filename.
TEXT_INDEX	Index based on the items' text or content.
URL_INDEX	Index based on the items' Uniform Resource Locator (URL).

Notes:

- The time required for creating indexes varies depending on the number of items you have on your WebDB site. A message is displayed when the index is created.
- When specifying a proxy server, do not prefix http:// to the proxy server name.
- Make sure that you have the LD_LIBRARY_PATH variable correctly set for the extproc in your `LISTENER.ORA` file. See "Setting Up Your Environment for interMedia Text" on page 3.

7.5 Updating *inter*Media Text Indexes

To update the *inter*Media Text indexes when you add items to your WebDB site, you must have *inter*Media Text Server running or you can issue the following command:

```
ALTER INDEX with parameters ('sync')
```

For more information about the *inter*Media Text Server and the `ALTER INDEX` command, see the *inter*Media Text documentation.

7.6 Dropping *inter*Media Text Indexes

You can drop *inter*Media Text indexes in either of these ways:

- On the WebDB Site Builder Administration page:
  1. Click **Search** under the Toolbox section.
  2. Click the ***inter*Media Text** tab.
  3. Click **Drop Basic Index**.
     The *inter*Media Text index is deleted from the server.
- Or, to drop an *inter*Media Text Index, run the following script in Oracle SQL*Plus logging in as the WebDB schema owner:

  `ctxdrind.sql`

8

Setting Up the WebDB CGI Executable and WebDB Cartridge to OAS

This chapter discusses how to install and configure the WebDB CGI Executable or the WebDB Cartridge.

You can use either of these plug-ins to replace the PL/SQL Gateway functionality that is provided as part of the WebDB Listener.

This chapter contains the following sections:

- Chapter 8.1, "Setting up the WebDB CGI Executable" on page 8-2
- Chapter 8.2, "Configuring the WebDB Cartridge with OAS" on page 8-6

8.1 Setting up the WebDB CGI Executable

If you plan to use a standard Web server (such as one provided by Netscape or an Apache Web server) instead of the WebDB Listener, you can set up the WebDB CGI executable provided by WebDB for use with these Web servers. The WebDB CGI executable replaces the PL/SQL Gateway which is provided with the WebDB Listener.

Note: The WebDB CGI executable is *not* installed as part of Oracle WebDB. Thus, if you wish to use it, you must install the WebDB CGI executable manually.

8.1.1 Manually Installing and Configuring the WebDB CGI

Before installing or configuring the WebDB CGI, verify that the following conditions exist:

- Oracle WebDB 2.2 is installed including the PL/SQL packages and PL/SQL Toolkit. The software can be installed remotely on another machine.
- The Oracle Required Support Files (Release 8.0.5.1) are installed in a separate Oracle Home located locally on the machine where you intend to install the WebDB CGI.

  If the WebDB Listener is already installed, you don't need to install the Oracle Required Support Files separately as they are part of the Listener installation. Thus, continue configuration from Step 6.

Note: You can install WebDB components separately with the Oracle WebDB custom install program. For more information, refer to the appropriate section depending on your environment: "WebDB on Windows NT Custom Install" on page 2-24 or "Installing WebDB Listener on Solaris" on page 3-15.

To configure the WebDB CGI executable for use with a supported Web server:

1. If these directories don't already exist, create the following directories on your machine to install the WebDB cartridge files:
   - <ORACLE_HOME>\webdb
   - <ORACLE_HOME>\webdb\listener
   - <ORACLE_HOME>\webdb\listener\cfg
   - <ORACLE_HOME>\webdb\images
2. **On Windows NT**, copy the following files from your WebDB CD into the appropriate Web server's location on your machine:

Files	From CD	To Your Machine
wdbcgiw.cmd wdbcgi.exe	\www22	<ORACLE_HOME>\bin
*.gif and *.jpg	\www22\images	<ORACLE_HOME>\webdb\images
*.htm, wdsvr.app	\www22	<ORACLE_ HOME>\webdb\listener\cfg
Required Support Files (8.0.5.1)	Custom installation	<ORACLE_HOME>

On Solaris, copy the following files from your WebDB CD into the appropriate <ORACLE_HOME> location on your machine:

Files	From CD	To Your Machine
wdbcgiw wdbcgi	/www22	<ORACLE_HOME>/bin
*.gif and *.jpg	/www22/images	<ORACLE_HOME>/webdb/images
*.htm, wdsvr.app	/www22	<ORACLE_ HOME>/webdb/listener/cfg
Required Support Files (8.0.5.1)	Custom installation	<ORACLE_HOME>

3. In the \www22 directory on the Oracle WebDB CD, copy all the *.htm files and the configuration file, wdbsvr.app, to the <ORACLE_HOME>\webdb\listener\cfg directory.

4. In the `\www22\images` directory on the Oracle WebDB CD, copy all the *.gif and *.jpg files to the `<ORACLE_HOME>\webdb\images` directory on your machine.
5. Open `wdbcgiw` in a text editor and customize the environment variables by changing the path to point to the actual location of the Oracle WebDB CGI program.
6. Configure your Web server to update the mapping of the `/images/` virtual directory to the correct physical directory on the server.

   Note: Make sure that the mapping of this directory matches the location you chose for storing the WebDB images (see Step 1).

7. Restart your Web server.
8. **On Windows NT**, type the following URL into your Web browser's location or address field:

   ```
   http://hostname:port/cgi-bin/wdbcgiw.cmd/admin_/gateway.htm
   ```

   On Solaris, type the following URL into your Web browser's location or address field:

   ```
   http://hostname:port/cgi-bin/wdbcgiw/admin_/gateway.htm
   ```

   where:

   - **hostname** is the name of the server on which you installed WebDB.
   - **port** is the Listener port you specified during WebDB installation.

9. Update the Document Table field with the name of the document table. Use the format, *schema.tablename*, to indicate the schema in which the document table has been created.

   On Solaris, you may need to set the environment variable, LD_LIBRARY_PATH, to point to the `wdbcgiw` file. See "Configuring Variables and General Configuration" on page 6-1 for more information.

10. Run WebDB by typing the following URL into your Web browser's location or address field:

    On Windows NT:

    ```
    http://servername:port/cgi-bin/wdbcgiw.cmd/{DAD}/
    ```

    On Solaris:

    ```
    http://servername:port/cgi-bin/wdbcgiw/{DAD}
    ```

11. Test file uploading and downloading by typing the following URL into your Web browser's location or address field:

    On Windows NT:

    ```
    http://servername:port/cgi-bin/wdbcgiw.cmd/{DAD}/{schema}.wwv_testdoc.
    show_form
    ```

    On Solaris:

    ```
    http://servername:port/cgi-bin/wdbcgiw/{DAD}/{schema}.
    wwv_testdoc.show_form
    ```

    where

    - **schema** is the schema where WebDB is installed in the database.
    - **DAD** is the Data Access Descriptor name.

8.2 Configuring the WebDB Cartridge with OAS

If you plan to use the Oracle Application Server (OAS) 4.0.8 as your Web server, you need to add the WebDB cartridge provided by WebDB to OAS. The WebDB cartridge replaces the PL/SQL Gateway provided as part of the WebDB Listener.

For additional instructions about adding the WebDB cartridge to OAS, see the *"Oracle Application Server Administration Guide"*.

Note: The WebDB cartridge is *not* installed as part of Oracle WebDB. Thus, if you wish to use it, you must install the WebDB cartridge manually.

8.2.1 Prerequisites

Before installing or configuring the WebDB cartridge, verify that the following conditions exist:

- Oracle WebDB 2.2 is installed including the PL/SQL packages and PL/SQL Toolkit. The software can be installed remotely on another machine.

Note: You can install these components separately with the Oracle WebDB custom install program. For more information, refer to the appropriate sections depending on your environment: "WebDB on Windows NT Custom Install" on page 2-24 or "Installing WebDB Listener on Solaris" on page 3-15.

8.2.2 Manually Installing the WebDB Cartridge

The Oracle WebDB cartridge must be installed in the same Oracle Home as for the Oracle Application Server; for example, `<OAS_HOME>`.

To manually install the WebDB cartridge:

1. Create the following directories on your machine to install the WebDB cartridge files:
   - `<OAS_HOME>\webdb`
   - `<OAS_HOME>\webdb\listener`
   - `<OAS_HOME>\webdb\listener\cfg`
   - `<OAS_HOME>\webdb\images`

2. Copy the appropriate file from the \www22 directory on the Oracle WebDB CD into the directory containing your Oracle Application Server installation:

Environment	File	To Your Machine
Windows NT	wdbctx.dll	<ORACLE_HOME>\bin
Solaris	wdbctx.so	<ORACLE_HOME>/bin

3. In the \www22 directory on the Oracle WebDB CD, copy all the *.htm files and the configuration file, wdbsvr.app, to the <OAS_HOME>\webdb\listener\cfg directory.
4. In the \www22\images directory on the Oracle WebDB CD, copy all the *.gif and *.jpg files to the <OAS_HOME>\webdb\images directory on your machine.
5. Set up the environment variable, WV_GATEWAY_CFG, to point to the gateway configuration file, wdbsvr.app. For example,

   Windows NT

   ```
   set WV_GATEWAY_CFG=<OAS_HOME>\webdb\listener\cfg\wdbsvr.app
   ```

   Solaris

   ```
   setenv WV_GATEWAY_CFG <OAS_HOME>/webdb/listener/cfg/wdbsvr.app
   ```

8.2.3 Adding the WebDB Cartridge to OAS

To add the WebDB cartridge to OAS:

1. In your Web browser, display the top-level administration page for Oracle Application Server. At the top of the navigational tree, you should see **Website40 Site** (or whatever you named the site when you installed the OAS server).
2. Click the plus sign (+) to display the components on the site. You should see **Oracle Application Server**, **HTTP Listeners**, and **Applications**.
3. Click **Applications** to display the applications in the right frame of the browser window.

> **Note:** Do not click the plus sign (+) next to **Applications**. Doing so displays the applications for the site in the navigational tree instead of displaying applications in the right frame.

4. Click the **+** button in the right frame to display the Add Application dialog box.
5. In the Add Application dialog box, specify the following:

Field	Specify
Application Type	CWeb
Configure Mode	Manually

6. Click **Apply**. The Add Application dialog box displays again.
7. In the dialog box, specify the following:

Field	Specify
Application Name	WebDB
Display Name	WebDB
Application Version	2.2

8. Click **Apply**. A Success dialog box displays.
9. In the Success dialog box, click **Add Cartridge To This Application**. The Add C-Web Cartridge dialog box displays.
10. In the Add C-Web Cartridge dialog box, specify the following:

Field	Specify
Cartridge Name	wdbctx
Display Name	WebDB Cartridge
Cartridge Shared Object	the full path to the wdbctx.so file on Solaris (wdbctx.dll file on Windows NT); for example: `/private/wdbsvr/lib/wdbctx.so.`
Entry Point (Shared Object)	wwwre_Entry

Field	Specify
Virtual Path	/wdbctx
Physical Path	This field shows <ORACLE_HOME>/bin as the physical path. Leave this field as it is.

11. Click **Apply**.
12. Navigate to the Web Parameters page located in the WebDB Configuration folder under the Applications node.
13. On the Web Parameters page, make sure that the Application MIME Types field is blank by removing any listed file extensions such as jpeg or gif.
14. Click **Apply**.
15. Configure your server's Listener to update the mapping of the `/images/virtual` directory to the correct physical directory on your server.

    Note: Make sure that the mapping of this directory matches the location you chose for storing the WebDB images.

16. Click **Apply**.
17. Click **Website40 Site** at the top of the OAS navigational tree.
18. Select the **ALL** radio button in the right frame of the browser window.
19. Click `|<<` to reload the server for the new configuration to take effect.
20. Type the following URL into your Web browser's location or address field:

    `http:/servername:port/admin_/gateway.htm`

21. On the PL/SQL Gateway Settings page, adjust the settings in fields contained in the Database Access Descriptor (DAD) section. You can click the small help icon on the upper right corner of the page to view information about fields.

    Note: Remember to update the Document Table field with the name of the document table. Use the format, *schema.tablename*, to indicate the schema in which the document table has been created.

22. Click **Apply**.

23. Run WebDB by typing the following URL into your Web browser's location or address field:

    ```
    http://hostname:port/wdbctx
    ```

24. Test file uploading and downloading by typing the following URL into your Web browser's location or address field:

    ```
    http://hostname:port/wdbctx/DAD/{schema}.wwv_testdoc.show_form
    ```
    where

    - **hostname** is the name of the server on which you installed WebDB.
    - **port** is the port you specified during installation of WebDB.
    - **DAD** is the Database Access Descriptor name you defined in Step 18.
    - **schema** is the schema where WebDB is installed in the database.

9

Troubleshooting

This chapter provides solutions to help you resolve errors or problems encountered while using Oracle WebDB 2.2.

9.1 Troubleshooting List

Scan the following list of troubleshooting tips that may assist you while resolving a problem in Oracle WebDB 2.2.

9.1.1 Browser fails to retrieve information

If the browser fails to retrieve any information or appears to hang when connecting to WebDB, you can isolate the problem by testing these three points of failure:

- WebDB Listener
- PL/SQL Toolkit (in database)
- Connection between WebDB and the database

WebDB Listener

Verify that the WebDB Listener is up and running and serving requests by issuing the following command:

Windows NT

```
netstat -a|grep <port>
```

where <port> is the WebDB Listener port number.

Look for a LISTEN state for the port which means the WebDB Listener is running. For example:

```
*.80   *.*   0   0   0   0   LISTEN
```

Solaris

```
netstat -a|findstr <port>
```

where <port> is the WebDB Listener port number.

Look for a LISTENING state for the port which means the WebDB Listener is running. For example:

```
TCP hostname ... LISTENING
```

If you do not see LISTEN OR LISTENING, this indicates that the WebDB Listener is down or not running on this port and may be running on another port.

- If netstat shows that the WebDB Listener is listening, then see if you can access a static html file (file in the filesystem rather than database). For example, test the images virtual directory:

  ```
  http://machine.domain:port/images/wadmin.gif
  ```

  If you see the Administer icon, this indicates that the Listener is listening and serving requests. Thus, the problem is *not* with the Listener.

PL/SQL Toolkit (in database)

To verify that the PL/SQL toolkit is properly installed and working:

- Verify that the WebDB Home page procedure can be executed successfully. You can run SQL*Plus and connect to the database as the WebDB user with the following commands:

  ```
  set serveroutput on
  exec webdb.home;
  exec owa_util.showpage;
  ```

This should display the resulting WebDB Home page, generated by the procedure webdb.home. If the `webdb.home` procedure does not execute successfully, or you don't see any output, then there is a problem with either the PL/SQL toolkit or the webdb.home procedure.

If HTML is generated, then the problem is *not* with the PL/SQL Toolkit. If you do not see the correct results, execute the following commands at the SQL prompt:

```
begin
null;
end;
/
```

You should see PL/SQL successfully completed. If you do not, this indicates that PL/SQL is not installed correctly in your database. Ask your database administrator to re-run the `catproc.sql` script as the SYS user:

Platform	Path
UNIX	`<ORACLE_HOME>/rdbms/admin/catproc.sql`
Windows NT	`<ORACLE_HOME>\rdbms80\admin\catproc.sql`

Connection between WebDB and the database

To determine if there is a connection problem between WebDB and the database, verify the following:

- Connect to the database running SQL*Plus from the same location as where you installed WebDB. For example,

  ```
  SQL > connect username<password>@<connectstring> connect
  ```

  where `connectstring` is the TNS names alias for the remote database (a connect string is not required if your database is local).

- Verify that the connect string, WebDB user name, and password is correct on the WebDB Listener Administration page or its configuration file, `wdbsvr.app`.

- Verify that the `WV_GATEWAY_CFG` environment variable is pointing to the location of this file. Then, test the connection to the database using this information. For example,

  ```
  SQL > connect webdb/webdb@v815 connect
  ```

  If the connection fails, adjust the Listener settings with the appropriate connection information, stop WebDB, and re-start it.

  Additional Information:

  - Chapter 5, "Configuring the WebDB Listener and PL/SQL Gateway"
  - "Environment Variable Check List" on page 6-2

- Test your connection to the WebDB site by verifying the Database Access Descriptor (DAD) settings. For example, if your site is called 'mysite', the DAD settings in the WebDB configuration file (`wdbsvr.app`) should be as follows:

  ```
  [DAD_mysite]
  connect_string = webdb
  password = mysite_public
  username = mysite_public
  default_page = mysite.home
  document_table = mysite.wwv_document
  ```

If you get an error such as the following and fail to connect to your WebDB site:

```
http:404 >HTTP 404 Not found'  in your browser.
```

This means that your `wdbsvr.app` configuration file does not have an entry for your WebDB site, or one or more of the parameters are incorrect. Edit the settings as appropriate and attempt a connection to your site.

9.1.2 WebDB Listener doesn't start with new hostname

If you reinstalled WebDB Listener with a new hostname, the Listener may not start. The reason is because the installation does not modify the hostname in the Windows NT registry.

To manually modify the Windows NT registry for the new hostname, edit the registry with regedit as follows:

```
HKEY_LOCAL_MACHINE
 + SYSTEM
  + CurrentControlSet
   + Services
    + OracleWebDbListener
     - Parameters
```

In the right frame, right-click the HostName entry, and choose Modify. Enter the fully-qualified hostname in the text field, and click OK. You should now be able to restart the Listener successfully.

9.1.3 Error log

The WebDB packages installation error log file is contained in the following location:

```
<ORACLE_HOME>/orainst/wdb_install_packages.log
```

where ORACLE_HOME is the Oracle Home where you installed WebDB.

9.1.4 Uploading documents to a Web site

If you upload documents to a WebDB site using the Item Wizard and the following error messages are displayed:

ORA-20000: ConText error: DRG-50704: Net8 listener is not running or cannot start external procedures.

ORA-28575: unable to open RPC connection to external procedure agent.

You have either not configured your database Listener for external procedures or your database Listener is not running. See "Configuring Variables and General Configuration" on page 9-1 for more information.

9.1.5 Setting the MAX_ENABLED_ROLES parameter

Ensure that the MAX_ENABLED_ROLES parameter is in your INIT.ORA file and set to at least 25. Shut down your database, and restart it after changing INIT.ORA.

9.1.6 Setting the MAX_OPEN_CURSORS parameter

If this error occurs while WebDB is running:

ORA-01000: maximum open cursors exceeded

Ensure that the MAX_OPEN_CURSORS parameter is in your INIT.ORA file and set to at least 100. Shut down your database, and restart it after changing INIT.ORA.

9.1.7 Tablespace sizes

You should have tablespaces available with sizes of at least 25-30 MB each. These tablespaces will be used as Temporary and Default tablespaces by the schema in which you install WebDB.

For each Web site you create with WebDB, you should have a tablespace of at least 10 MB.

9.1.8 Shared pool size

When installing WebDB with Release 7.3.4 of the Oracle server, ensure that you use a value for the SHARED_POOL_SIZE environment variable that is larger than the default value. The default value is too small and causes the installation of WebDB to fail. With Release 8.0.5, the default value of SHARED_POOL_SIZE is sufficient.

9.1.9 Creating *inter*Media Text Indexes

If you are unable to create an *inter*Media Text index, make sure that the "Keep Database Connection Open between Requests" is set to "No" for both the DADs on your WebDB site.

This field is located on the Oracle WebDB PL/SQL Gateway Settings page by clicking Listener Settings from the Administer page.

After the index is created, reset this parameter to "Yes" for optimal performance.

Additional Information: Chapter 7, "Integrating interMedia Text in WebDB Site Builder".

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