

Oracle® WebDB

Getting Started - Installation and Tutorial

Release 2.0

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Oracle WebDB Getting Started - Installation and Tutorial, Release 2.0

Part No. A66601-02

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Contents

Send Us Your Comments	v
Welcome To Oracle WebDB!	xiii
Intended Audience	xiii
Prerequisites	xiv
Tutorial Setup.....	xiv
Structure.....	xiv
Conventions.....	xv
Related Publications	xvi
Oracle WebDB Basic Concepts	xvii
What is Oracle WebDB?.....	xvii
Why Use Oracle WebDB?.....	xviii
Starting Oracle WebDB	xix
Exiting Oracle WebDB	xx
Navigating in Oracle WebDB.....	xxi
Displaying an Oracle WebDB Site.....	xxiv
Getting Help	xxvii
Part I Installing Oracle WebDB	
1 Installing and Configuring Oracle WebDB	
1.1 System Requirements	1-2

1.2	Overview of Oracle WebDB Architecture.....	1-3
1.2.1	Using the WebDB Listener.....	1-3
1.2.2	Using Other Web Servers.....	1-3
1.3	Installing Oracle WebDB on Windows NT.....	1-4
1.3.1	Windows NT Typical Install.....	1-8
1.3.2	Windows NT Custom Install.....	1-13
1.3.2.1	PL/SQL Web Toolkit Custom Install on Windows NT.....	1-17
1.3.2.2	WebDB Listener Custom Install on Windows NT.....	1-19
1.3.2.3	Required Support Files Custom Install on Windows NT.....	1-20
1.3.2.4	Oracle WebDB Custom Install on Windows NT.....	1-20
1.3.2.5	Deinstalling on Windows NT.....	1-22
1.4	Installing Oracle WebDB on Solaris.....	1-23
1.4.1	Solaris Typical Install.....	1-26
1.4.1.1	PL/SQL Web Toolkit Typical Install on Solaris.....	1-33
1.4.1.2	WebDB Listener Typical Install on Solaris.....	1-34
1.4.1.3	Oracle WebDB Typical Install on Solaris.....	1-35
1.5	Solaris Custom Install.....	1-36
1.5.0.4	PL/SQL Web Toolkit Custom Install on Solaris.....	1-45
1.5.0.5	WebDB Listener Custom Install on Solaris.....	1-48
1.5.0.6	Oracle WebDB Custom Install on Solaris.....	1-49
1.5.0.7	Running the WebDB Listener as setuid root.....	1-52
1.5.1	Deinstalling on Solaris.....	1-52
1.6	Configuring the WebDB Listener.....	1-53
1.6.1	Access From Within Oracle WebDB.....	1-54
1.6.2	Access from Outside WebDB.....	1-54
1.6.3	Setting up a TNS Names Alias.....	1-54
1.7	Setting up the CGI Application.....	1-57
1.8	Adding the PL/SQL Cartridge to OAS.....	1-59
1.8.1	Setting Environment Variables.....	1-62
1.9	Integrating interMedia Text in WebDB Site Builder (Beta).....	1-63
1.9.1	Prerequisites.....	1-63
1.9.2	Setting Up Your Environment for interMedia Text.....	1-64
1.9.2.1	LISTENER.ORA.....	1-64
1.9.2.2	TNSNAMES.ORA.....	1-65
1.9.2.3	SQLNET.ORA.....	1-65

1.9.3	Creating interMedia Text Indexes	1-66
1.9.4	Updating interMedia Text Indexes.....	1-67
1.9.5	Dropping interMedia Text Indexes	1-68
1.10	Date and Time Configuration.....	1-68
1.11	Viewing Arabic Characters	1-68
1.12	Troubleshooting.....	1-69

Part II Building Applications

2 Managing Users

2.1	Before You Begin	2-2
2.2	Creating a New User.....	2-2
2.3	Adding a User to a Role	2-5
2.4	Granting Browse In and Build In Privileges to a User.....	2-8
2.5	Granting Database Object Privileges to a User	2-10
2.6	Creating a new role	2-12
2.6.1	Creating a role	2-12
2.6.2	Adding users to a role	2-14
2.7	What's Next?.....	2-14

3 Building and Browsing Database Objects

3.1	Before You Begin	3-3
3.2	Building a Table.....	3-3
3.3	Building a Procedure	3-5
3.4	Querying a Table	3-6
3.5	Executing a Procedure	3-11
3.6	What's Next?.....	3-13

4 Building Components

4.1	Before You Begin	4-3
4.2	Building a Form Based on a Table	4-3
4.3	Editing a Form	4-7
4.3.1	Editing the basic appearance of forms	4-7
4.3.1.1	Changing field labels.....	4-8

4.3.1.2	Adding colors	4-9
4.3.2	Adding supporting text to a form.....	4-11
4.3.3	Adding advanced PL/SQL code.....	4-13
4.4	Making a Component Available to Other Users.....	4-16
4.5	Building a Report.....	4-19
4.6	Editing a Report.....	4-20
4.6.1	Adding summary information to a report.....	4-20
4.6.2	Adding a break to a report.....	4-22
4.6.3	Adding parameters to a report.....	4-25
4.7	Building a Chart.....	4-27
4.8	Building Shared Components.....	4-30
4.8.1	Building a List of Values (LOV)	4-31
4.8.2	Testing a List of Values.....	4-33
4.8.3	Using a List of Values in a component.....	4-34
4.8.3.1	Using a List of Values in a form.....	4-34
4.8.3.2	Using a List of Values in a report parameter entry form	4-36
4.9	What's Next?	4-38

5 Linking Components to Build Applications

5.1	Before You Begin	5-1
5.2	Building a Menu	5-2
5.3	Editing a Menu.....	5-4
5.3.1	Adding role-level menu security	5-7
5.4	Building a Link.....	5-8
5.4.1	Testing a link.....	5-10
5.4.2	Using a link in a component	5-11
5.5	What's Next?	5-13

Part III Building WebDB Sites

6 Creating WebDB Sites

6.1	Before You Begin	6-1
6.2	Creating a WebDB Site in the Database	6-2

6.3	Assigning a Site Administrator	6-7
6.4	What's Next?	6-11

7 Designing WebDB Sites

7.1	Before You Begin	7-1
7.2	Designing the Structure of a WebDB Site	7-3
7.2.1	Creating folders	7-3
7.2.2	Creating categories.....	7-6
7.2.3	Creating perspectives	7-8
7.2.4	Creating custom item types.....	7-9
7.3	Controlling the Style of a WebDB Site	7-13
7.3.1	Designing the style of a WebDB site	7-13
7.3.2	Applying a style to a folder	7-19
7.4	Providing Access to a Web Site	7-22
7.4.1	Providing public access to a folder	7-22
7.4.2	Granting folder access privileges to a user.....	7-24
7.4.3	Granting folder access privileges to a group of users.....	7-26
7.4.3.1	Creating a group	7-26
7.4.3.2	Granting folder access privileges to a group	7-29
7.5	What's Next?	7-31

8 Managing WebDB Site Content

8.1	Before You Begin	8-3
8.2	Adding a Regular Item	8-3
8.2.1	Adding a custom item type item	8-5
8.3	Adding a News Item.....	8-7
8.4	Adding an Announcement Item	8-9
8.5	Adding a Quickpick Item.....	8-11
8.6	Creating an Item with Approval.....	8-13
8.6.1	Adding an item that requires approval	8-13
8.6.2	Approving an item.....	8-16
8.7	Editing an Item	8-19
8.8	What's Next?	8-23

Part IV Appendix

A Tutorial Setup Instructions

A.1	Creating HR_TUTORIAL.....	A-1
A.2	Creating the Tutorial Web Site	A-2
A.2.1	Assigning a user as Site Administrator.....	A-2
A.3	Creating TUTORIAL_USER.....	A-3

Part V Glossary

Glossary

Part VI Index

Index

Welcome To Oracle WebDB!

Welcome to Oracle WebDB! This guide will help get you started with Oracle WebDB Release 2.0.

This preface includes the following sections:

Section	Location
"Intended Audience"	on page xiii
"Prerequisites"	on page xiv
"Tutorial Setup"	on page xiv
"Structure"	on page xiv
"Conventions"	on page xv
"Related Publications"	on page xvi

Intended Audience

This guide is intended for a variety of users, from database administrators (DBAs) to web site content creators.

Before you begin the installation or tutorial, you should read the preface "Oracle WebDB Basic Concepts" to gain a basic understanding of WebDB and general advice on how to use the product. After that, you only need to read those chapters that relate to your particular job. To find out which chapters you should read, see "Structure" on page xiv.

Prerequisites

You should be familiar with using your web browser. For example, you should know how to start your web browser and be familiar with the basic user interface elements such as hypertext links.

In addition:

- If you are a DBA, you should be familiar with Oracle database administration concepts such as users, roles, profiles, and tablespaces.
- If you are a component developer, you should have a basic understanding of SQL and be familiar with objects in the database.

Tutorial Setup

Before you begin the exercises in this tutorial, you or your database administrator must set up the tutorial environment. Instructions for this are provided in Appendix A, "Tutorial Setup Instructions".

Structure

This book teaches you how to use WebDB in the following chapters:

Chapter	Contents	Who Should Read This Chapter?
Chapter 1, "Installing and Configuring Oracle WebDB"	Instructions on how to install WebDB and configure the WebDB Listener.	DBAs who will be installing WebDB.
Chapter 2, "Managing Users"	Exercises to create a new user, add a user to a role, grant privileges to a user, and create a new role.	DBAs who will be managing WebDB users.
Chapter 3, "Building and Browsing Database Objects"	Exercises to build a table and a procedure, query the table, and execute the procedure.	Developers who will be building and browsing database objects.
Chapter 4, "Building Components"	Exercises to build a form, a report, a chart, and a List of Values.	Developers who will be building WebDB components. Note To complete this chapter you must have completed Chapter 3, "Building and Browsing Database Objects".

Chapter	Contents	Who Should Read This Chapter?
Chapter 5, "Linking Components to Build Applications"	Exercises to build menus and links.	Developers who will be linking components together to build WebDB applications. Note To complete this chapter you must have completed Chapter 4, "Building Components".
Chapter 6, "Creating WebDB Sites"	Exercises to create and set up a new web site.	DBAs who will be creating web sites with WebDB.
Chapter 7, "Designing WebDB Sites"	Exercises to design the structure, define the style, and control access to a WebDB site.	Site administrators and folder owners who will be managing one or more folders of a WebDB site.
Chapter 8, "Managing WebDB Site Content"	Exercises to add and edit WebDB site content.	Content creators who will be adding items to a WebDB site. Note To complete this chapter, you must have completed Chapter 7, "Designing WebDB Sites".

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.
<i>italics</i>	Used to introduce new terms. Also used enclosed in angled brackets (<>) to represent a variable. Substitute an appropriate value.
<code>courier</code>	Used to represent text you need to type.

Related Publications

You may also wish to refer to the following publications which are available in PDF format in the \docs directory on your product CD, or orderable from Oracle.

Oracle WebDB publications

Title	Part Number	File Name
<i>Oracle WebDB: Creating and Managing Components User Guide</i>	A66602-01 A66602-02	a6660201.pdf
<i>Oracle WebDB: Creating and Managing Components Reference Manual</i>	A66603-01	a6660301.pdf
<i>Oracle WebDB: Creating and Managing Sites User Guide</i>	A66604-01	a6660401.pdf
<i>Oracle WebDB: Creating and Managing Sites Reference Manual</i>	A66605-01	a6660501.pdf

Other Oracle publications

Title	Part Number
<i>Oracle Application Server Administration Guide</i>	A60172-02

Oracle WebDB Basic Concepts

This preface introduces the basic concepts and navigational principles of Oracle WebDB and web sites built with Oracle WebDB.

This preface includes the following sections:

Section	Location
"What is Oracle WebDB?"	on page xvii
"Why Use Oracle WebDB?"	on page xviii
"Starting Oracle WebDB"	on page xix
"Exiting Oracle WebDB"	on page xx
"Navigating in Oracle WebDB"	on page xxi
"Displaying an Oracle WebDB Site"	on page xxiv
"Getting Help"	on page xxvii

What is Oracle WebDB?

Oracle WebDB is a complete solution for building, deploying, and proactively monitoring web database applications and content-driven web sites. WebDB provides a fast and easy way to "web-enable" Oracle databases.

Manage database objects

Developers can create, view, and edit database objects through the easy-to-use, HTML-based WebDB interface. These objects include tables, views, procedures, functions, packages, indexes, sequences, synonyms, and triggers.

Develop HTML components

WebDB provides tools for creating HTML-based interfaces to database data. These interfaces include reports, forms, charts, calendars, menus, hierarchies, and frame drivers.

Build content-driven web sites

Web sites created with WebDB (WebDB sites) are divided into manageable areas that can be delegated to individuals or groups. The tools for managing WebDB sites are provided within the site itself, enabling content creators to make changes to and ensure the quality of their own areas of the site, instead of relying on the webmaster.

Track performance

DBAs can isolate and proactively resolve performance problems using the performance tracking facilities in WebDB. Information about individual components, web pages, and their requestors is logged, and pre-built reports display their performance and security histories. DBAs can also create their own customized reports that display logged information.

Manage database security

DBAs can manage database roles, users, and privileges, as well as WebDB specific privileges and web server settings, all through the WebDB interface.

Why Use Oracle WebDB?

WebDB is easy to use, easy to access, and easy to administer. Wizards guide administrators and developers through tasks step-by-step. By lowering the amount of technical knowledge required to produce useful results and maintain a high quality of service, WebDB makes information readily available to everyone who has permission to see it.

Universal accessibility

The only software needed to develop and run WebDB applications and web sites is a web browser. WebDB is accessible from anywhere there is a network connection. Unauthorized access is prevented because WebDB leverages database security.

Reduced total cost of ownership

WebDB itself, as well as applications and web sites created with WebDB are completely contained within the Oracle database. There is no need to install

software on every machine being used. Thus, WebDB significantly reduces the amount of overhead usually associated with application rollout and maintenance.

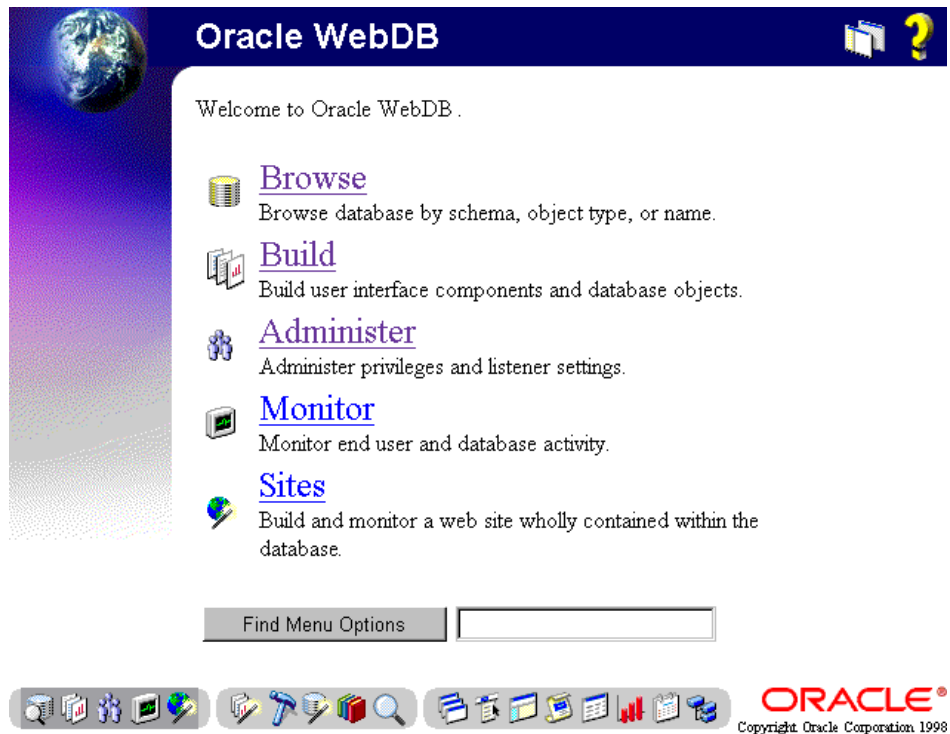
Starting Oracle WebDB

1. Set up or obtain the following information from your DBA:
 - A user name
 - A password
 - The URL of your WebDB home page
2. Start your web browser.
3. In the Address or Location field of your browser, type the URL for your WebDB home page and press the Enter or Return key.



4. In the log on dialog box, type your user name and password and click **OK**.
If your browser displays an error message, check that you've typed the information correctly, or ask your DBA to verify the information given to you.

If the connection is successful, your WebDB home page will be displayed.



Tip: It is a good idea to bookmark your WebDB home page so that you do not have to type the URL each time you want to access it. If you do not know how to add a bookmark, see your web browser documentation.

Exiting Oracle WebDB

To exit WebDB, simply close your web browser, or navigate to a non-WebDB page.

If you close your web browser, you will automatically be logged off WebDB.

However, if you navigate to a non-WebDB page, you will not be logged off WebDB. If you return to a WebDB page, you will still be logged on. For security reasons, you may want to log off WebDB before navigating to a non-WebDB page.

To log off Oracle WebDB:

1. In the top left of any page, click the WebDB logo to display the Connection Information page.
2. Click **Log off**.

If you return to a WebDB page and click your browser's Reload button, you will be prompted for your user name and password.

Navigating in Oracle WebDB

WebDB's HTML interface makes it very easy to navigate within the product. The following list details some of the navigation tools offered:

- **Hypertext links**



[Browse](#)

Browse database by schema, object type, or name.



[Build](#)

Build user interface components and database objects.



[Administer](#)

Administer privileges and listener settings.



[Monitor](#)

Monitor end user and database activity.



[Sites](#)

Build and monitor a web site wholly contained within the database.

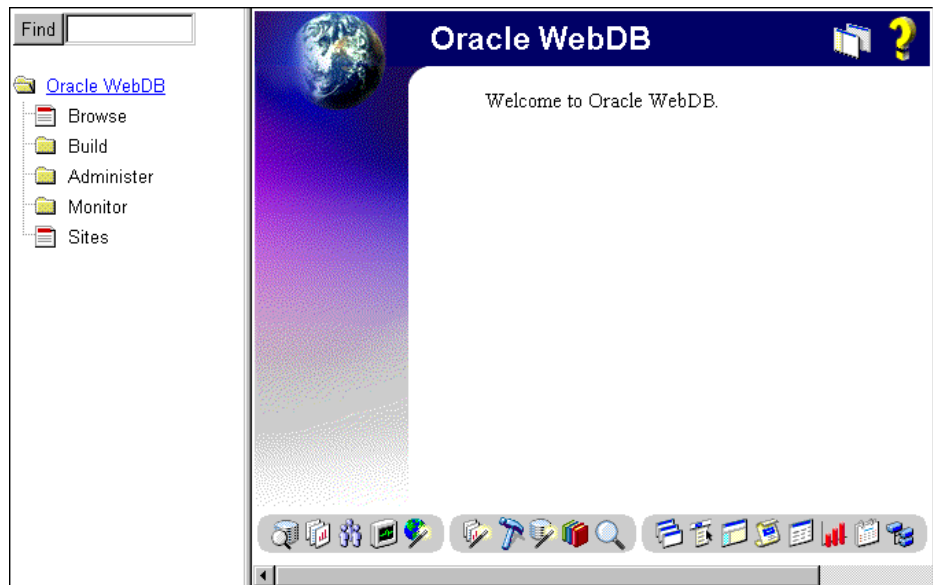
WebDB uses lists of hypertext links as menus to help you navigate through the product. The text below the link describes the destination of the link in more detail.

- **Toolbar**




The toolbar is displayed at the bottom of most WebDB pages and provides access to the most commonly used menus and tools.

- **Home page navigation tree**



The navigation tree is a hierarchical menu displayed in a separate frame on the left side of the home page. You can use the navigation tree instead of the hypertext link menus if you prefer.

To activate the navigation tree, click  at the top right of your WebDB home page. To return to the full page view, click **Oracle WebDB** at the top of the navigation tree.

- **Home page Find Menu Options field**




The Find Menu Options field is displayed just above the toolbar on the WebDB home page. WebDB finds all the menu items that contain the text you type in the Find field.

- **Link history**

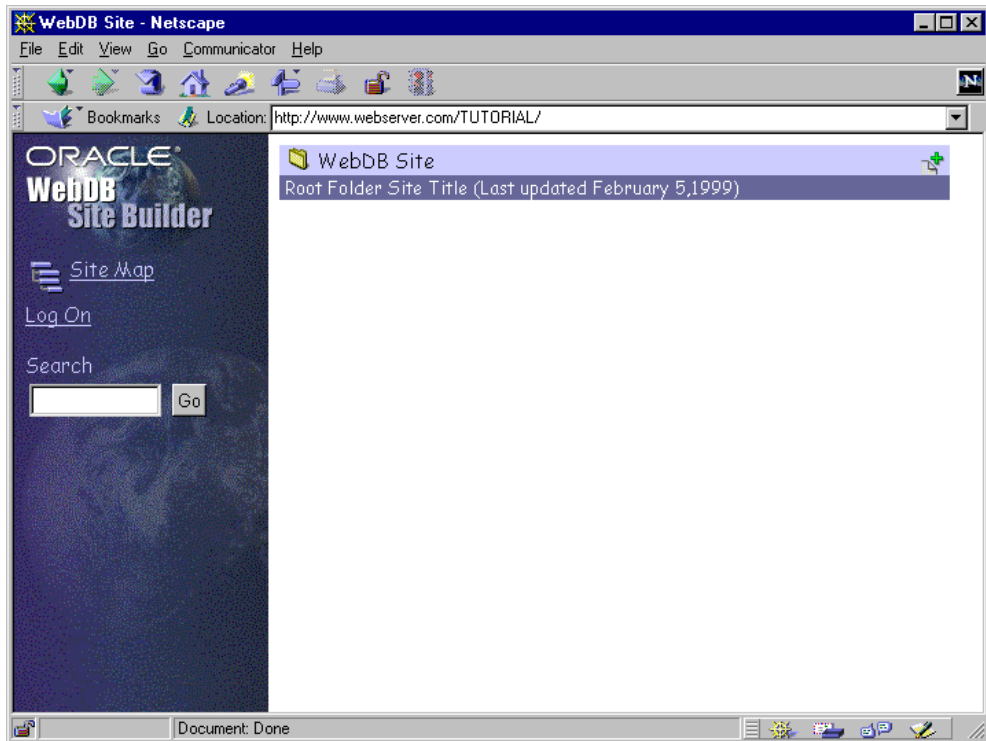
Back: [User Interface Components](#), [Build](#), [Oracle WebDB](#)

The link history is a list of links displayed just above the toolbar that shows which pages precede the current page in the WebDB menu structure. Click on any of the links to go to that page.

Tip: Wherever you are in WebDB, clicking  at the top right of any page always takes you to your WebDB home page.

Displaying an Oracle WebDB Site

You can use WebDB to create database-driven web sites.



A WebDB site is divided into *folders*. A folder is a collection of related *items*, including files, URLs of other web pages, and links to other folders. You can enable users to log on to the site and thus control the content displayed to them. Users who are not logged on to the site can only view items in folders that have been marked as public. Users who are logged on to the site can view items in public folders and can also view items in folders where they have been granted view privileges. Logged on users can also be granted privileges to edit items in folders or administer folders or the entire WebDB site.

To display an Oracle WebDB site:

You display a WebDB site in the same way as you display any other web site or page.

1. Obtain the URL of the WebDB site from your DBA or site administrator.
2. Start your web browser.
3. In the Address or Location field of your browser, type the URL of the WebDB site and press the Enter or Return key.

The WebDB site home page will be displayed and you will be able to view items in public folders.

Tip: It is a good idea to bookmark the WebDB site home page so that you do not have to type the URL each time you want to access it. If you do not know how to add a bookmark, see your web browser documentation.

To log on to an Oracle WebDB site:

If you are not logged on to the WebDB site, you can only view items in public folders. For greater access to the site, you must log on using your user name and password for the database where the site is installed. Once you are logged on to the site, the tasks you can perform depend upon the privileges you have been granted.

Note: If you don't already have a database user name, ask your DBA or site administrator to set one up for you.

1. In the WebDB site navigation bar, click **Log On**.
2. In the log on dialog box, type your user name and password and click **OK**.

If your browser displays an error message, check that you've typed the information correctly, or ask your DBA or site administrator to verify your user information.

If the connection is successful, you will now be able to view items in non-public folders and perform those tasks for which you have the appropriate privileges.

To access the Administration page:

If you are a site administrator, you can perform administrative tasks on the whole site. If you are a folder owner, you can perform administrative tasks only on the folders that you own.

1. Log on to the WebDB site.
2. In the navigation bar, click  to access the Administration page.

To enter Edit Mode:


If you have been granted the appropriate privileges by the folder owner, you can add, edit, or delete items in a folder.

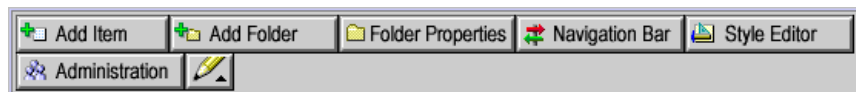
1. Log on to the WebDB site.
2. In the navigation bar, click  to display the Site Map.

Note: The Site Map lists only the folders that you can access. You can access public folders, folders on which you have been granted view or item privileges, and folders that you own.


3. Click the folder name to display the folder.

Until you enter Edit Mode, you can only **view** the contents of the folder.

4. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.





The folder dashboard provides quick access to the tools for editing a folder. Edit Mode also provides you with access to other tools for editing the content of the folder.

5. To exit Edit Mode, in the folder dashboard, click  .

Getting Help

WebDB includes a comprehensive online help system to provide you with all the information you need.

Help Type	Icon	Description
Online Help		Online help provides step-by-step instructions and reference information. You can access WebDB's online help by clicking the large help icon at the top right of any WebDB page.
Context-sensitive Help		Context-sensitive help provides specific information about a particular dialog box or wizard. You can access context-sensitive help by clicking the small help icon at the top right of a wizard or tabbed page.
Quick Tour	<No icon>	The Quick Tour provides a visual introduction to the terminology, workflow, and concepts of WebDB. You can access the Quick Tour from the online help table of contents.

Part I

Installing Oracle WebDB

Read Chapter 1, "Installing and Configuring Oracle WebDB" if you will be installing Oracle WebDB.

Installing and Configuring Oracle WebDB

This chapter describes the system requirements and guides you through the process of installing and configuring Oracle WebDB. It also contains instructions for configuring the WebDB Listener, or using other web servers for use with Oracle WebDB.

- "System Requirements" for Oracle WebDB are contained on page 1-2.
- "Installing Oracle WebDB on Windows NT" on page 1-4 contains WebDB installation instructions on Windows NT.
- "Installing Oracle WebDB on Solaris" on page 1-23 contains WebDB installation instructions on Solaris.
- "Configuring the WebDB Listener" on page 1-53 contains instructions for setting up the Listener after installing WebDB.
- "Setting up the CGI Application" on page 1-57 contains instructions for configuring a CGI executable supplied by WebDB if you are using a standard web server other than the Listener.
- "Adding the PL/SQL Cartridge to OAS" on page 1-59 contains instructions for adding the PL/SQL cartridge if you are using Oracle Application Server (OAS) 4.0 as your web server.
- "Integrating interMedia Text in WebDB Site Builder (Beta)" on page 1-63 contains instructions about setting up *interMedia* Text to perform text searching in web sites created with WebDB.
- "Troubleshooting" on page 1-69 provides resolutions for situations that you may encounter while using Oracle WebDB.

1.1 System Requirements

There are different system requirements depending on whether you are using Oracle WebDB to create or run an application.

The following table lists the minimum and recommended requirements if you are using Oracle WebDB to **create** web sites, WebDB components, or objects:

Operating Systems:	Windows NT 4.0 with Service Pack 3 or Service Pack 4 Solaris (2.5.1 and above)
Databases:	Oracle 7.3.4, 8.0.5, 8i (release 8.1.5)
Web Browsers:	Netscape 4.0.7 and above Microsoft Internet Explorer 4.0.1 with Service Pack 1 and above
Other Products:	SQL*Plus and SQL*Loader must be installed on the machine where you plan to install Oracle WebDB. Note These aren't required if you plan to install only the WebDB Listener. <i>interMedia</i> Text must be installed in the Oracle8i database in order for WebDB's advanced web site search features to be available. Note <i>interMedia</i> Text is supported only in Oracle8i.

You can build WebDB components and web sites that are **viewable** by users who have the following minimum requirements:

Operating Systems:	Windows NT 4.0 with Service Pack 3 or Service Pack 4 Solaris (2.5.1 and above)
Web Browsers:	<i>When viewing on Windows NT or Solaris:</i> Netscape 4.0.7 and above Microsoft Internet Explorer 4.0.1 with Service Pack 1 and above <i>When viewing on Macintosh:</i> Netscape 4.0.8 and above

1.2 Overview of Oracle WebDB Architecture

Oracle 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 operating system can be Windows NT or Solaris.

1.2.1 Using the WebDB Listener

The WebDB HTTP Listener is a lightweight web server that is used for building and deploying PL/SQL-based web applications. It 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 Oracle WebDB to execute.

The PL/SQL gateway's function is similar to that of the Oracle Application Server (OAS) 4.0 PL/SQL cartridge, with some additions. Like the cartridge, the PL/SQL gateway uses the concept of 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 Oracle WebDB itself.

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:

- **PL/SQL Cartridge**

If you want to run Oracle WebDB using Oracle Application Server 4.0, WebDB provides a PL/SQL Cartridge that you that you can add to the Oracle Application Server. The cartridge runs the PL/SQL stored procedures that comprise WebDB to generate dynamic HTML. See "Adding the PL/SQL Cartridge to OAS" on page 1-59 for more instructions.

- **Common Gateway Interface (CGI)**

If you want to use other web servers such as those provided by Netscape, Microsoft, or an Apache web server, WebDB provides a CGI executable that can be used with any of these servers. For instructions on how to configure the CGI, see "Setting up the CGI Application" on page 1-57.

1.3 Installing Oracle WebDB on Windows NT

IMPORTANT: Oracle WebDB 2.0 *cannot* be installed on remote Oracle databases. You can install WebDB on local Oracle databases only.

Before you install Oracle WebDB into Oracle 7.3.4, 8.0.5, or 8.1.5 (Oracle8i) on Windows NT:

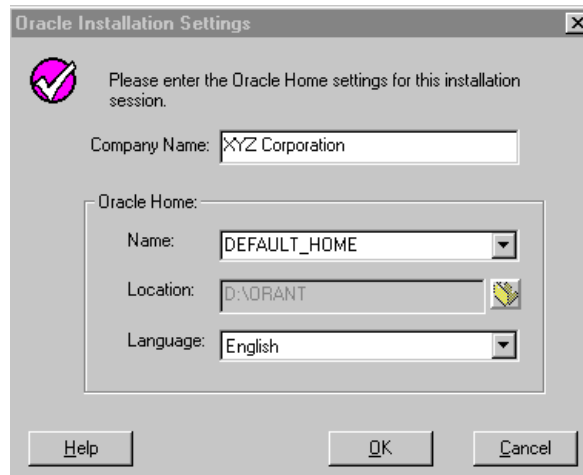
- Review the Release Notes that are provided on your product CD.
- You must have a SYS user password on one of the Oracle database versions shown on page 1-2.
- The database where you plan to install Oracle WebDB must be up and running. You can use SQL*Plus to first log on to and connect to the database with administrator privileges and then start your database with the following commands:
 - connect *user name/password* (the default for the SYS user is SYS/CHANGE_ON_INSTALL)
 - STARTUP
- SQL*Plus and SQL*Loader must be already installed on the same machine where you plan to install Oracle WebDB. If you have multiple versions of either of these applications, click **Start, Settings, Control Panel, System**, then **Environment**. Then, make sure there is a Path system variable that points to the correct version of the application.
- You must ensure that 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 each.
- If you are installing Oracle WebDB into an Oracle8i database, make sure that you install WebDB in a separate Oracle Home and also create a TNS Names alias pointing to your Oracle8i database. For information, see "Setting up a TNS Names Alias" on page 1-54.

In addition, if you are installing WebDB into Oracle8i on Windows NT:

- You must install WebDB 2.0 into a non-8i Oracle Home: for example, an Oracle Home where you have installed an Oracle product other than Oracle8i. If a non-8i 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 2.0. You add the alias to the `tnsnames.ora` file in the new Oracle Home. The default location of this file is `Oracle_Home\net80\admin`. For more information on how to do this, see "Setting up a TNS Names Alias" on page 1-54.

To install Oracle WebDB on Windows NT:

1. Insert the CD labeled **WebDB**.
2. From the **Start** menu on the NT desktop, choose **Run**.
3. Type `D:\WEBDB\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 entry field, then click **OK**. If you have questions about an entry field in this window or any other installation window, click **Help**.



Type the name of your company in the **Company Name** field.

An Oracle Home corresponds to the environment in which the Oracle database runs. During installation of the Oracle database, you define a **Name**, **Location**, and **Language** for the Oracle Home.

- The **Name** drop-down list contains all Oracle Home Names defined for the database. For most database installations, choose DEFAULT_HOME as the **Name**.

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.

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, installs all required files (for example, SQL*Plus and SQL*Loader), and provides required permissions.

IMPORTANT: If you are installing on Oracle8i, you must install WebDB into an Oracle Home that is different from the Oracle Home for the Oracle8i database. In addition, the Oracle Home cannot be in a subdirectory of the Oracle8i Home.

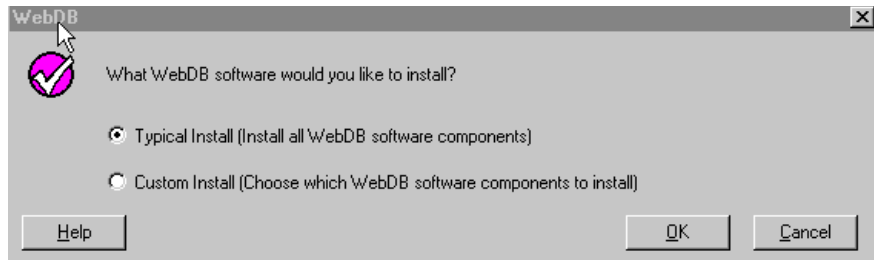
The Oracle Home can be one where you have installed an Oracle product other than Oracle8i or a new Oracle Home.

- **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. In the WebDB window, choose a typical or custom install, then click **OK**.



If you choose **Typical Install**, these software components are installed with default settings chosen by WebDB:

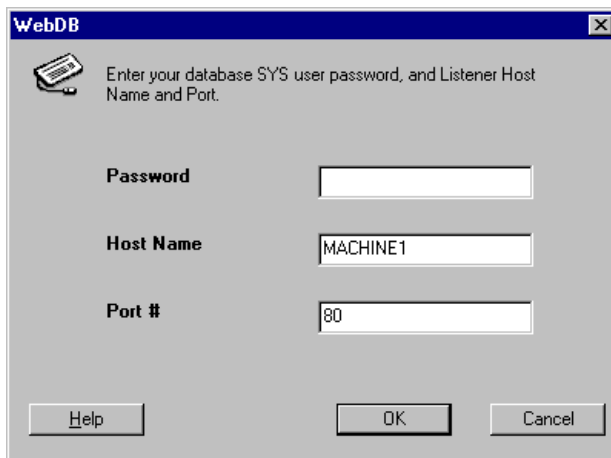
Software Component	Purpose
Oracle WebDB 2.0.1	
WebDB Listener 2.0.3.1.3	Allows you to use your web browser to access the database.
PL/SQL Web Toolkit 4.0.5.4	Allows you to write web-enabled applications.
Required Support Files 7.3.4.1.1	Required by the Listener if WebDB is installed in Oracle 7.3.4
Required Support Files 8.0.5	Required by the Listener if WebDB is installed in other Oracle database versions.

See "Windows NT Typical Install" on page 1-8 for further instructions.

If you choose **Custom Install**, you can install any or all of the above software components. You also can choose your own installation settings rather than the default settings. See "Windows NT Custom Install" on page 1-13 for further instructions.

1.3.1 Windows NT Typical Install

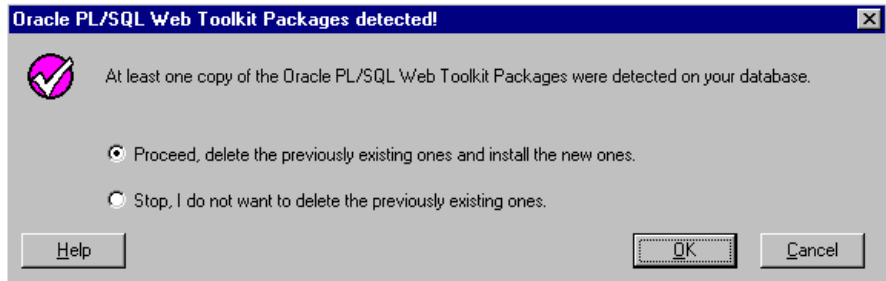
1. If you selected **Typical Install**, you are prompted for your database SYS user password, the host machine name, and the Listener port.



- **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 Listener will be installed. You can obtain the host name by typing `hostname` at a command line prompt.
 - The machine **Port #** is used by the WebDB Listener to transmit data between the database and web browser.
2. Click **OK** to install Oracle WebDB, the Listener, and the PL/SQL Web Toolkit. Oracle WebDB and the PL/SQL Web Toolkit are installed in the Oracle database.

Note: The WebDB Listener executable files are installed in *Oracle_Home\bin* and the WebDB Listener configuration files are installed in the *Oracle_Home\Listener* directory.

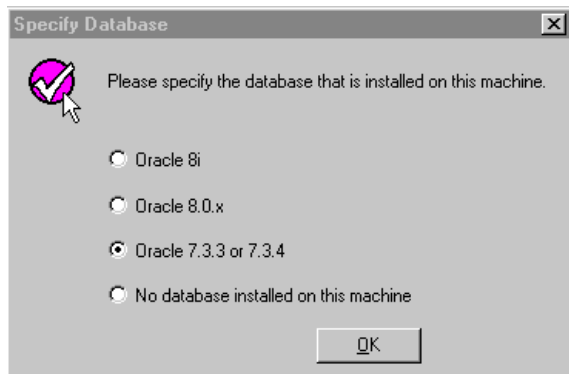
3. If any versions of the PL/SQL Web Toolkit already exist in the database, you are asked if you want to delete them.



There should be only one instance of PL/SQL Web Toolkit version 4.0 in the database. You can have previous versions in addition to the 4.0 version.

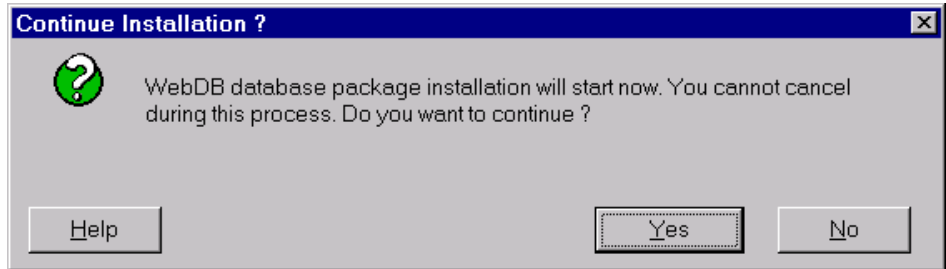
- Click **Proceed, delete the previously existing ones and install the new ones**, then **OK** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0 version instead.
- Click **Stop, I do not want to delete the previously existing ones**, then **OK** to continue the WebDB installation process without installing version 4.0 of the Toolkit. You'd typically click this options if there already is an existing 4.0 version that you want to use.
- Click the **Cancel** button to terminate the installation process.

4. In the Specify Database window, click the version of the Oracle database where you are installing WebDB, then click **OK**.

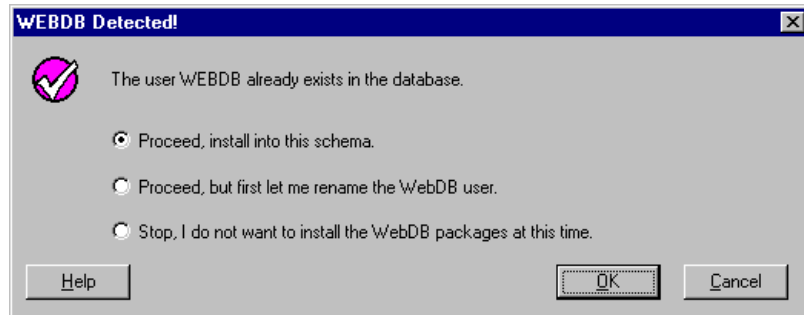


Note: If you choose "No database installed on this machine", the Oracle WebDB Listener is the only WebDB component installed. Also, if you are installing into an Oracle8i database, make sure that the `tnsnames.ora` file in the `Oracle_Home/Network/Admin` directory includes a TNS Names alias. See "Setting up a TNS Names Alias" on page 1-54.

5. In the Continue Installation window, click **Yes** to install the WebDB database packages and Required Support Files. This process will take several minutes to complete.



6. If Oracle WebDB is already installed in the database, you are asked if you want to overwrite it or install a new version in addition to this version.

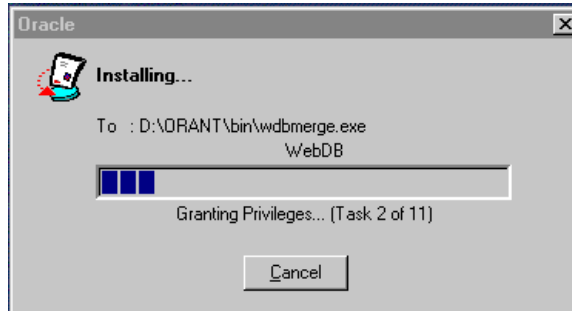


- Click **Proceed, install into this schema**, then **OK** to overwrite the currently installed version of Oracle WebDB.
- Click **Proceed, but first let me rename the WebDB user**, then **OK** to install WebDB into another schema. This option installs a new version of Oracle WebDB in addition to the existing version.

It's recommended that you install only one instance of Oracle WebDB in the database. However, it is possible to have two installed instances when migrating between different Oracle WebDB versions.

(If you click this option, a window similar to the one shown in step 3 on page 1-21 appears. Follow the instructions in step 3 to specify a new **WebDB User** name. This will install WebDB into another schema).

- Click **Stop, I do not want to install the WebDB packages at this time**, then **OK** to terminate the installation process.
7. If you choose to proceed, installation begins. The installation takes several minutes to complete. An indicator displays the progress.



In addition, you should see a DOS window that displays the WebDB packages as they are being installed. This process will take several minutes to complete.

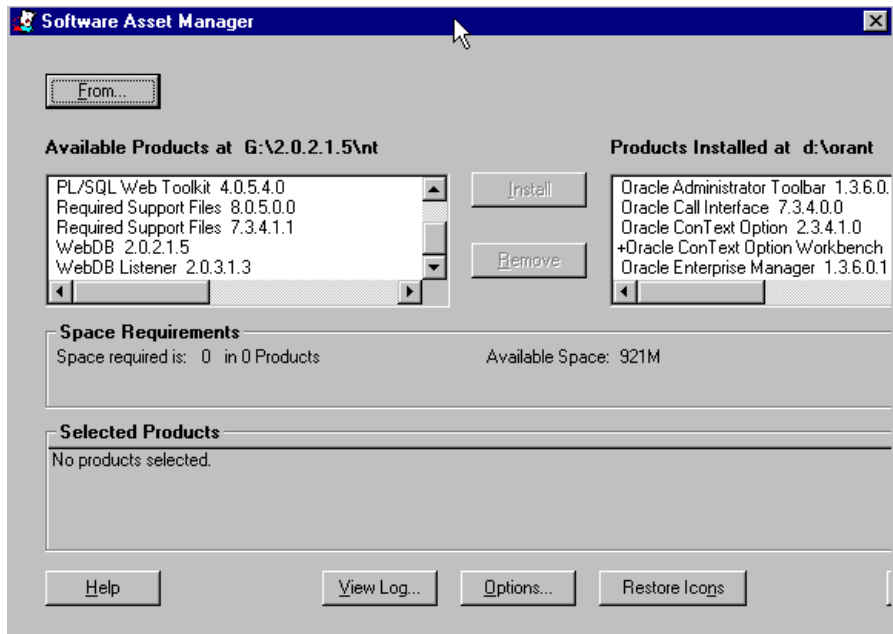
8. When installation completes, a success message displays.

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. For more information, see "Configuring the WebDB Listener" on page 1-53.

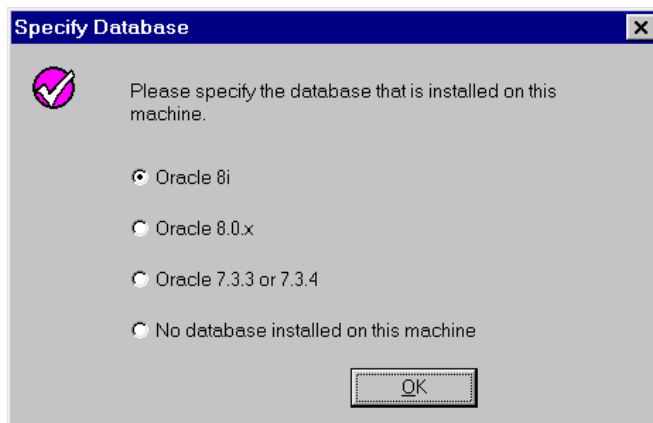
Note the URLs and user name/password in the message.

1.3.2 Windows NT Custom Install

1. Follow steps 1 through 5 in the section, "Installing Oracle WebDB on Windows NT" beginning on page 1-4.
2. If you selected a **Custom Install** in step 5, the Software Asset Manager window displays the Oracle WebDB software components you can install. Select one or more software components to install, then click **Install**.



3. The Specify Database window displays from which you can select which Oracle database version you have installed on your computer:



Select the appropriate Oracle database version from the available choices and click **OK**.

Note: If you choose "No database installed on this machine", the Oracle WebDB Listener is the only WebDB component installed. Also, if you are installing into an Oracle8i database, make sure that the `tnsnames.ora` file in the `Oracle_Home/Network/Admin` directory includes a TNS Names alias. See "Setting up a TNS Names Alias" on page 1-54.

4. In the WebDB Listener window, you are prompted for the Data Access Descriptor (DAD) configuration information:

where:

- The **Host Name** is the name of the machine on which the 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 Oracle WebDB URLs. In the following URL:

`http://webdb.myserver.com:2000/`

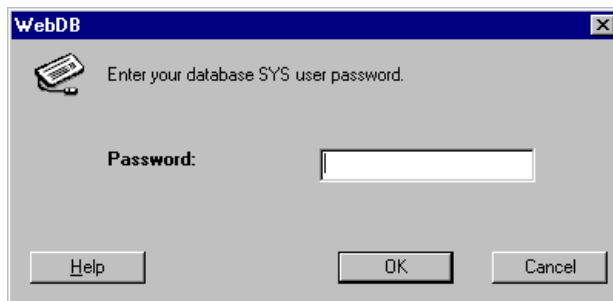
webdb is the Data Access Descriptor Name and *2000* is the Port Number.

- The **WebDB User Name** is the name of the database schema in which Oracle WebDB will be installed. In most installations, the **WebDB User Name** and **Data Access Descriptor Name** will be the same.
- The machine **Port #** will be used by the WebDB Listener to transmit data between the database and web browser.

Note: The WebDB Listener executable files are installed in *Oracle_Home\bin* and the WebDB Listener configuration files are installed in the *Oracle_Home\Listener* directory.

5. Click **OK**.

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

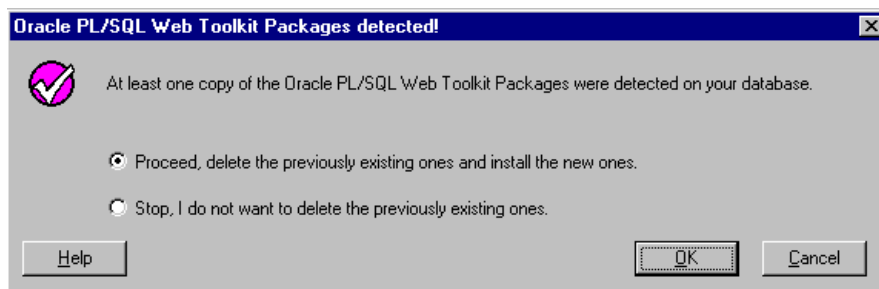


7. Click **OK** to begin the custom installation of WebDB.

1.3.2.1 PL/SQL Web Toolkit Custom Install on Windows NT

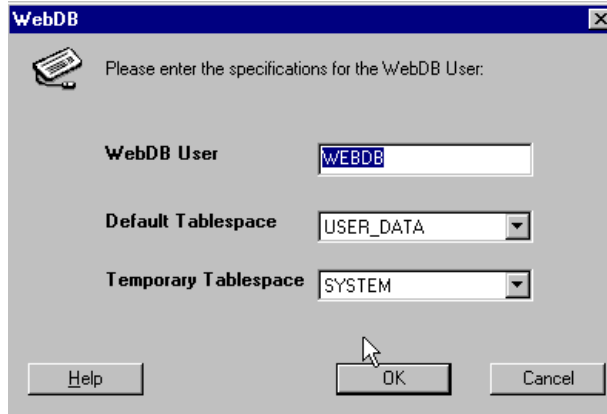
IMPORTANT: The PL/SQL Web Toolkit must be installed *before* you install Oracle WebDB.

1. If you select **PL/SQL Web Toolkit** in the Software Asset Manager window, and any versions of the PL/SQL Web Toolkit already exist in the database, you are asked if you want to delete them. There should be only one instance of PL/SQL Web Toolkit version 4.0 in the database. However, you can have previous versions of PL/SQL Web Toolkit installed.



- Click **Proceed, delete the previously existing ones and install the new ones**, then **OK** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0 version instead.
 - Click **Stop, I do not want to delete the previously existing ones**, then **OK** to terminate the installation process and display the Software Asset Manager window.
2. Click **OK**.

3. In the next window, specify a WebDB user and default and temporary tablespaces for the user.



- **WebDB User** is the name of the database schema where the PL/SQL Web Toolkit will be installed.
 - The **Default Tablespace** is used to store any database objects or components created by the WebDB schema.
 - The **Temporary Tablespace** will be used for creation of temporary table segments for operations performed by the WebDB schema such as sorting table rows.
4. Click **OK** to install the PL/SQL Web Toolkit. A success message displays when installation completes.

1.3.2.2 WebDB Listener Custom Install on Windows NT

1. If you select **WebDB Listener** in the Software Asset Manager window, you are prompted for Listener configuration information.

- The **Host Name** is the name of the machine on which the 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 Oracle WebDB URLs. In the following URL:

```
http://webdb.myserver.com:2000/
```

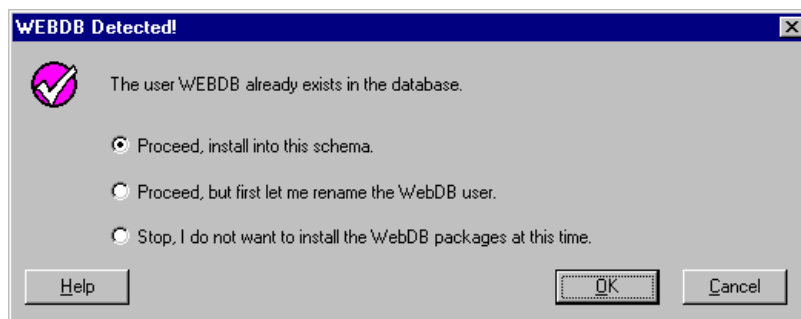
webdb is the Data Access Descriptor Name and *2000* is the Port Number.
 - The **WebDB User Name** is the name of the database schema in which Oracle WebDB will be installed. In most installations, the **WebDB User Name** and **Data Access Descriptor Name** will be the same.
 - The machine **Port #** will be used by the WebDB Listener to transmit data between the database and web browser.
2. Click **OK**. A success message displays when installation completes.

1.3.2.3 Required Support Files Custom Install on Windows NT

If you install the WebDB Listener in Oracle database versions 7.3.4 or 8.0.5, WebDB automatically installs all required support files (versions 7.3.4.1.1 and 8.0.5, respectively) for you. The only time that you may need to perform a custom install of a required support file is to replace a currently installed version that has become corrupted.

1.3.2.4 Oracle WebDB Custom Install on Windows NT

1. If you select **WebDB** in the Software Asset Manager window and Oracle WebDB is already installed on your server, you will be prompted to overwrite it, or to install a new version in addition to this version.



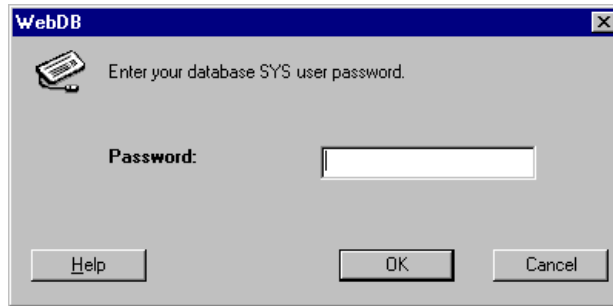
- Click **Proceed, install into this schema**, then **OK** to overwrite the currently installed version of Oracle WebDB.
- Click **Proceed, but first let me rename the WebDB user**, then **OK** to install Oracle WebDB into another schema. This option installs a new instance of Oracle WebDB in addition to the existing version.

It's recommended that you install only one instance of Oracle WebDB in the database. However, it is possible to have two installed instances when migrating between different Oracle WebDB versions.

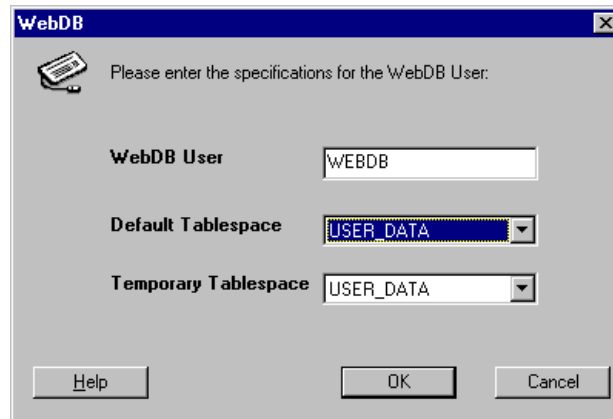
(If you click this option, a window similar to the one shown in step 3 on page 1-21 appears. Follow the instructions in step 3 to specify a new **WebDB User** name. This will install WebDB into another schema)

- Click **Stop, I do not want to install the WebDB packages at this time**, then **OK** to terminate installation of Oracle WebDB.

2. In the next window, type the SYS user password that you use to log on to the Oracle database where you are installing Oracle WebDB. (If you are already logged on to the database, this window doesn't display.)



3. In the next window, specify a WebDB user name and the default and temporary tablespaces for the user.



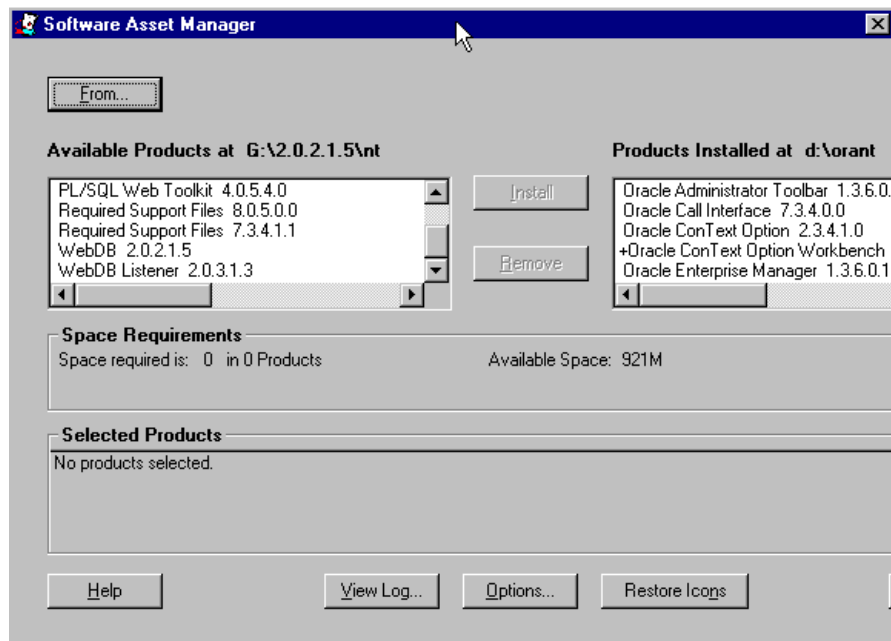
- The **WebDB User** is the database schema where Oracle WebDB will be installed. You type the WebDB User name to log on to Oracle WebDB for the first time.
- The **Default Tablespace** will be used to store any database objects or components created by the WebDB user.
- The **Temporary Tablespace** will be used for creation of temporary table segments for operations performed by the WebDB user such as sorting table rows.

4. Click **OK**. A success message displays when installation completes.
5. Note the URL and user name/password in the message. Type the URL into your web browser's location or address field to display a dialog for logging on to WebDB.

1.3.2.5 Deinstalling on Windows NT

To deinstall Oracle WebDB or other software components such as:

- WebDB Listener 2.0.3
 - PL/SQL Web Toolkit 4.0.5
 - Required Support Files 8.0.5
1. Follow Steps 1-4 beginning on page 1-5.
 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.

1.4 Installing Oracle WebDB on Solaris

IMPORTANT: Oracle WebDB 2.0 *cannot* be installed on remote Oracle databases. You can install WebDB on local Oracle databases only.

Before you install Oracle WebDB on Solaris:

- Review the Release Notes that are provided on your product CD.
- You must have a SYS user password on one of the Oracle database versions shown on page 1-2.
- The database where you plan to install Oracle WebDB must be up and running. You can use SQL*Plus to first log on to and connect to the database with administrator privileges and then start your database with the following commands:
 - `connect user name/password` (the default for the SYS user is SYS/CHANGE_ON_INSTALL)
 - STARTUP
- If you are installing Oracle WebDB into an Oracle8i database, make sure that you install WebDB in a separate Oracle Home and also create a TNS Names alias pointing to your Oracle8i database. For information, see "Setting up a TNS Names Alias" on page 1-54.
- 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 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.

- If you plan on starting the WebDB Listener with port less than 1025, you must log on to your Solaris machine as the root administrative user.
- 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
```

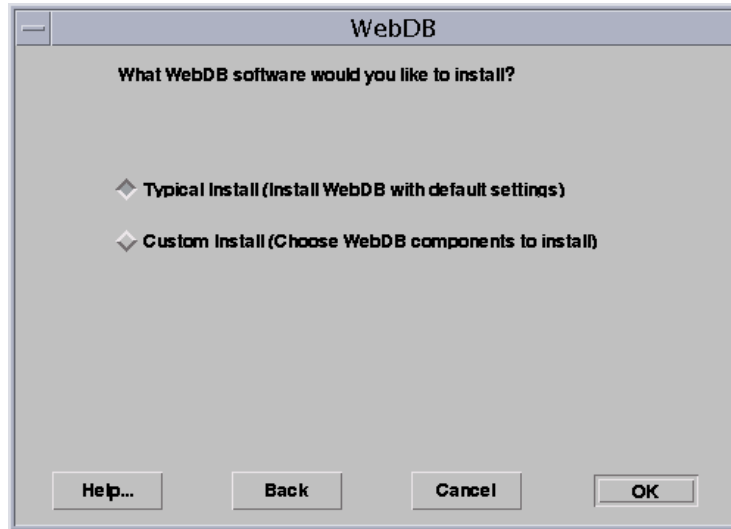
```
wy150 wy50
```

```
xsun xsun5
```

To install Oracle WebDB on Solaris:

1. Insert the CD labeled WebDB.
2. Navigate to the `/orainst/` directory.
3. Type `orainst.`

4. In the WebDB window, choose a Typical or Custom Install and click **OK**.



IMPORTANT: If you choose a **Typical Install**, you cannot change the default schema name of **WEBDB**. If you need to change the schema name to something other than **WEBDB**, you must choose **Custom Install**.

If you choose **Typical Install**, you can install any or all of the following software components with default settings chosen by WebDB:

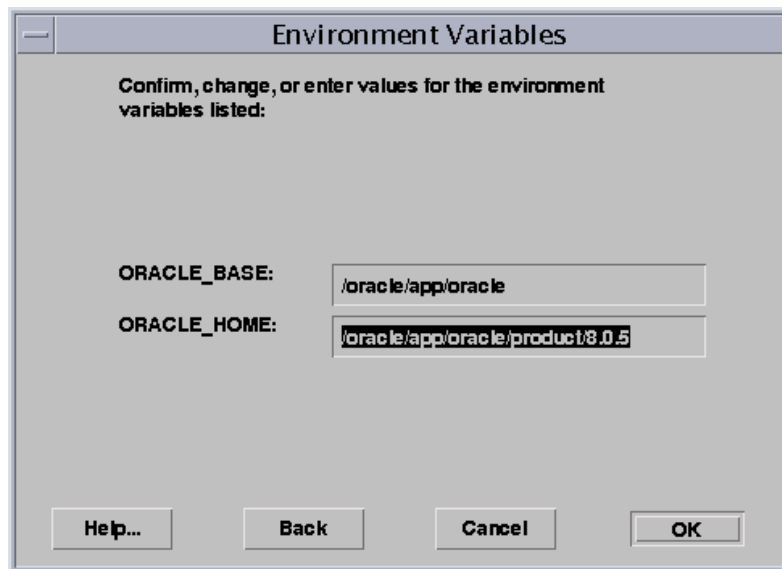
Software Component	Purpose
Oracle WebDB 2.0.1	
WebDB Listener 2.0.3.1.3	Allows you to use your web browser to access the database.
PL/SQL Web Toolkit 4.0.5.4.	Allows you to write web-enabled applications.

See "Solaris Typical Install" on page 1-26 for further instructions.

If you choose **Custom Install**, you can install any or all of the above software components and specify your own settings. See "Solaris Custom Install" on page 1-36 for further instructions.

1.4.1 Solaris Typical Install

1. If you selected **Typical Install** in the WebDB window (see step 4 on page 1-25), you are asked to 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 and click **OK**. You are prompted for your database SYS user password, the host machine name, and the Listener port.

2. In the next window, type the required information:



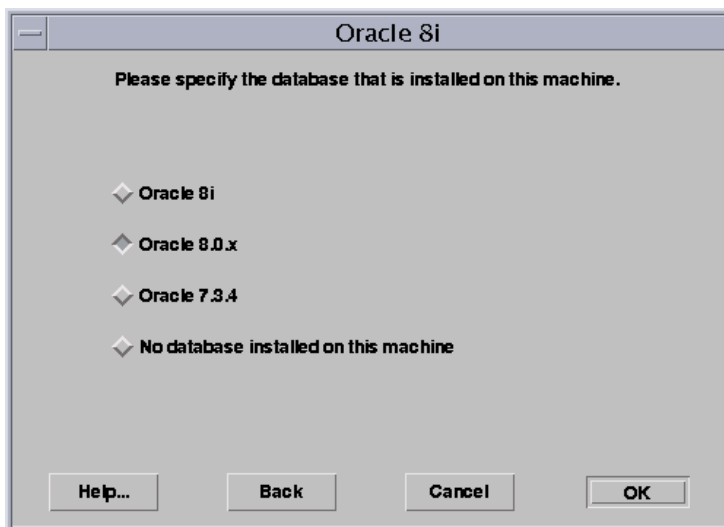
The screenshot shows a dialog box titled "WebDB". The main text inside the dialog reads: "Enter your database SYS user password, and Listener Host Name and Port." Below this text are three input fields. The first is labeled "Password" and contains a series of asterisks. The second is labeled "Host Name" and contains the text "hostname.company.com". The third is labeled "Port #" and contains the text "9000". At the bottom of the dialog are four buttons: "Help...", "Back", "Cancel", and "OK".

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

- **Host Name** is the name of the machine on which the Listener will be installed. You can obtain the host name by typing `hostname` at a command line prompt.
- The machine **Port #** is used by the WebDB Listener to transmit data between the database and web browser.

Note: Unless you have root privileges on the Solaris machine, you must specify a port higher than 1024 to be able to start the WebDB Listener. You can also run the Oracle Listener as `setuid root`. See "Running the WebDB Listener as `setuid root`" on page 1-52.

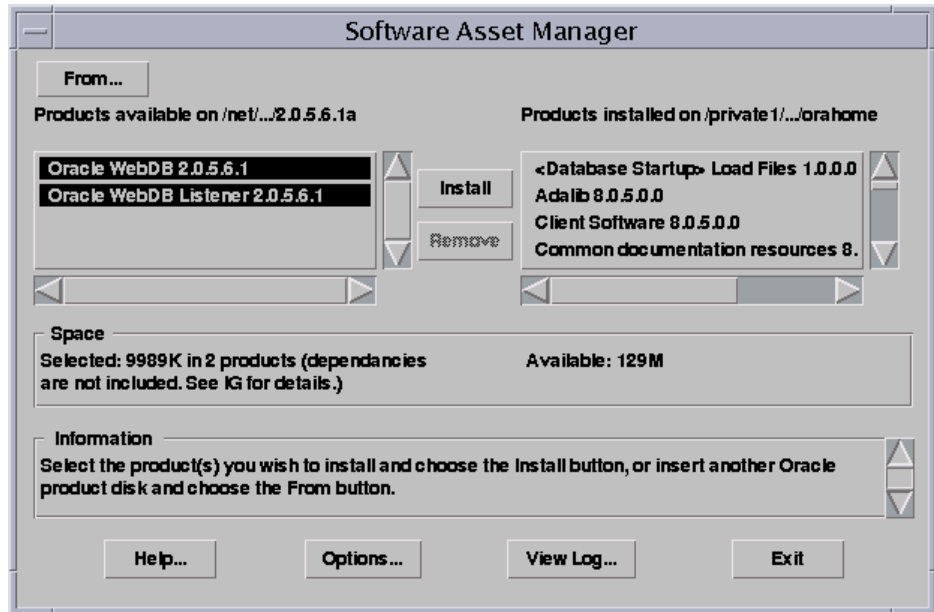
3. In the next window, select which Oracle database version you have installed on your machine:



Note: If you choose "No database installed on this machine", the Oracle WebDB Listener is the only WebDB component installed. Also, if you are installing into an Oracle8i database, make sure that the `tnsnames.ora` file in the `Oracle_Home/Network/Admin` directory includes a TNS Names alias. See "Setting up a TNS Names Alias" on page 1-54.

Click **OK**.

4. 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



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.

5. If you select **PL/SQL Web Toolkit** in the Software Asset Manager window, and any versions of the PL/SQL Web Toolkit already exist in the database, you are asked if you want to delete them. There should be only one instance of PL/SQL

Web Toolkit version 4.0 in the database. However, you can have previous versions of PL/SQL Web Toolkit installed.

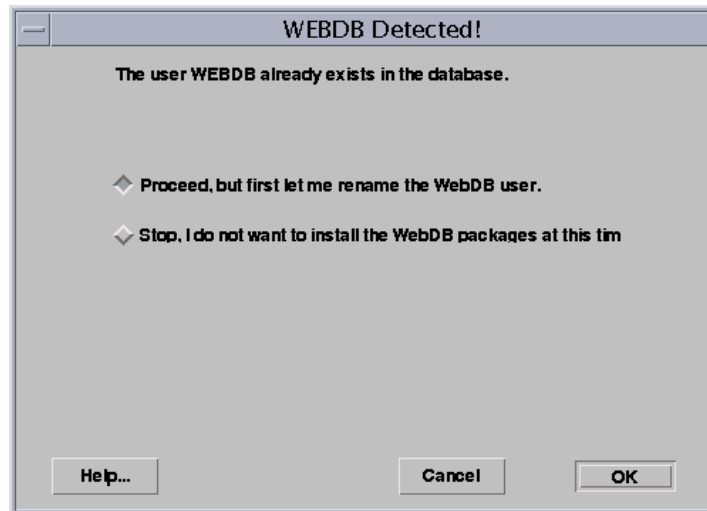


- Choose **Proceed, delete the previously existing ones and install the new ones** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0.7 version instead.

Note Version 4.0.7 of the PL/SQL Web Toolkit must be installed in order to install WebDB.

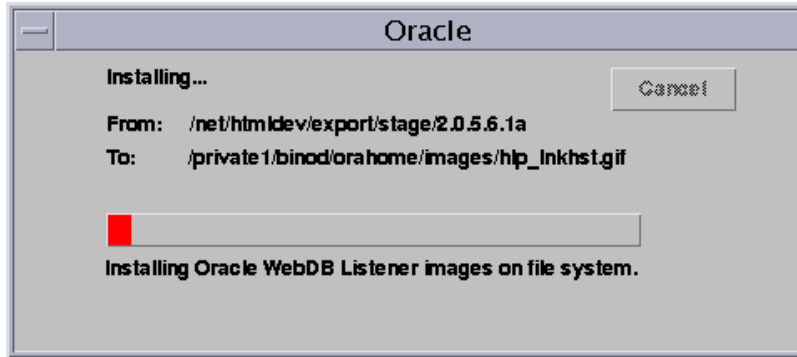
- Choose **Stop, I do not want to delete the previously existing ones** to keep PL/SQL Web Toolkit.

6. If the user/schema WebDB already exists on your machine, you can choose to rename it or cancel the installation of WebDB packages at this time.



- Choose **Proceed, but first let me rename the WebDB user** to install WebDB 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.

7. Installation proceeds based on your choices in the Software Asset Manager. Installation can take several minutes; do not touch your keyboard while the installation is in progress.



8. A success message displays when installation of the Listener is complete. The message displays:
 - A command for starting the WebDB Listener manually.
 - Two URLs to navigate to pages for adjusting the WebDB Listener settings.

Note: You may need to set environment variables before starting the WebDB Listener.

Make a note of the URLs shown in the message and click **OK**.

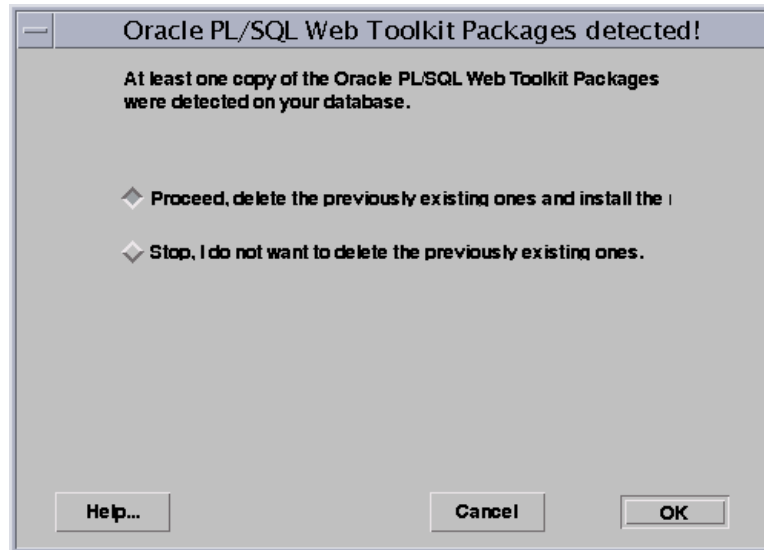
For information about installing each WebDB software component separately:

- See "PL/SQL Web Toolkit Typical Install on Solaris" on page 1-33 for more information about installing the PL/SQL Toolkit.
- See "WebDB Listener Typical Install on Solaris" on page 1-34 for more information about installing the WebDB Listener.
- See "Oracle WebDB Typical Install on Solaris" on page 1-35 for more information about installing Oracle WebDB.

1.4.1.1 PL/SQL Web Toolkit Typical Install on Solaris

IMPORTANT: The PL/SQL Web Toolkit must be installed *before* you install Oracle WebDB.

1. If you chose the PL/SQL Web Toolkit in the Software Asset Manager (see step 4 on page 1-29) and any versions of the PL/SQL Web Toolkit already exist in the database, you are asked if you want to delete them. There should be only one instance of the PL/SQL 4.0 Toolkit in the database. You can have previous versions in addition to the 4.0 version.

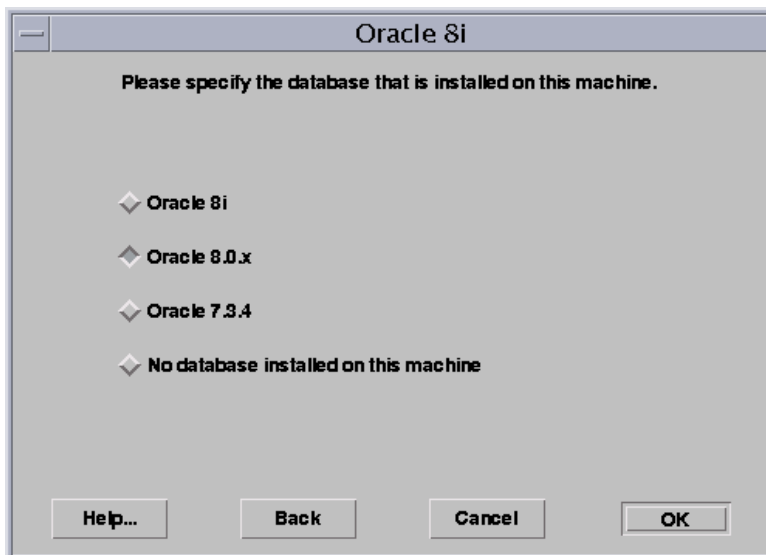


- Choose **Proceed, delete the previously existing ones and install the new ones**, then **OK** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0 version.
- Choose **Stop, I do not want to delete the previously existing ones**, then **OK** to terminate the installation process and display the Software Asset Manager window.

2. If you choose to proceed, installation of the PL/SQL Web Toolkit begins. The installation takes several minutes to complete. When it completes, the Software Asset Manager displays.

1.4.1.2 WebDB Listener Typical Install on Solaris

1. If you choose the Oracle WebDB Listener in the Software Asset Manager (see step 4 on page 1-29) you are asked to specify the version of the Oracle database where you are installing WebDB, then click **OK**.

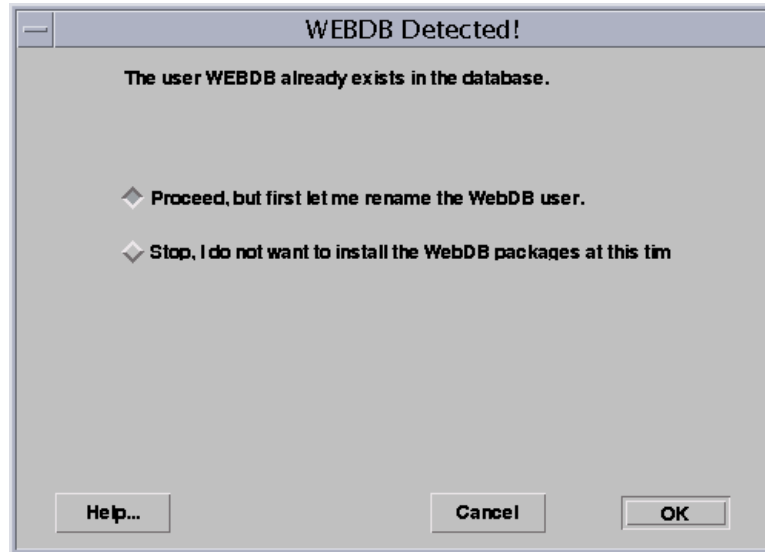


Note: If you choose "No database installed on this machine", the Oracle WebDB Listener is the only WebDB component installed. Also, if you are installing into an Oracle8i database, make sure that the `tnsnames.ora` file in the `Oracle_Home/Network/Admin` directory includes a TNS Names alias. See "Setting up a TNS Names Alias" on page 1-54.

2. Installation of the Listener begins. When it completes, the Software Asset Manager displays.

1.4.1.3 Oracle WebDB Typical Install on Solaris

1. If you choose Oracle WebDB in the Software Asset Manager (see step 4 on page 1-29) and Oracle WebDB is already installed in the database, you are asked if you want to overwrite it, or install a new version in addition to this version.



- Choose **Proceed, but first let me rename the WebDB user** to install WebDB 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.

It's recommended that you install only one instance of Oracle WebDB in the database. However, when migrating between different Oracle WebDB versions, it's possible to have two installed instances.

(If you click this option, a window similar to the one shown in step 6 on page 1-31 appears. Follow the instructions in step 6 to specify a new **WebDB User** name. This will install WebDB into another schema.

2. If you choose to proceed, the installation process begins. It takes several minutes to complete. At any point during the process you can click **Cancel** to terminate installation.

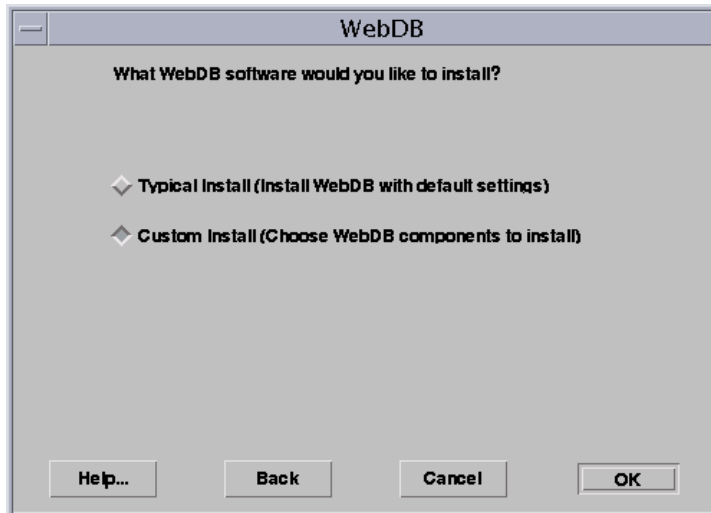
3. When installation completes, a success message displays.

Note the user name/password displayed in the message. In addition, 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. For more information, see "Configuring the WebDB Listener" on page 1-53.

1.5 Solaris Custom Install

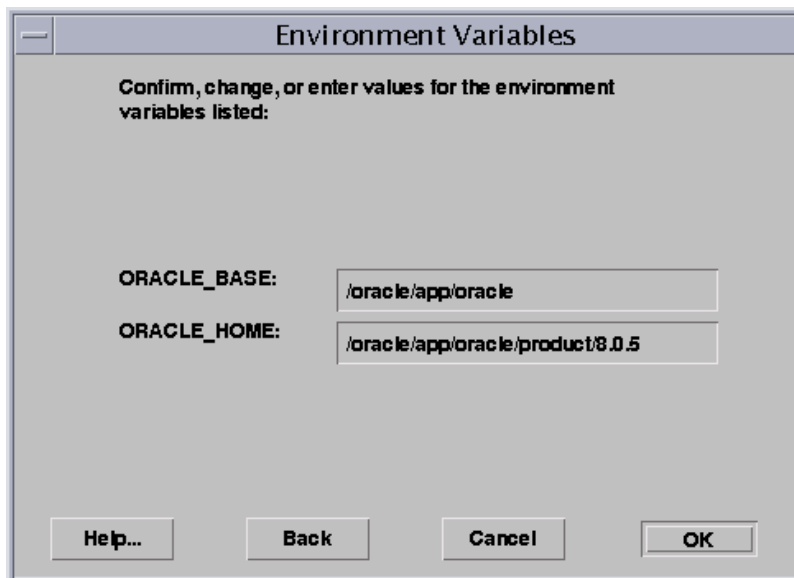
To perform a Custom Install on a Solaris machine, follow these steps:

1. To install your choice of WebDB components, choose Custom Install and click **OK**.



IMPORTANT: A Custom Install lets you change the schema name to something other than WEBDB; a Typical Install automatically installs the schema with the name, WEBDB.

2. If you selected **Custom Install** in the WebDB window (see step 4 on page 1-25), you are asked to set paths for the ORACLE_BASE and ORACLE_HOME environment variables.



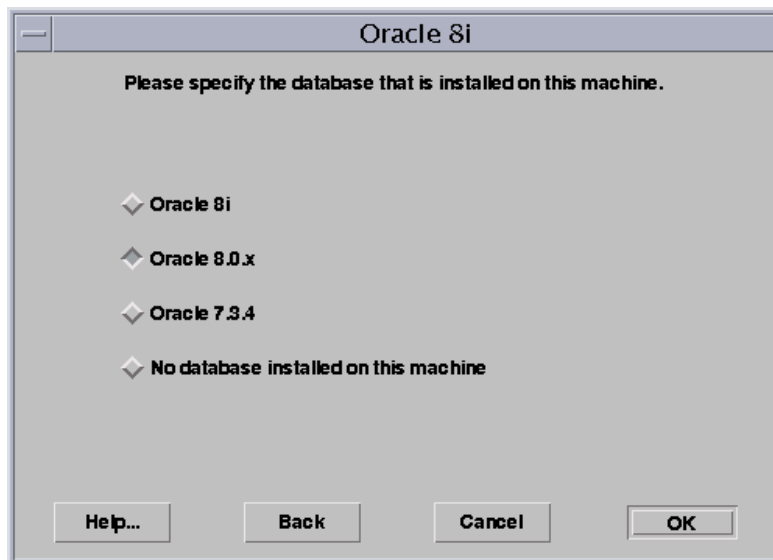
- **ORACLE_BASE** is the directory where you install Oracle products. A product directory (/ORACLE_BASE/product) and a configuration directory (/ORACLE_BASE/admin) are located under ORACLE_BASE. The product directory contains the ORACLE_HOME and all product files.
- **ORACLE_HOME** is the directory where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

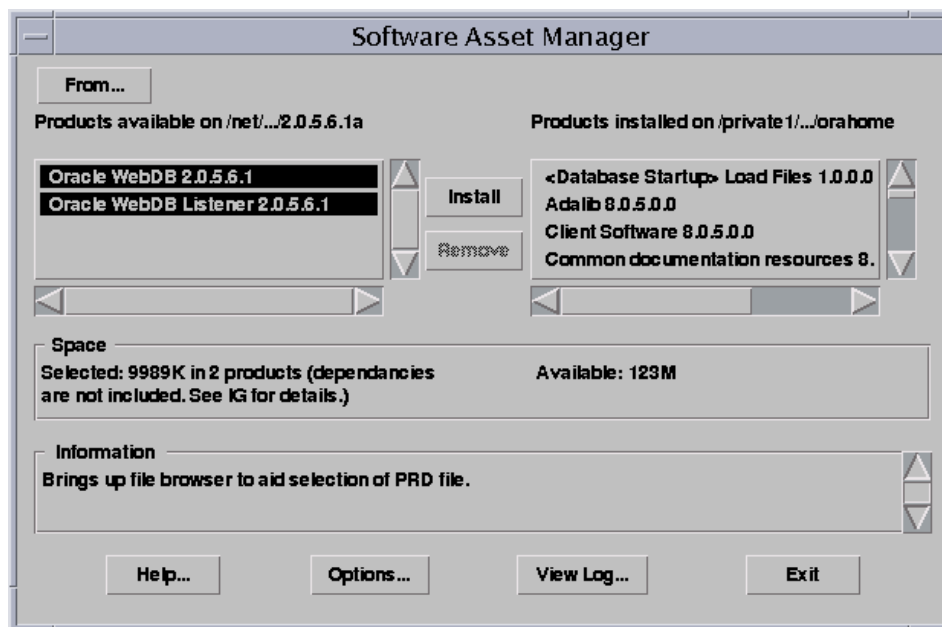
For example, if the `ORACLE_BASE` is `/oracle/app`, you could create a new Oracle Home by typing `/oracle/app/webdb_home`. Click **OK**. You are prompted for your database SYS user password, the host machine name, and the Listener port.

3. On this window, you are asked to specify the version of the Oracle database where you are installing WebDB, then click **OK**.



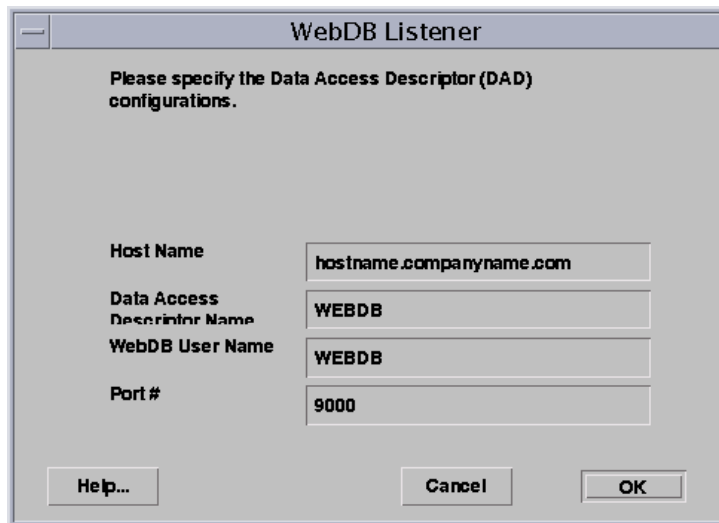
Note: If you choose "No database installed on this machine", the Oracle WebDB Listener is the only WebDB component installed. Also, if you are installing into an Oracle8i database, make sure that the `tnsnames.ora` file in the `Oracle_Home/Network/Admin` directory includes a TNS Names alias. See "Setting up a TNS Names Alias" on page 1-54.

4. 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



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.

5. On this window, you are prompted for the WebDB Listener information:



The image shows a dialog box titled "WebDB Listener". Inside the dialog, there is a prompt: "Please specify the Data Access Descriptor (DAD) configurations." Below this prompt, there are four input fields with labels to their left: "Host Name" with the value "hostname.companyname.com", "Data Access Descriptor Name" with the value "WEBDB", "WebDB User Name" with the value "WEBDB", and "Port #" with the value "9000". At the bottom of the dialog, there are three buttons: "Help...", "Cancel", and "OK".

- The **Host Name** is the name of the machine on which the 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://hostname.company:9000/`

WEBDB is the Data Access Descriptor Name

hostname is the Host Name

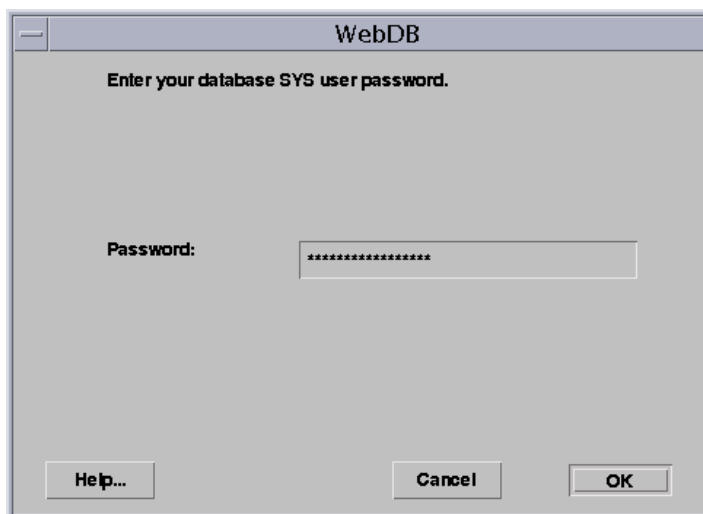
9000 is the Listener Port Number

- The **WebDB Schema** is the name of the database schema in which WebDB will be installed.

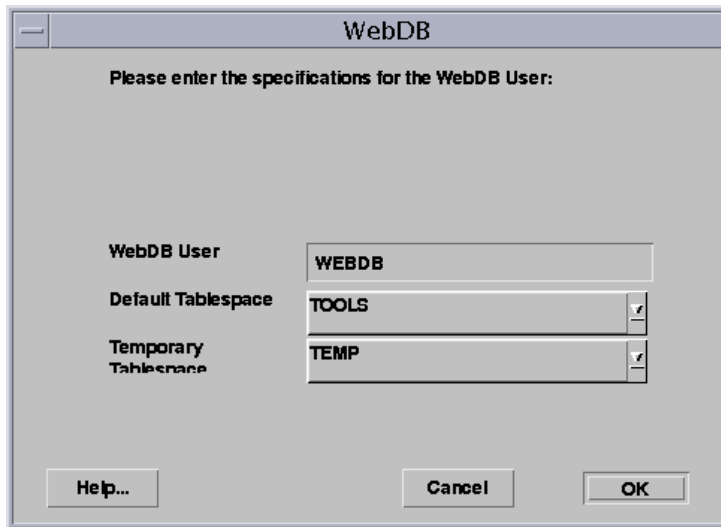
- The **Listener Port** will be used by the WebDB Listener to transmit data between the database and Web browser. The default port number is 80. Choose another port number if 80 is being used by another application.

Note: Unless you have root privileges on the Solaris machine, you must specify a port higher than 1024 to be able to start the WebDB Listener. You can also run the Oracle Listener as setuid root. See "Running the WebDB Listener as setuid root" on page 1-52.

6. On this window, type the SYS password for the database you want to install Oracle WebDB into and click **OK**. The default password for SYS is CHANGE_ON_INSTALL.



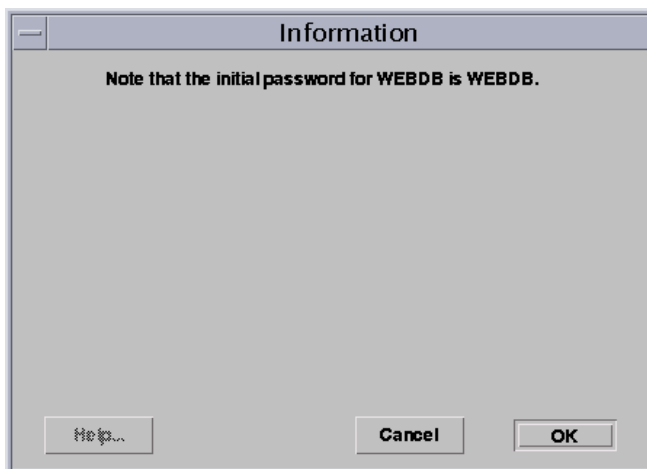
7. In this window, type the information required and click **OK**:



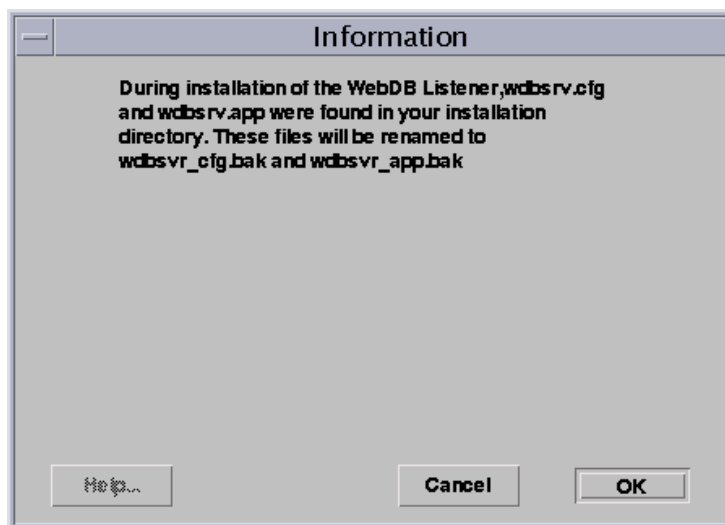
The image shows a dialog box titled "WebDB" with the instruction "Please enter the specifications for the WebDB User:". It contains three input fields: "WebDB User" with the value "WEBDB", "Default Tablespace" with the value "TOOLS", and "Temporary Tablespace" with the value "TEMP". Each of the last two fields has a small dropdown arrow on its right side. At the bottom of the dialog are three buttons: "Help...", "Cancel", and "OK".

- **WebDB User** is the name of the database schema where the PL/SQL Web Toolkit will be installed.
- The **Default Tablespace** is used to store any database objects or components created by the WebDB user.
- The **Temporary Tablespace** will be used for creation of temporary table segments for operations performed by the WebDB user such as sorting table rows.

8. The Information window provides the user name and password for the WebDB schema. Note this information for future reference and click **OK**.



9. Installation of the Oracle 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. Click **OK**.



10. A success message displays when installation of the Listener is complete. The message displays:
- A command for starting the WebDB Listener manually.
 - Two URLs to navigate to pages for adjusting the WebDB Listener settings. See "Configuring the WebDB Listener" on page 1-53.

Make a note of the URLs shown in the message and click **OK**.

Note: You may need to set environment variables before starting the WebDB Listener. See "Setting Environment Variables" on page 1-62.

For more information on installing separate components of WebDB, see:

- See "PL/SQL Web Toolkit Custom Install on Solaris" on page 1-45 for more information about installing the PLSQL Toolkit.
- See "WebDB Listener Custom Install on Solaris" on page 1-48 for more information about installing the WebDB Listener.
- See "Oracle WebDB Custom Install on Solaris" on page 1-49 for more information about installing Oracle WebDB.

1.5.0.4 PL/SQL Web Toolkit Custom Install on Solaris

IMPORTANT: The PL/SQL Web Toolkit must be installed *before* you install Oracle WebDB.

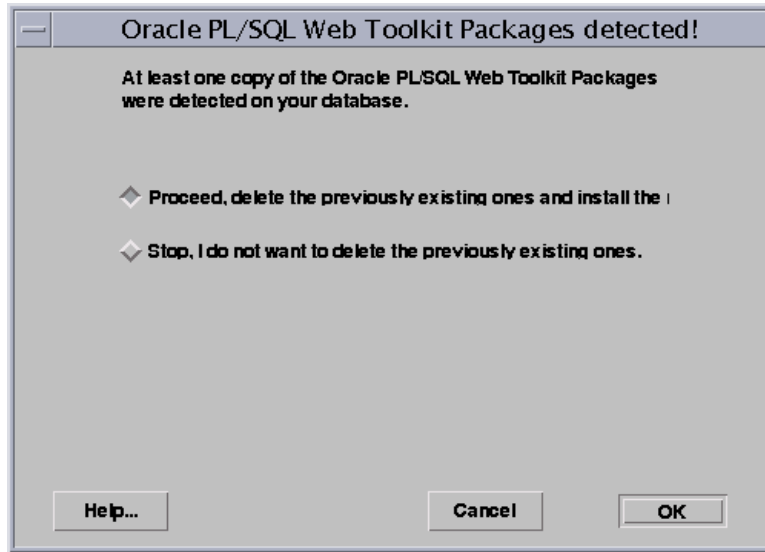
1. If you choose the PL/SQL Web Toolkit in the Software Asset Manager (see step 4 on page 1-39), you are prompted for the SYS user password that you use to log on to the Oracle database where you are installing the PL/SQL Web Toolkit.

Note: This window appears only if you are not already logged on to the database.



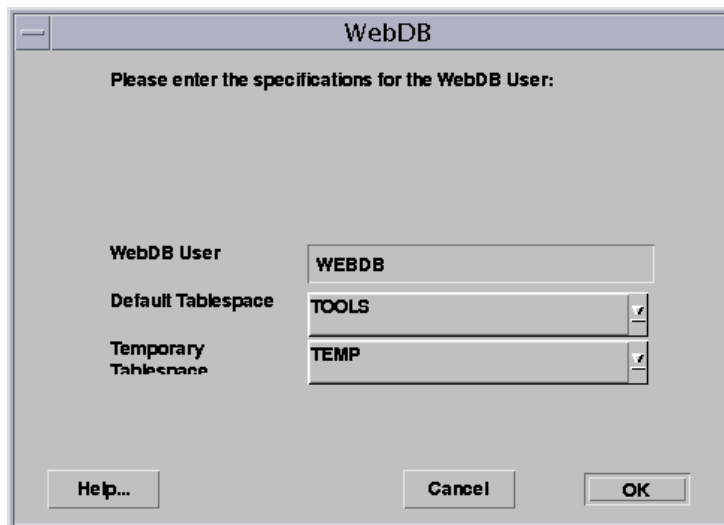
2. Type your password and click **OK**.
3. If any versions of the PL/SQL Web Toolkit already exist in the database, you are asked if you want to delete them. There should be only one instance of the

PL/SQL 4.0 Toolkit in the database. You can have previous versions in addition to the 4.0 version.



- Choose **Proceed, delete the previously existing ones and install the new ones**, then **OK** to delete any currently existing versions of the PL/SQL Web Toolkit and install the 4.0 version.
- Choose **Stop, I do not want to delete the previously existing ones**, then **OK** to terminate the installation process and display the Software Asset Manager window.

4. In the next window, specify an Oracle PL/SQL user and default and temporary tablespaces for the user.



The screenshot shows a dialog box titled "WebDB" with the instruction "Please enter the specifications for the WebDB User:". It contains three input fields: "WebDB User" (value: WEBDB), "Default Tablespace" (value: TOOLS), and "Temporary Tablespace" (value: TEMP). At the bottom are buttons for "Help...", "Cancel", and "OK".

- **WebDB User** is the name of the database schema where the PL/SQL Web Toolkit will be installed.

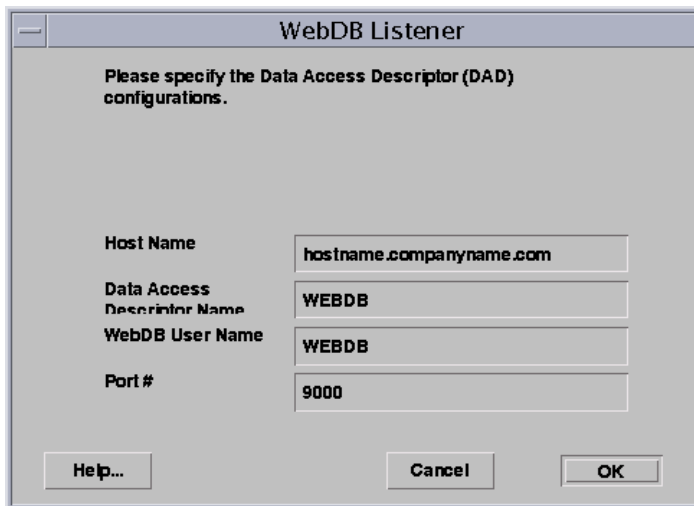
Note: The password for the user is the same as the **WebDB User** name.

- The **Default Tablespace** is used to store any database objects or components created by the WebDB user.
 - The **Temporary Tablespace** will be used for creation of temporary table segments for operations performed by the WebDB user such as sorting table rows.
5. Click **OK**. A success message displays when installation completes.

1.5.0.5 WebDB Listener Custom Install on Solaris

To perform a custom install of the WebDB Listener on your Solaris machine:

1. Follow steps 1-3 from "Solaris Custom Install" starting on page 1-36.
2. From the Software Asset Manager (see step 4 on page 1-39), select (highlight) the Oracle WebDB Listener component and click **Install**.
3. The WebDB Listener window is displayed from which you are prompted for WebDB Listener information:



The screenshot shows a dialog box titled "WebDB Listener". The main text inside the dialog reads "Please specify the Data Access Descriptor (DAD) configurations." Below this text are four input fields, each with a label to its left and a text box to its right. The labels and their corresponding values are: "Host Name" with "hostname.companyname.com", "Data Access Descriptor Name" with "WEBDB", "WebDB User Name" with "WEBDB", and "Port #" with "9000". At the bottom of the dialog, there are three buttons: "Help...", "Cancel", and "OK".

- The **Host Name** is the name of the machine on which the 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://hostname.company:9000/`

WEBDB is the Data Access Descriptor Name

hostname is the Host Name

9000 is the Listener Port Number

- The **WebDB Schema** is the name of the database schema in which WebDB will be 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.

Note: Unless you have root privileges on the Solaris machine, you must specify a port higher than 1024 to be able to start the WebDB Listener. You can also run the Oracle Listener as setuid root. See "Running the WebDB Listener as setuid root" on page 1-52.

4. Click **OK**. The installation of the Oracle WebDB Listener begins. A success message displays when installation completes.

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. For more information, see "Configuring the WebDB Listener" on page 1-53.

1.5.0.6 Oracle WebDB Custom Install on Solaris

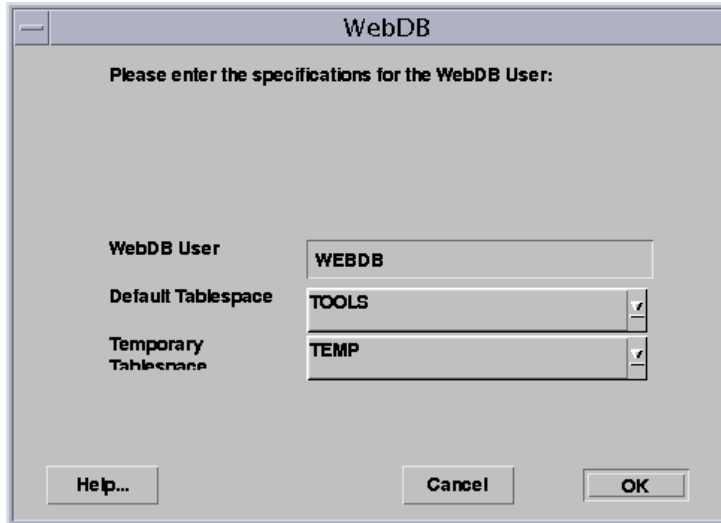
1. If you chose Oracle WebDB in the Software Asset Manager (see step 4 on page 1-39), you are prompted for the SYS user password that you use to log on to the Oracle database where you are installing Oracle WebDB.

To perform a custom install of the Oracle WebDB on your Solaris machine:

1. Follow steps 1-3 from "Solaris Custom Install" starting on page 1-36.
2. From the Software Asset Manager (see step 4 on page 1-39), select (highlight) the Oracle WebDB component and click **Install**.
3. Type your SYS password and click **OK** in the next window.

Note: The window displays only if you are not already logged on to the database.

4. In the next window, specify a WebDB User name and the default and temporary tablespaces for the user:

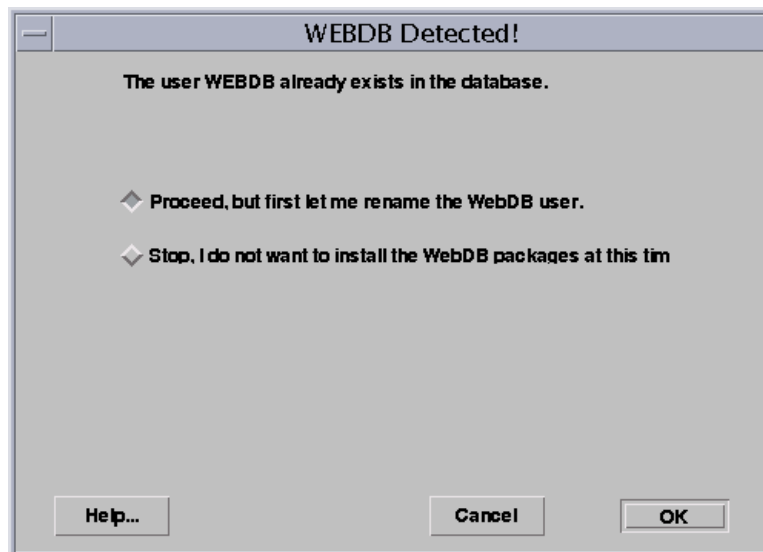


- **WebDB User** is the name of the database schema where the PL/SQL Web Toolkit will be installed.

Note: The password for the user is the same as the **WebDB User** name.

- The **Default Tablespace** is used to store any database objects or components created by the WebDB user.
- The **Temporary Tablespace** will be used for creation of temporary table segments for operations performed by the WebDB user such as sorting table rows.

5. If Oracle WebDB is already installed in the database, you are asked if you want to overwrite it, or install a new version in addition to this version.



- Choose **Proceed, but first let me rename the WebDB user** to install WebDB 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.

It's recommended that you install only one instance of Oracle WebDB in the database. However, when migrating between different Oracle WebDB versions, it's possible to have two installed instances.

(If you click this option, a window similar to the one shown in step 3 on page 1-50 appears. Follow the instructions in step 3 to specify a new **WebDB User** name. This will install WebDB into another schema.

6. If you choose to proceed, the installation process begins. It takes several minutes to complete. At any point during the process you can click **Cancel** to terminate installation.
7. 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. For more information, see "Configuring the WebDB Listener" on page 1-53.

1.5.0.7 Running the WebDB Listener as setuid root

If you specified a privileged port for the WebDB Listener (less than 1025) when installing Oracle WebDB 2.0 on Solaris, you must run the Oracle 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 2.0) 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
```

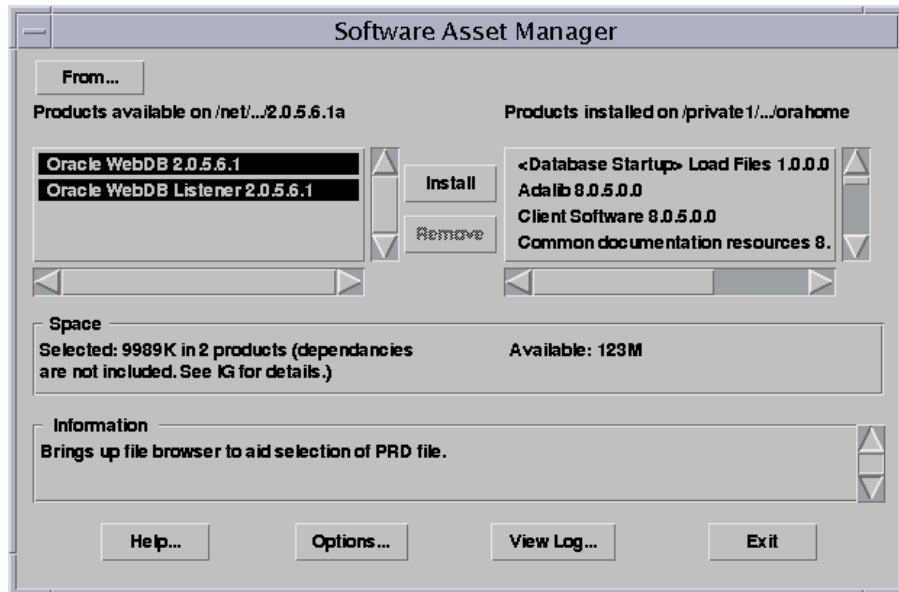
```
chmod ts Oracle_Home/bin/wdblsnr
```

1.5.1 Deinstalling on Solaris

To deinstall Oracle WebDB 2.0 or other software components such as:

- WebDB Listener 2.0.3
 - PL/SQL Web Toolkit 4.0.5
 - Required Support Files 8.0.5
1. Follow steps 1-4 beginning on page 1-24.

2. Click **OK**. In the next screen, choose **Custom Install**




3. Select the product or products you want to deinstall in the Products Installed list on the right side of the window.
4. Click **Remove**.
5. The contents of the next window are different depending on which product you are deinstalling. WebDB. Follow the instructions in the next window and any after that until you deinstall the product.


1.6 Configuring the WebDB Listener

Once you have installed Oracle WebDB, you may need to configure the WebDB Listener and PL/SQL Gateway to ensure optimal performance. This includes changing:

- Listener settings such as directory mappings, MIME types, and the URL for the WebDB home page.
- PL/SQL Gateway Data Access Descriptor (DAD) settings.

1.6.1 Access From Within Oracle WebDB

To configure the Listener or PL/SQL Gateway from within WebDB, click  at the bottom of any Oracle WebDB page, then **Change 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 view information about entry fields.

1.6.2 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 Oracle WebDB.
- **port** is the port you specified during installation of Oracle WebDB.

1.6.3 Setting up a TNS Names Alias

You must set up a TNS Names Alias to your Oracle database in the following situations:

- You installed Oracle WebDB in the Oracle8i (version 8.1.5) database
- You installed the WebDB Listener on a different machine from Oracle WebDB
- You have more than one database on your local machine and need to set up a local or primary environment variable for installing Oracle WebDB into the appropriate database.

You can use the Oracle Net8 Easy Configuration program to set up a TNS names alias or the Oracle Home Selector (if you have it installed) to change your Primary Oracle Home (the Oracle Home that appears first in your PATH environment variable).

You can also set up a TNS names alias manually by following these steps:

1. On Windows NT, open the `\net80\admin\tnsnames.ora` file in the Oracle Home where you are planning to install WebDB.

On Solaris, the `tnsnames.ora` file can be located anywhere on your machine.

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-8i database; for example, Oracle 7.3.4 or 8.05. 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**.

1.7 Setting up the CGI Application

If you plan to use a standard Web server (such as ones provided by Netscape, Microsoft, 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 provided as part of the WebDB Listener. The following instructions assume that you have already installed the WebDB packages and PL/SQL Web Toolkit.

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

1. **In Windows NT**, copy the files `wdbcgiw.cmd` and `wdbcgi.exe` to the Web server's `cgi-bin` directory.

In Solaris, copy `wdbcgiw` and `wdbcgi` to the Web server's `cgi-bin` directory.

2. Open `wdbcgiw` in a text editor. In the text editor, customize the environment variables and change the path to the real CGI program.
3. Configure your Web server to update the mapping of the `/images/` virtual directory to the correct physical directory on the server.
4. Restart your Web server.
5. **In 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
```

In Solaris, type:

```
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.
6. 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` in the `wdbcgi` file. See "Setting Environment Variables" on page 1-62 for more information.

7. 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}`

8. 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.

1.8 Adding the PL/SQL Cartridge to OAS

If you plan to use the Oracle Application Server (OAS) 4.0 as your web server, you need to add the PL/SQL cartridge provided by Oracle WebDB to OAS. The PL/SQL cartridge replaces the PL/SQL Gateway provided as part of the WebDB Listener. The following instructions assume that you have already installed the WebDB packages and the PL/SQL Web Toolkit.

For additional instructions about adding the PL/SQL cartridge to OAS, see the *Oracle Application Server Administration Guide*.

To add the PL/SQL 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:

Entry 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:

Entry Field	Specify
Application Name	WebDB
Display Name	WebDB
Application Version	2.0

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:

Entry 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
Virtual Path	/wdbctx
Physical Path	This entry field shows %ORAWEB_HOME%/bin as the physical path. Leave this field as it is.

11. Click **Apply**.
12. Configure your server's listener to update the mapping of the /images/ virtual directory to the correct physical directory on your server.
13. Click **Apply**.
14. Click **website40 Site** at the top of the OAS navigational tree
15. Select the **ALL** radio button in the right frame or the browser window.
16. Click |<< to reload the server for the new configuration to take effect.
17. Type the following URL into your web browser's location or address field:

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

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

Note: Remember to update the Document Table entry 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.

19. Click **Apply**.
20. Run WebDB by typing the following URL into your web browser's location or address field:

`http://hostname:port/wdbctx`

21. 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}.www_testdoc.show_form`

where

- **servername** is the name of the server on which you installed Oracle WebDB.
- **port** is the port you specified during installation of Oracle WebDB.
- **schema** is the schema where WebDB is installed in the database.
- **DAD** is the Data Access Descriptor name you defined in step 6.

1.8.1 Setting Environment Variables

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

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

On **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:

```
%ORACLE_HOME%\listener\cfg\wdbsvr.app.
```

On **Solaris**, this value is configured in a script file called `wdbstart`. The default value is:

```
$ORACLE_HOME/listener/cfg/wdbsvr.app.
```

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

- `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)

1.9 Integrating *interMedia* Text in WebDB Site Builder (Beta)

Beta Draft documentation is considered to be in prerelease status. This documentation is Oracle confidential and proprietary and is intended for demonstration and preliminary use only. We expect that you may encounter some errors, ranging from typographical errors to data inaccuracies. This documentation is subject to change without notice, and it may not be specific to the hardware on which you are using the software. Please be advised that Oracle Corporation does not warrant prerelease documentation and will not be responsible for any loss, costs, or damages incurred due to the use of this documentation.

The following section describes prerequisites and how to set up your environment for Oracle *interMedia* Text and WebDB. Information on creating, updating, and dropping the *interMedia* Text indexes is also provided.

Oracle8i *interMedia* Text creates indexes that let users perform fast and accurate text searching, from traditional full-text search to document theme analysis.

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

1.9.1 Prerequisites

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

- Install and configure the Oracle8i database to use *interMedia* Text. This is done using the Database Configuration Assistant.
- See the Oracle8i documentation for more information about installing and configuring an Oracle8i database to use *interMedia* Text.
- Install WebDB 2.1.
- 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.

1.9.2 Setting Up Your Environment for *interMedia* Text

interMedia Text in Oracle8i uses external procedures to perform document filtering. You must configure the `LISTENER.ORA`, `TNSNAMES.ORA`, and `SQLNET.ORA` files in your Oracle8i 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:

1.9.2.1 LISTENER.ORA

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

1.9.2.2 TNSNAMES.ORA

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

1.9.2.3 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 Oracle8i documentation for more information about creating these configuration files.

1.9.3 Creating *interMedia* Text Indexes

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

On the WebDB Site Builder Administration page:

1. Click **Search** under the Toolbox section.
2. Click the ***interMedia* Text** tab.
3. Configure the *interMedia* Text fields as required:
 - a. Check **Enable interMedia Text Features**.
 - b. If desired, check **Enable Theme & Gists**.
 - c. Choose a color for the **Search Highlight Text Color**.
 - d. Choose the number of **Hits Per Page**.
 - e. Specify the number of seconds for the **URL Connection Time-out**.
 - f. Specify the **HTTP Proxy**.
 - g. 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 *interMedia* Text index is created on the server.

Note: To get help for the current page, click the small 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, "SCOTTOWN".

```
ctxcrind.sql
```


The following *interMedia* 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 64.

1.9.4 Updating *interMedia* Text Indexes

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

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

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

1.9.5 Dropping *interMedia* Text Indexes

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

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

```
ctxdrind.sql
```

1.10 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.

1.11 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.

1.12 Troubleshooting

Error log

The installation error log file is located in

```
oracle_home/orainst/wwv_load_packages.log
```

where oracle_home is the Oracle Home where you installed WebDB.

Also, check for errors that may have occurred while loading PL/SQL procedures, tables, and other objects.

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 "Setting Up Your Environment for interMedia Text" on page 1-64 for more information.

Starting the Listener manually

You can manually start the Listener from a command line prompt by typing:

```
wdblmsr hostname port
```

where

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

port is the port you specified during installation of WebDB.

Editing the Listener and PL/SQL configuration files manually

You can edit the Listener and PL/SQL Gateway configuration files in a text editor. All Listener and PL/SQL Gateway settings that you can specify within WebDB can be edited in these files.

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.

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.

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.

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.

Part II

Building Applications

Complete This Chapter	If You Will Be Using Oracle WebDB To:
Chapter 2, "Managing Users"	Create database users and roles and assign privileges to users and roles.
Chapter 3, "Building and Browsing Database Objects"	Build database objects such as tables and procedures. Browse database objects.
Chapter 4, "Building Components"	Build components such as forms and reports. Note To complete this chapter, you must have completed some of the exercises in Chapter 3, "Building and Browsing Database Objects". We recommend that you complete all the exercises in Chapter 3 before starting this chapter.
Chapter 5, "Linking Components to Build Applications"	Build applications by linking together components with links and menus. Note To complete this chapter, you must have completed some of the exercises in Chapter 4, "Building Components". We recommend that you complete all the exercises in Chapter 4 before starting this chapter.

Managing Users

Estimated completion time: 30 minutes

This chapter shows you how to use Oracle WebDB to manage database users. You'll learn how to create new users and give WebDB users task-related job privileges.

WebDB is installed in an Oracle database. To access WebDB, users must have a user name set up in the database where WebDB is installed. If a WebDB user does not already have a user name, you can use WebDB to create one. When you create a new user name, a *schema* is also created in the database which can be used to store database objects and WebDB components. The schema name is the same as the user name.

Note: The terms user and schema are often used synonymously.

This chapter includes the following sections:

Section	Location
"Before You Begin"	on page 2-2
"Creating a New User"	on page 2-2
"Adding a User to a Role"	on page 2-5
"Granting Browse In and Build In Privileges to a User"	on page 2-8
"Granting Database Object Privileges to a User"	on page 2-10
"Creating a new role"	on page 2-12
"What's Next?"	on page 2-14

2.1 Before You Begin

- To complete this chapter, you must be a member of the DBA role. If you are not a member of the DBA role, you will not be able to access WebDB's user, role, and privilege management features.
- At least one tablespace must exist to store database objects and to be used for temporary operations. If this tablespace does not already exist, create it now. We recommend that you create two tablespaces called USERS and TEMP.

For information about how to create tablespaces, see your Oracle server documentation.

- If you have not already started WebDB, follow the instructions in "Oracle WebDB Basic Concepts, Starting Oracle WebDB" on page xix.


2.2 Creating a New User

Users who already have a user name in the database can already log on to WebDB. You can use WebDB to create user names for new users and to manage existing users, without ever having to leave your web browser.

A new employee, MILLER, has joined your company. He does not have access to any databases and you have been asked to give him access to Oracle WebDB.

1. If you are not currently on your WebDB home page, click  at the top right of the page.
2. Click **Administer**.

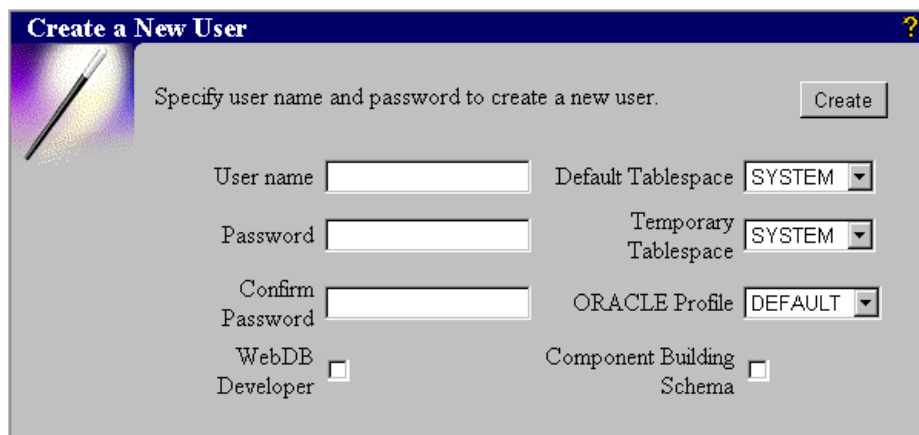
Note: If you cannot see the **Administer** link, you are probably not a member of the DBA role. Ask your DBA to add you to this role.

Tip: You can also click  in the toolbar at the bottom of any page to display the Administer page.

3. Click **User Manager**.

Note: If you cannot see the **User Manager** link, you are probably not a member of the DBA role. Ask your DBA to add you to this role.

The page displayed is divided into three sections. For this exercise you will use the Create a New User section.



4. In the **User name** text box, type `MILLER_<NAME>`, where *NAME* is your own user name.

For the purposes of this tutorial, you add your own user name to the end to identify this user as the one created by you, rather than one created by another tutorial user.

Tip: We recommend that you use a consistent naming convention for user names.

5. In the **Password** text box, type `CHANGEME`.

This is the password MILLER will use to log on to WebDB. You should instruct new users to change this password the first time they log on.

6. In the **Confirm Password** text box, type `CHANGEME` to confirm that this is the password you want to use.

7. Click the **Default Tablespace** drop down list and choose the tablespace (for example, USERS) to be used to store any database objects created by MILLER.

You, or another DBA, should have created this tablespace before you started this chapter. We recommend that all users use the same default tablespace.

8. Click the **Temporary Tablespace** drop down list and choose the tablespace (for example, TEMP) to be used for temporary operations, such as sorting table rows.

You, or another DBA, should have created this tablespace before you started this chapter. We recommend that all users use the same temporary tablespace.

9. In the **ORACLE Profile** list, make sure **DEFAULT** is selected.

A *profile* specifies the amount of system and database resources available to a user. For more information about profiles, see your Oracle server documentation.

10. Click **Create** to create the user name and display the User Manager, which you will use in the next exercise.

The screenshot shows the Oracle User Manager interface for user 'Miller'. The interface has a dark blue header with the title 'User: Miller' and several tabs: 'User', 'Grants', 'Roles', 'Browse Privileges', and 'Build Privileges'. A help icon (?) is also present. Below the header, there is a message: 'This page shows information about the user you selected. You can also change the user's password, tablespace or profile on this page.' To the right of this message is an 'Apply' button. On the left side, there is a graphic of three stylized human figures. The main content area contains the following fields and options:

- User name: **MILLER**
- Default Tablespace: **USERS** (dropdown menu)
- Password: [text input field]
- Temporary Tablespace: **TEMP** (dropdown menu)
- Confirm Password: [text input field]
- ORACLE Profile: **DEFAULT** (dropdown menu)
- WebDB Developer:
- Component Building Schema:

Below these fields, there are four sections, each with a blue underlined link and a grey background bar:

- [Roles](#)
- [Grants](#)
- [Browse Privileges](#)
- [Build Privileges](#)

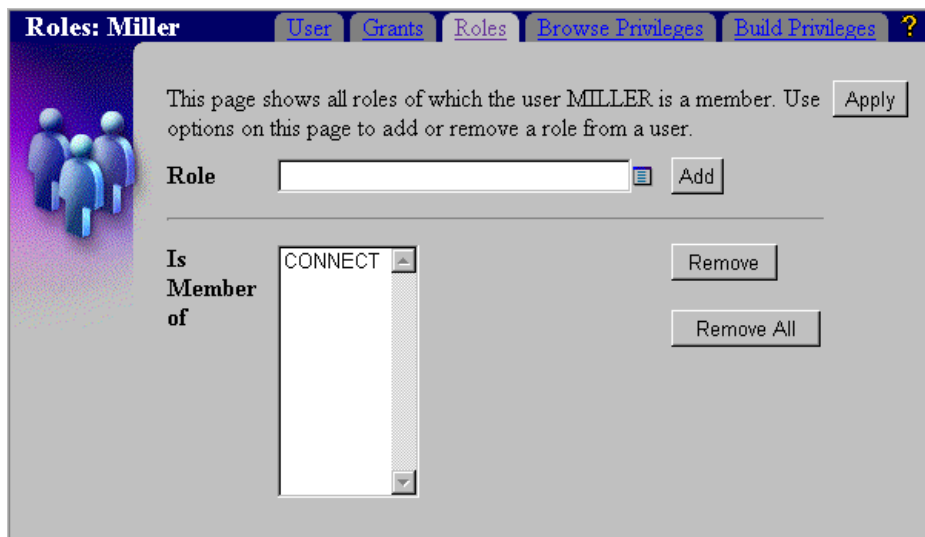
2.3 Adding a User to a Role


To use WebDB, a user must be a member of one of the following roles. These roles control the user's view of WebDB itself:

- The DBA role provides the user with access to all WebDB menus.
- The WEBDB_DEVELOPER role provides the user with access to the WebDB menus for building applications.

MILLER is a member of the Application Development department. As he will be building applications, he needs to be added to the WEBDB_DEVELOPER role.

1. In the User Manager, click the **Roles** tab.



2. Click  to display a list of the roles to which you can add MILLER.

Tip: You can restrict the search by typing search criteria in the text box. For example, to find all roles beginning with W type w% in the text box and click **Find**.



3. Click **Next** to page through the roles if necessary and click **WEBDB_DEVELOPER (Role)**.

WEBDB_DEVELOPER is displayed in the **Role** text box on the User Manager: Roles page.

4. Click **Add** to add WEBDB_DEVELOPER to the **Is Member of** list.

To add MILLER to more roles, you would repeat Steps 2 through 4 for each role. You can use the User Manager to add a user to any existing Oracle database role, not just those associated with WebDB.

5. Click **Apply** to save your changes.

WARNING: If you do not click **Apply**, your changes will not be preserved when you exit or move to a different page of the User Manager.

Tip: To quickly add a user to the WEBDB_DEVELOPER role, you can check the **WebDB Developer** check box on the User Manager: User page. This also grants the user Build In privileges on his or her own schema. You will learn about Build In privileges in Section 2.4, "Granting Browse In and Build In Privileges to a User" on page 2-8.

In this exercise you learned how to use the User Manager to add a single user to multiple roles. In Section 2.6.2, "Adding users to a role" on page 2-14 you will learn how to use the Role Manager to add multiple users to a single role.

2.4 Granting Browse In and Build In Privileges to a User

Database objects and WebDB components are stored in database schemas. To view database objects, users need to be granted *Browse In privileges* on the schema that contains the object. To build objects and components in a schema, users need to be granted *Build In privileges* in the schema.

- Browse In privileges enable users to use the Browse feature to browse a schema for objects such as tables, views, and procedures on which a component will be based. Users can also browse for other objects such as functions or triggers that can be included in the component. By default, users have Browse In privileges in their own schema.

Note: Browse In privileges only enable users to browse the schema. They **do not** enable users to build components based on or including database objects in the schema. To build a component based on objects in a schema, users must be building the component in one of the following:

- The schema that contains the objects
- A schema that has been explicitly granted database object privileges on the objects.

You'll learn how to grant database object privileges to a user in Section 2.5, "Granting Database Object Privileges to a User" on page 2-10.

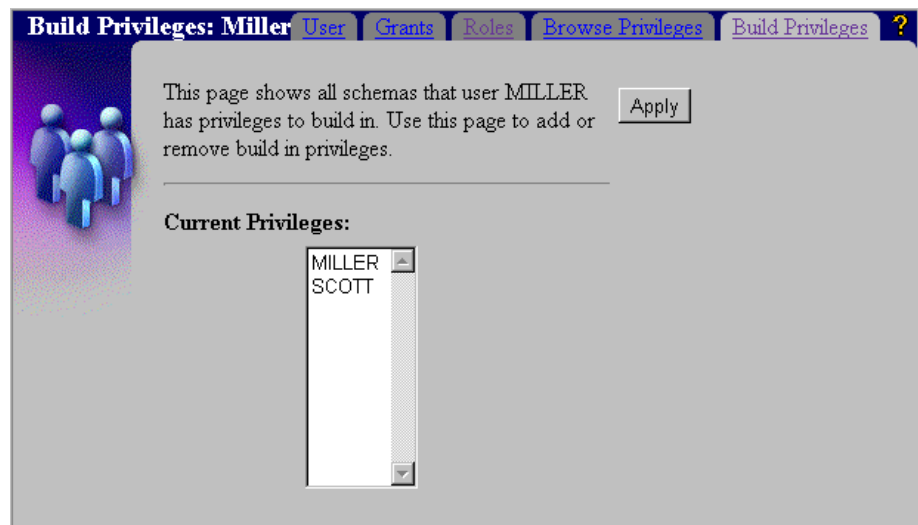
- Build In privileges enable users to build database objects and WebDB components in a schema. All components built in the schema are owned by that

schema, regardless of who built them. Granting a user Build In privileges in a schema automatically grants the user Browse In privileges in the schema.

Note: To grant a user Build In privileges on a schema other than his or her own, the schema must have been identified as a *component schema*. To identify a schema as a component schema, in the User Manager: User page for the schema, check the **Component Building Schema** check box.

The Application Development department requires that all developers build their applications in the SCOTT schema. MILLER needs to be granted Build In privileges on that schema.

1. In the User Manager, click the **Build Privileges** tab.



The **Current Privileges** list box lists the schemas on which you can grant MILLER Build In privileges. You can grant a user Build In privileges on his or her own schema and on any component schema.

2. In the **Current Privileges** list box, select **SCOTT**.

Tip: You can select more than one schema. For example in Microsoft Windows, press **Ctrl** and select the schemas on which you want to grant the user Build In privileges.

3. Click **Apply** to save your changes.

WARNING: If you do not click **Apply**, your changes will not be preserved when you exit or move to a different page of the User Manager.

Tip: To quickly add a user to the WEBDB_DEVELOPER role and grant that user Build In privileges on his or her own schema, you can check the **WebDB Developer** check box on the User Manager: User page.

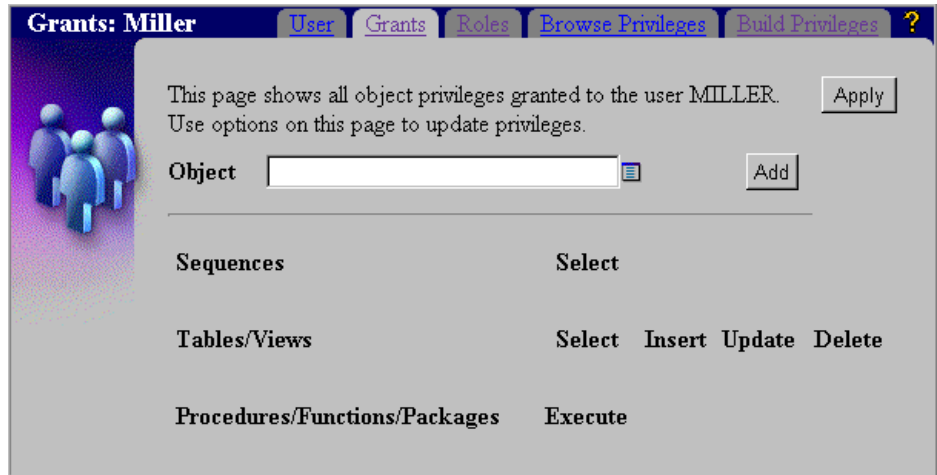
2.5 Granting Database Object Privileges to a User


To build components based on database objects, the schema where the component will be stored must have the appropriate privileges on those objects. For example, to build a report in the SCOTT schema based on a table in the FRED schema, the SCOTT schema must be granted SELECT privileges on the table. A schema automatically has privileges on all database objects stored in it. For example, the SCOTT schema automatically has privileges on all database objects in the SCOTT schema.

Note: These privileges must be explicitly granted directly to the schema. You cannot use roles to grant these privileges.

MILLER can build a component in the SCOTT schema based on a table in the SCOTT schema. However, if MILLER was given Build In privileges in his own schema and wanted to build a component based on a table in the SCOTT schema, he would need to be explicitly granted database object privileges on the table.

1. In the User Manager, click the **Grants** tab.



2. Click  to display a list of the objects on which you can grant MILLER privileges.
3. Click **Next** to page through the objects if necessary and click **SCOTT.EMP**. SCOTT.EMP is displayed in the **Object** text box on the User Manager: Grants page.
4. Click **Add** to add SCOTT.EMP under **Tables/Views** (SCOTT.EMP is a table).
5. Check the **Select**, **Insert**, **Update**, and **Delete** check boxes to grant MILLER those privileges on the table.
To grant MILLER database object privileges on more objects, you would repeat Steps 2 through 5 for each object.
6. Click **Apply** to save your changes.

WARNING: If you do not click **Apply**, your changes will not be preserved when you exit or move to a different page of the User Manager.

In this exercise you learned how to use the User Manager to grant a single user database object privileges on multiple objects. You can use the Grant Manager

to grant multiple users database object privileges on a single object. For more information about the Grant Manager, see the WebDB online help.

2.6 Creating a new role


Developers may want to enable a group of users to execute a component. For example, a developer might create a report to display employee information and want all members of the Human Resources department to be able to execute the report. You can create a *database role* and add each user in the group to the role. The developer can then grant execute privileges to the role, rather than to each individual user.

Developers can also use roles to provide menu security.

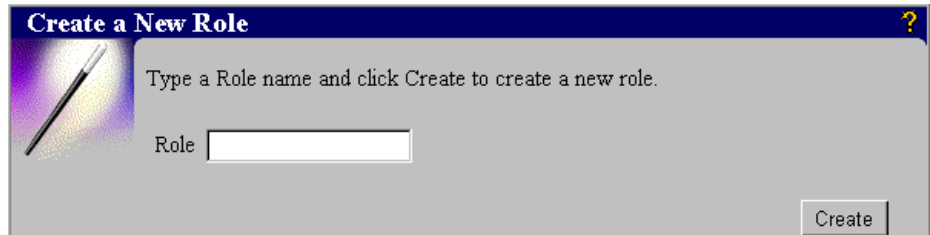
Note: In WebDB you use roles to grant **component execute privileges for running components**. You cannot use roles to grant **database object privileges for building components**. These privileges must be explicitly granted directly to the schema where the component will be stored.

2.6.1 Creating a role

The Application Development department is building a Human Resources application. Members of the Human Resources department will need to be able to execute the components in that application. First, let's create a Human Resources role.

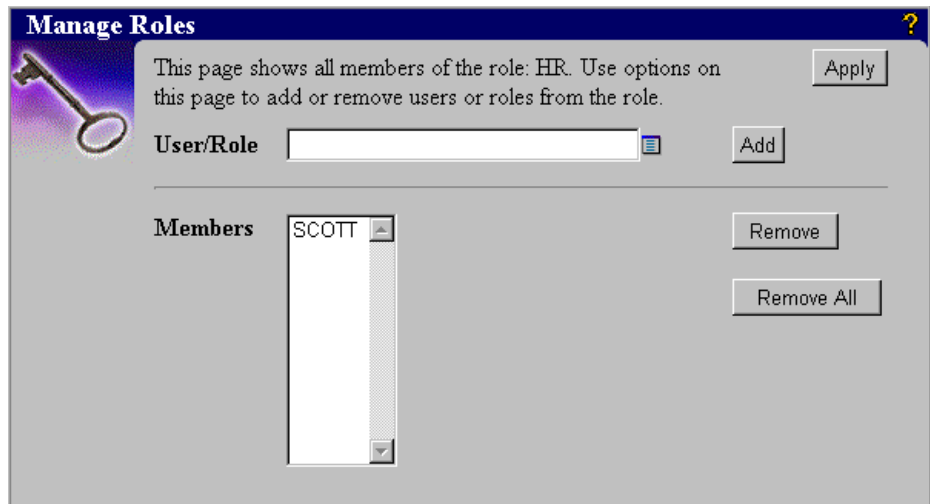
1. In the toolbar at the bottom of the page, click  to return to the Administer page.
2. Click **Role Manager**.

The page displayed is divided into three sections. For this exercise you will use the Create a New Role section.



The screenshot shows a dialog box titled "Create a New Role" with a question mark icon in the top right corner. On the left, there is a graphic of a pencil. The main text reads: "Type a Role name and click Create to create a new role." Below this text is a text input field labeled "Role". At the bottom right of the dialog is a button labeled "Create".


3. In the **Role** text box, type `HR_<NAME>`, where *NAME* is your own user name. For the purposes of this tutorial, you add your own user name to the end to identify this role as the one created by you, rather than one created by another tutorial user.
4. Click **Create** to create the role and display the Role Manager, which you will use in the next exercise.



The screenshot shows a dialog box titled "Manage Roles" with a question mark icon in the top right corner. On the left, there is a graphic of a key. The main text reads: "This page shows all members of the role: HR. Use options on this page to add or remove users or roles from the role." Below this text is a text input field labeled "User/Role" with an "Add" button to its right. Below the "User/Role" field is a list box labeled "Members" containing the name "SCOTT". To the right of the "Members" list box are two buttons: "Remove" and "Remove All". An "Apply" button is located in the top right corner of the dialog.

2.6.2 Adding users to a role

Now let's identify the members of the new role you have created. In Section 2.3, "Adding a User to a Role" on page 2-5 you learned how to add a single user to multiple roles. In this exercise you'll learn how to add multiple users to a single role.

1. In the Role Manager, click  to display a list of the users and roles you can add to the role.
2. In the Search window text box type `M%R%` and click **Find** to find all database users and roles that start with an M and contain an R.
3. Click **Next** to page through the users and roles if necessary and click **MILLER_<NAME> (User)**, where *NAME* is your own user name to choose the user you created earlier in this chapter.

MILLER_<NAME> is displayed in the **User/Role** text box on the Role Manager page.

4. Click **Add** to add MILLER to the **Members** list.

To add more members to the HR role, you would repeat Steps 1 through 4 for each user or role.

5. Click **Apply** to save your changes.

When developers create components for the Human Resources application, they can grant execute privileges to members of the HR role in a single operation, rather than having to grant privileges to each user individually.

2.7 What's Next?

In this chapter you learned how to:

- Create a new user
- Add a user to a role
- Grant Build In and Browse In privileges to a user
- Grant database object privileges to a user
- Create a new role and add users to that role







If you will be creating database objects or WebDB components, see Chapter 3, "Building and Browsing Database Objects".




If you will be creating WebDB sites, see Chapter 6, "Creating WebDB Sites".

Building and Browsing Database Objects

Estimated completion time: 20 minutes

This chapter shows you how to use Oracle WebDB to build and browse *database objects*. Database objects are structures used to store data in the database. You can create the following database objects in WebDB:

Icon	Database Object	Description
	Function	A PL/SQL subprogram that performs a specified sequence of actions, and then returns a value.
	Index	A structure associated with a table used to locate rows of the table quickly, and (optionally) to guarantee that every row is unique.
	Package	A database object consisting of a specification and a body. The specification defines the procedures and functions that can be referenced by other program units. The body includes the actual implementation of the package.
	Procedure	A PL/SQL subprogram that performs a specified sequence of actions.
	Sequence	A database object used to automatically generate numbers for table rows.
	Synonym	An alias assigned to a table, view, or other database object that can thereafter be used to refer to it.

Icon	Database Object	Description
	Table	The basic storage structure in a relational database. Data is stored in columns and rows within a table.
	Trigger	A stored procedure associated with a table and automatically executed before or after one or more specified events.
	View	A virtual table whose rows do not actually exist in the database, but which is based on a table that is physically stored in the database.

In this chapter, you'll learn how to build tables and procedures using Oracle WebDB's database object build wizards.

Note: You can still build database objects using SQL CREATE commands if you prefer. WebDB simply provides an alternative tool for you to use.

This chapter includes the following sections:

Section	Location
"Before You Begin"	on page 3-3
"Building a Table"	on page 3-3
"Building a Procedure"	on page 3-5
"Querying a Table"	on page 3-6
"Executing a Procedure"	on page 3-11
"What's Next?"	on page 3-13

3.1 Before You Begin

- To complete this chapter, you must be a member of the WEBDB_DEVELOPER role and have Build In privileges on your own schema. If you are not a member of the WEBDB_DEVELOPER role, you will not be able to access WebDB's database object building features. If you do not have Build In privileges on your own schema, you will not be able to build database objects in that schema. If you want to be added to the WEBDB_DEVELOPER role, or need to be granted Build In privileges on your own schema, ask your DBA.
- If you have not already started Oracle WebDB, follow the instructions in "Oracle WebDB Basic Concepts, Starting Oracle WebDB" on page xix.

3.2 Building a Table

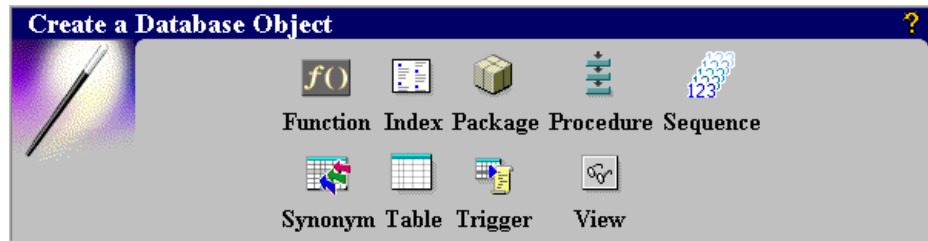
The Human Resources department has requested a table to store information about the company's employees.


1. If you are not already on your WebDB home page, click  at the top right of the page.
2. Click **Build**.


Note: If you cannot see the Build link, you are probably not a member of the WEBDB_DEVELOPER role. Ask your DBA to add you to this role.

3. Click **Database Objects** to display the Build Database Objects page.

The page displayed contains the Create a Database Object section.





Tip: You can also click  in the toolbar at the bottom of any page to display the Build Database Objects page.

4. Click  to display the Create Table Wizard.
5. Click the **Schema** drop down list and choose your own schema.

Note: Your schema name is the same as your user name.



If your own schema is not listed, you have probably not been granted Build In privileges on it. Ask your DBA to grant these privileges to you.

6. In the **Table Name** text box, type TUTORIAL_TABLE.
7. Click  to display the Columns page.

WARNING: Click  if you need to go back to a previous page of the wizard. Do not click your browser's Back button.



8. Complete the column details using the information in the following table.

Column Name	Datatype	Length	Precision	Null?	Primary Key?
EMPNO	NUMBER	10	<No value>	Uncheck	Check
ENAME	VARCHAR2	20	<No value>	Check	Uncheck
JOB	VARCHAR2	20	<No value>	Check	Uncheck
SAL	NUMBER	10	<No value>	Check	Uncheck
DEPTNO	NUMBER	10	<No value>	Check	Uncheck


9. Click  to display the Storage page.
10. You can accept the default values on this page. Click  to display the Create Table page.
11. Click **OK** to create the table and return to the Build Database Objects page.

3.3 Building a Procedure

The Human Resources department has requested a procedure to increase the salaries of the employees in a specified department by a specified percentage.


1. Click  to display the Create Procedure Wizard.
2. Click the **Schema** drop down list and choose your own schema.
3. In the **Procedure Name** text box, type TUTORIAL_PROC.
4. Click  to display the Arguments page.
5. Complete the argument details using the information in the following table.

Argument Name	In/Out	Datatype	Default
P_DEPTNO	IN	NUMBER	<No value>
P_PCT_RAISE	IN	NUMBER	<No value>

6. Click  to display the Create Procedure page.


- In the **Procedure Body** text box, change the text so it reads:

```
BEGIN
  UPDATE TUTORIAL_TABLE
  SET SAL = ((P_PCT_RAISE/100)+1)*SAL
  WHERE DEPTNO = P_DEPTNO;
END;
```

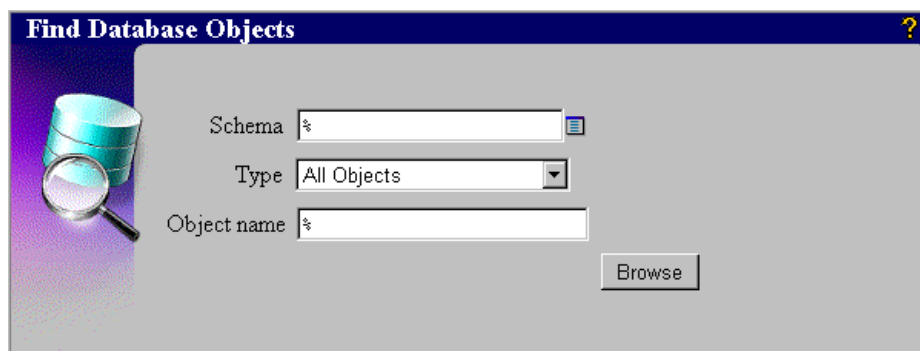
- Click  to display the Create Procedure page.
- Click **OK** to create the procedure and return to the Build Database Objects page.

3.4 Querying a Table


So far you have created a table (TUTORIAL_TABLE) and a procedure (TUTORIAL_PROC). Now you need to test these objects to make sure they meet the requirements of the Human Resources department. First, let's take a look at TUTORIAL_TABLE.

- In the toolbar at the bottom of the page, click  to display the Browse Database page.

The page displayed contains the Find Database Objects section.



- In the **Schema** text box, type the name of your own schema (the schema where you created the table).

Tip: Click  to search for schemas if you don't know the name of the schema you want to browse.

3. Click the **Type** drop down list and choose **Tables**.
4. Click **Browse** to list all the tables in your own schema.

Note: To browse database objects in a schema other than your own, you must have been granted Browse In privileges to do so by the DBA. If you have Build In privileges on a schema, you automatically have Browse In privileges on that schema.

5. Click **Tutorial_Table** to display the Query and Update Table page.

The form on the Query and Update page is divided into three parts. The first part lists the columns in the table. You can type values in the text boxes to specify query criteria or to add new data. The second and third parts of the form enable you to specify the way the query results are displayed. For example, you can order the results by a specified column, or download the results and display them in Microsoft Excel.

SCOTT.TUTORIAL TABLE
?

[Show Object Information](#)

Query
Query & Update
Insert New Row
Reset

<input checked="" type="checkbox"/>	EMPNO <small>789</small>	<input type="text"/>	Right	<input type="text"/>	<input type="button" value="ⓘ"/>
<input checked="" type="checkbox"/>	ENAME <small>A</small>	<input type="text"/>	Left	<input type="text"/>	<input type="button" value="ⓘ"/>
<input checked="" type="checkbox"/>	JOB <small>A</small>	<input type="text"/>	Left	<input type="text"/>	<input type="button" value="ⓘ"/>
<input checked="" type="checkbox"/>	SAL <small>789</small>	<input type="text"/>	Right	<input type="text"/>	<input type="button" value="ⓘ"/>
<input checked="" type="checkbox"/>	DEPTNO <small>789</small>	<input type="text"/>	Right	<input type="text"/>	<input type="button" value="ⓘ"/>

Where Clause

Order By

%	Ascending	%	Ascending	%	Ascending
---	-----------	---	-----------	---	-----------

Sum Columns

EMPNO
 SAL
 DEPTNO

Break on Columns

%	%	%
---	---	---

Output Format

Maximum Rows

Show Null as

Query Options

Show SQL
 Display Results in Table with Borders
 Show Total Row Count
 Count Rows Only
Show Paging Buttons

Query
Query & Update
Insert New Row
Reset

- TUTORIAL_TABLE does not currently contain any data. Let's insert a row so that you have some test data to work with. Use the information in the following table to complete the first part of the Query and Update Table form.

Field	Value
EMPNO	1
ENAME	KING
JOB	PRESIDENT
SAL	5000
DEPTNO	10

- Click **Insert New Row** to add the data to your table.



1 Row Inserted.

Column	Value(s)
EMPNO	1
ENAME	KING
JOB	PRESIDENT
SAL	5000
DEPTNO	10

- Click **Browse Table** in the link history to return to the Query and Update Table page.
- Click **Query** to take a look at the data you just added.

EMPNO	ENAME	JOB	SAL	DEPTNO
1	KING	PRESIDENT	5000	10

Row(s) 1 - 1

- At the top right of the page, click **Return to Table** to return to the Query and Update Table page.

11. Let's add some more data. Use the information in the following table to add some more rows to TUTORIAL_TABLE. After completing the form for each row, click **Insert New Row**, and then **Browse Table** to return to the form to add the next row.

EMPNO	ENAME	JOB	SAL	DEPTNO
2	BLAKE	MANAGER	3000	30
3	JONES	MANAGER	3500	20
4	ALLEN	SALESMAN	1500	30
5	CLARK	MANAGER	2500	10
6	MILLER	CLERK	1000	10
7	SCOTT	ANALYST	2000	20

12. After you have finished, in the Query and Update Table page click **Query** again to review all the data.

EMPNO	ENAME	JOB	SAL	DEPTNO
1	KING	PRESIDENT	5000	10
2	BLAKE	MANAGER	3000	30
3	JONES	MANAGER	3500	20
4	ALLEN	SALESMAN	1500	30
5	CLARK	MANAGER	2500	10
6	MILLER	CLERK	1000	10
7	SCOTT	ANALYST	2000	20

Row(s) 1 - 7

13. You can specify values to restrict the results of the query. For example, you might only want to display employee details for those employees who earn more than 3000.
14. Click **Return to Table**.
15. In the **SAL** field, type >3000.

16. Click **Query** to display all those employees with a salary greater than 3000.

EMPNO	ENAME	JOB	SAL	DEPTNO
1	KING	PRESIDENT	5000	10
3	JONES	MANAGER	3500	20

Row(s) 1 - 2

17. You can also restrict which columns to query and control how the query results are displayed. For example, you might only want to see the name and salary of employees in Department 10.

Click **Return to Table**.

18. Uncheck the check boxes next to **EMPNO**, **JOB**, and **DEPTNO**.

The check boxes next to **ENAME** and **SAL** should be checked.

19. In the **DEPTNO** field, type 10.

20. Click the **Order By** drop down list and choose **SAL**.

21. In the **Query Options** list box, choose **Display Results in Table with Borders**.


22. Click **Query** to display all those employees in Department 10. Make a note of this information, it will be useful to refer to later in this chapter.

ENAME	SAL
MILLER	1000
CLARK	2500
KING	5000

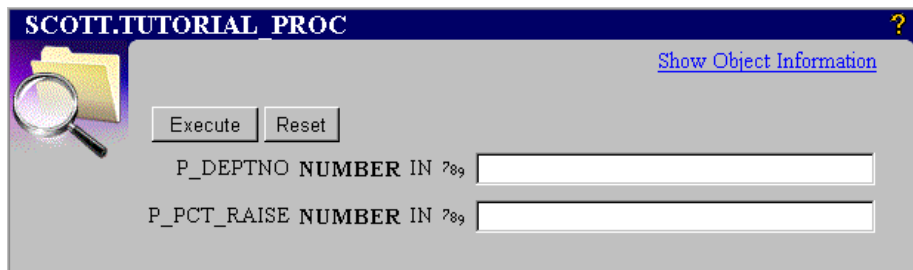
Row(s) 1 - 3

3.5 Executing a Procedure

Now that you have added some data to **TUTORIAL_TABLE**, let's test **TUTORIAL_PROC**.

1. In the toolbar at the bottom of the page, click  to display the Browse Database page.
2. In the **Schema** text box, type the name of your own schema (the schema where you created the procedure).
3. Click the **Type** drop down list and choose **Procedures**.

4. Click **Browse** to list all the procedures in your own schema.
5. Click **Tutorial_Proc** to display the Execute Procedure page. This is where you provide values for the arguments defined in the procedure.





SCOTT.TUTORIAL_PROC ?

Show Object Information

Execute Reset

P_DEPTNO NUMBER IN %s

P_PCT_RAISE NUMBER IN %s

6. In the **P_DEPTNO** text box, type 10.
7. In the **P_PCT_RAISE** text box, type 5.
8. Click **Execute**.
9. The  image indicates that the procedure executed successfully.
10. Now let's take another look at TUTORIAL_TABLE to check the results of the procedure.
Click your browser's Back button to return to the Execute Procedure page.
11. In the toolbar at the bottom of the page, click  to display the Find Database Objects page.
12. In the **Schema** text box, type the name of your own schema.
13. In the **Object name** text box, type TUTORIAL%.
14. Click **Browse** to list all the objects in your own schema that start with "tutorial".
15. Click **Tutorial_Table** to display the Query and Update Table page.

16. Click **Query** to view all the data in the table.

EMPNO	ENAME	JOB	SAL	DEPTNO
1	KING	PRESIDENT	5250	10
2	BLAKE	MANAGER	3000	30
3	JONES	MANAGER	3500	20
4	ALLEN	SALESMAN	1500	30
5	CLARK	MANAGER	2625	10
6	MILLER	CLERK	1050	10
7	SCOTT	ANALYST	2000	20

Row(s) 1 - 7

17. Compare the salaries of the employees in Department 10 (KING, CLARK, and MILLER) with those that you noted down at the end of the previous exercise. Executing TUTORIAL_PROC has increased them by 5%.

3.6 What's Next?

In this chapter, you learned how to:







- Create a table
- Create a procedure
- Query a table, add rows to a table, and execute a procedure



In Chapter 4, "Building Components", you will build components based on the TUTORIAL_TABLE table you created in this chapter.

Building Components

Estimated completion time: 1 hour

This chapter shows you how to use Oracle WebDB to build *components*. Components are web pages with content based on data stored in the Oracle database. Some components, such as reports, display database data in a graphical format. Others, such as forms, provide interfaces that enable users to change data in database objects. You can create the following components in WebDB:

Icon	Component	Description
	Form	Provides an interface to one or more database tables, views, or procedures.
	Menu	Displays a web page containing options that end users can click to navigate to WebDB components, URLs, or other menus.
	Frame Driver	Consists of a web page divided into two frames. One frame (the driving frame) contains a SQL query that drives the contents of a second frame (the target frame).
	Dynamic Page	Displays dynamic database data based on SQL or PL/SQL which is executed every time the page is requested.
	Report	Displays the results of a SQL query in tabular format.
	Chart	Displays the results of a SQL query as a bar chart. Charts are based on at least two table or view columns: one that identifies the bars on the chart and one that calculates the size of the bars on the chart.

Icon	Component	Description
	Calendar	Displays the results of a SQL query in calendar format. At least one of the table columns in the query must contain values having the DATE datatype.
	Hierarchy	Displays data from a self-referencing table or view (at least two columns in the table must share a recursive relationship). A hierarchy can contain up to three levels and displays data such as employees in an organization chart, or the hierarchical relationship between menus in a web site.

There is a separate component build wizard for each type of component. Each wizard creates PL/SQL stored procedures. When executed, the stored procedures dynamically create the HTML and JavaScript code to display the component.

In this chapter, you'll learn how to build forms, reports, and charts using Oracle WebDB's component build wizards. You'll also learn how to build Lists of Values which you can use in your components and share with other developers.

This chapter includes the following sections:

Section	Location
"Before You Begin"	on page 4-3
"Building a Form Based on a Table"	on page 4-3
"Editing a Form"	on page 4-7
"Making a Component Available to Other Users"	on page 4-16
"Building a Report"	on page 4-19
"Editing a Report"	on page 4-20
"Building a Chart"	on page 4-27
"Building Shared Components"	on page 4-30
"What's Next?"	on page 4-38

4.1 Before You Begin

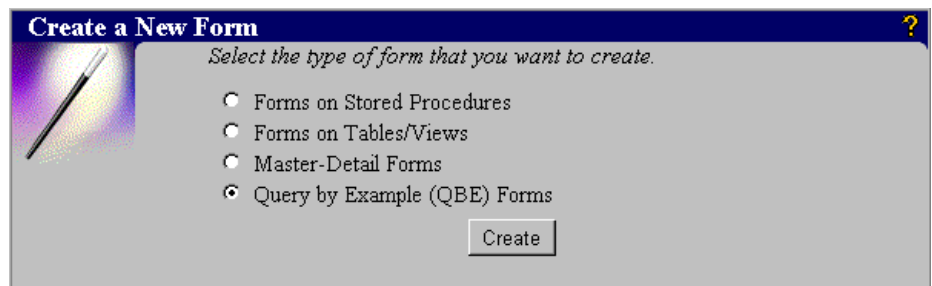
- To complete this chapter, you must be a member of the WEBDB_DEVELOPER role. If you are not a member of the WEBDB_DEVELOPER role, you will not be able to access WebDB's component building features. If you want to be added to the WEBDB_DEVELOPER role, ask your DBA.
- You must have completed Section 3.2, "Building a Table" on page 3-3 and Section 3.4, "Querying a Table" on page 3-6 before starting this chapter.
- Your DBA must have created the HR_TUTORIAL role. Instructions for creating this role are provided in Appendix A, "Tutorial Setup Instructions".

4.2 Building a Form Based on a Table

In Section 3.2, "Building a Table" on page 3-3 you created a table (TUTORIAL_TABLE) to contain information about a company's employees. Users in the company's Human Resources department need to be able to add new employees to this table. Your next development task is to build a form to enable the Human Resources staff to perform this part of their job.

1. In the toolbar at the bottom of the page, click  .

The page displayed is divided into three sections. For this exercise you will use the Create a New Form section.



You can build the following types of form:

- **Form based on stored procedures** Enables end users to select values to pass to a stored procedure, and execute the procedure. You used a form based on a stored procedure in Section 3.5, "Executing a Procedure" on page 3-11.


- **Form based on tables or views** Enables end users to insert, update, or delete data contained in a table or view. Forms based on tables or views offer more advanced features than simple query by example forms.
- **Master-detail form** Displays a master table row and multiple detail rows within a single HTML page. Values in the master row determine which detail rows are displayed for updating, inserting, and deleting.
- **Query by Example (QBE) form** Enables end users to query, insert, or update values in a database table or view. A Query by Example form contains fields that correspond to the columns in the database table or view on which the form is built. You used a query by example form in Section 3.4, "Querying a Table" on page 3-6.


In this exercise, you will build a form based a table (TUTORIAL_TABLE).


2. Click the **Forms on Tables/Views** radio button.
3. Click **Create** to display the Create Forms Wizard.
4. Click the **Schema** drop down list and choose your own schema.


Note: Your schema name is the same as your user name.


You can build components in the schema that owns the database objects on which the component is to be based, or in a schema that has been granted explicit database object privileges on the objects on which the component is to be based. Typically, if the application is small you will build everything in the same schema. If the application is large or you want to keep the application separate from the underlying data structures, you will build applications in a separate schema.

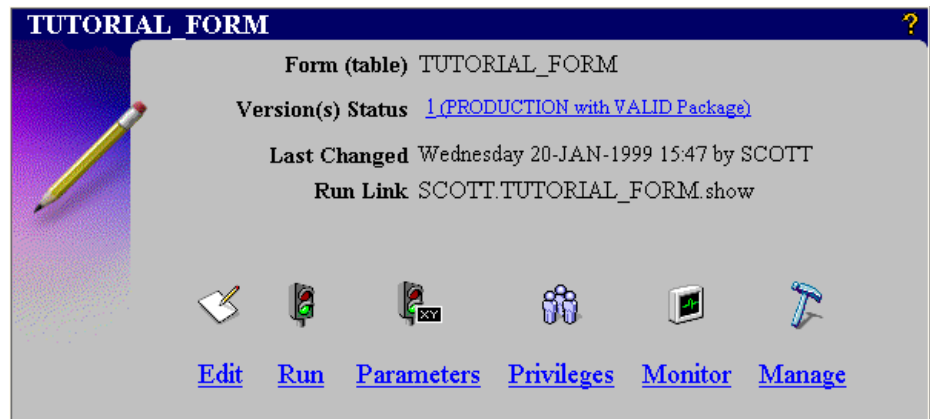
5. In the **Form Name** text box, type TUTORIAL_FORM.
6. Click  to display the Tables or Views page.

WARNING: Click  if you need to go back to a previous page of the wizard. Do not click your browser's Back button.

7. Click the **Tables/Views** drop down list and choose `<YOUR_SCHEMA>.TUTORIAL_TABLE`, where *YOUR_SCHEMA* is the name of your own schema.
8. Click  to display the Column Formatting and Validation page.

9. You can accept the default values on the remaining pages. Click  to create the form and display the Manage Component page.

Note:  is only displayed when you have reached a point in the wizard where you have provided all the information needed to create the component, and can use the default values in the remaining pages. You can change these default values later, if desired.



In the Manage Component page, you can choose from the following options:

- **Edit** Edit the form. For example, you can change the look and feel, add text, or add PL/SQL. You will use this option in Section 4.3, "Editing a Form" on page 4-7.
- **Run** Run the current version of the form. You will use this option in the next step of this exercise.

Note: If the component contains errors (indicated by the words **INVALID Package** in the **Version(s) Status** link), you will not be able to run it. You will need to edit the component first to correct the errors.

- **Parameters** Specify values that will be used to display the form.

Note: For components with a parameter entry form, such as reports, this option displays the parameter entry form. For more information see Section 4.5, "Building a Report" on page 4-19.

- **Privileges** Grant and revoke the privileges to execute the form to other WebDB users. You will use this option in Section 4.4, "Making a Component Available to Other Users" on page 4-16.
- **Monitor** View a chart of all requests for the form and the end users who made those requests.
- **Manage** Additional options for managing the component. For example, **Export** enables you to move the component to a different database, and **Drop** deletes the component.

10. Click **Run**. Your form is displayed on a web page.

The screenshot shows a web form interface. At the top, there is a grey header bar with the text "Form Title" and a question mark icon. Below the header, there are two buttons: "Insert" and "Reset". Underneath the buttons, there are five input fields, each with a label to its left: "Empno", "Ename", "Job", "Sal", and "Deptno". The "Empno" label is in red. At the bottom of the form, there is a small text label that reads "Elapsed Time = 0.29 seconds." Below this is a thick grey horizontal bar.

11. You can now use the form to insert data into TUTORIAL_TABLE.

Use the following information to fill in the form.

Field	Value
Empno	8
Ename	WARD
Job	SALESMAN
Sal	1250
Deptno	30

Click **Insert**.



1 Row Inserted.

Column	Value(s)
EMPNO	8
ENAME	WARD
JOB	SALESMAN
SAL	1250
DEPTNO	30

4.3 Editing a Form

As you can see, the form you created, while functional, is not particularly sophisticated. However, you can easily edit the form to improve the appearance and add more functionality.

4.3.1 Editing the basic appearance of forms

You can improve the usability of a form by making some changes to the basic appearance. For example, you can provide meaningful labels so the user can easily see what each field in the form is for, or add color to make the form more visually appealing.

1. Click your browser's Back button twice to return to the Manage Component page.
2. Click **Edit** to display the Edit Forms: Column Formatting and Validation page.

In this page, you can choose the columns you want to display as fields in the form, specify a selectable List of Values, a default value, a display format, and choose a JavaScript application for validating a field in the form. The details displayed depend on which column is selected in the **Columns** list box.

4.3.1.1 Changing field labels

By default, WebDB uses the column name as the label for the field in the form. Let's change the labels in the form to something more descriptive.

1. In the **Columns** list box, make sure **EMPNO** is selected.
2. In the **Text** text box, type `Employee Id`.
3. In the **Columns** list box, select **ENAME**. Note that the rest of the fields on the page are updated with information for **ENAME**.
4. In the **Text** text box, type `Last Name`.
5. Change the labels of the rest of the columns to something more descriptive.
6. You can change the font of labels to something that's easier to read.

For each column, select the column in the **Columns** list box, click the **Face** drop down list, and choose **Arial**.

You can also change the color and size of labels.

Note: The label for EMPNO is already colored red because EMPNO is a mandatory column.

The value of the label **Size** is relative to your browser's default text size. For example, if your browser's default text size is 12 points, changing the size of a label to +2 would increase the size of the label by two. For information about how to change your browser's default text size, refer to your browser documentation.

4.3.1.2 Adding colors

Adding color is another way of improving the basic appearance of a form and improving the overall user experience.

1. Click the  tab to display the Form Options page. In this page, you can specify options that control the appearance of the form.

Specify form options and a success procedure.

Run Options	Look and Feel Options
Log Activity <input checked="" type="checkbox"/>	Type Face %
Show Timing <input checked="" type="checkbox"/>	Font Size +0
Alternate ROWID %	Font Color %
	Box Background Color %
	Box Background Image %
	Box Border No Border

On Successful Submission of a Form Execute this Code

Success Procedure

2. Make sure that the **Log Activity** check box is checked. This means that every time an end user uses the form, details about that usage will be recorded in the activity log. You can view reports on the activity log from the **Monitor** option on the Manage Component page, or the WebDB Monitor menu.
3. Click the **Box Background Color** drop down list and choose a color, for example **Turquoise**.
4. Click the **Box Border** drop down list and choose **Thin Border**.
5. Click **Finish** to save your changes and display the Manage Component page.


WebDB keeps a copy of previous versions of your components. If you want to go back to an earlier version, simply click the appropriate **Version(s) Status** link. Once you have finished editing a component and are happy with the final version, you can click **Manage** and use the **Drop** option to delete the old versions of the component.

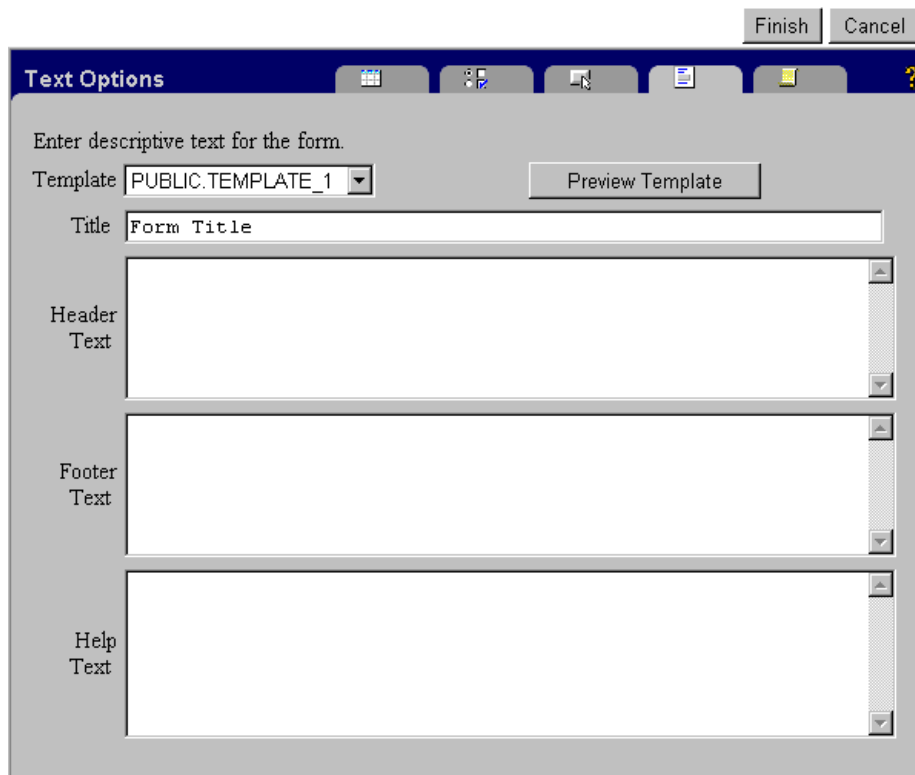
6. Click **Run** to view your changes.

The screenshot shows a web form with a grey header bar containing the text "Form Title" and a question mark icon. Below the header is a blue-bordered form area. At the top of this area are two buttons: "Insert" and "Reset". Below these are five input fields, each with a label to its left: "Employee Id", "Last Name", "Job", "Salary", and "Department Id". The "Employee Id" label is in red. Below the form area, the text "Elapsed Time = 0.22 seconds." is displayed. At the bottom of the screenshot is a solid grey horizontal bar.

4.3.2 Adding supporting text to a form

Good user interface design requires that any important information about a form should be displayed on the form itself. You should also provide help text to give end users additional guidance if they need it.

1. Click your browser's Back button to return to the Manage Component page.
2. Click **Edit** to display the Edit Form: Column Formatting and Validation page.
3. Click the  tab to display the Text Options page. In this page, you can specify text that you want to appear at the top or bottom of the form. You can also add help text and specify a template.



Text Options

Enter descriptive text for the form.

Template: PUBLIC.TEMPLATE_1

Title: Form Title

Header Text

Footer Text

Help Text

4. In the **Title** text box, type `Employees`.

5. In the **Header Text** text box, type:

```
<H3>Use this form to add new employee information.</H3>
```

Note: You can use HTML tags, for example `<H3>` or ``, to control the appearance of the text, if desired.

6. In the **Footer Text** text box, type:

```
<FONT COLOR="red">Red text indicates that the field is mandatory and you  
must enter a value.</FONT>
```

7. In the **Help Text** text box, type:

```
<H3>To add a new employee:</H3>  
Fill in the fields on the form and click <B>Insert</B>.<BR>  
<B>Note</B> If you make a mistake and want to start again, click  
<B>Reset</B> to clear all the fields on the form.
```

8. In this page, you can also specify the overall look and feel of the page on which the form is displayed by choosing a template. WebDB provides some templates to get you started, but you can also create your own with your company logo, color scheme, and text. For more information about templates, see the WebDB online help.
9. Click the **Template** drop down list, and choose a template, for example **PUBLIC.TEMPLATE_3**.
10. Click **Preview Template** to see what the template looks like.
11. Close the template preview window and click **Finish** to save your changes and display the Manage Component page.

12. Click **Run** to view your changes.



Employees ?

Use this form to add new employee information.

Insert Reset

Employee Id

Last Name

Job

Salary

Department Id


Elapsed Time = 0.39 seconds.
Red text indicates that the field is mandatory and you must enter a value.

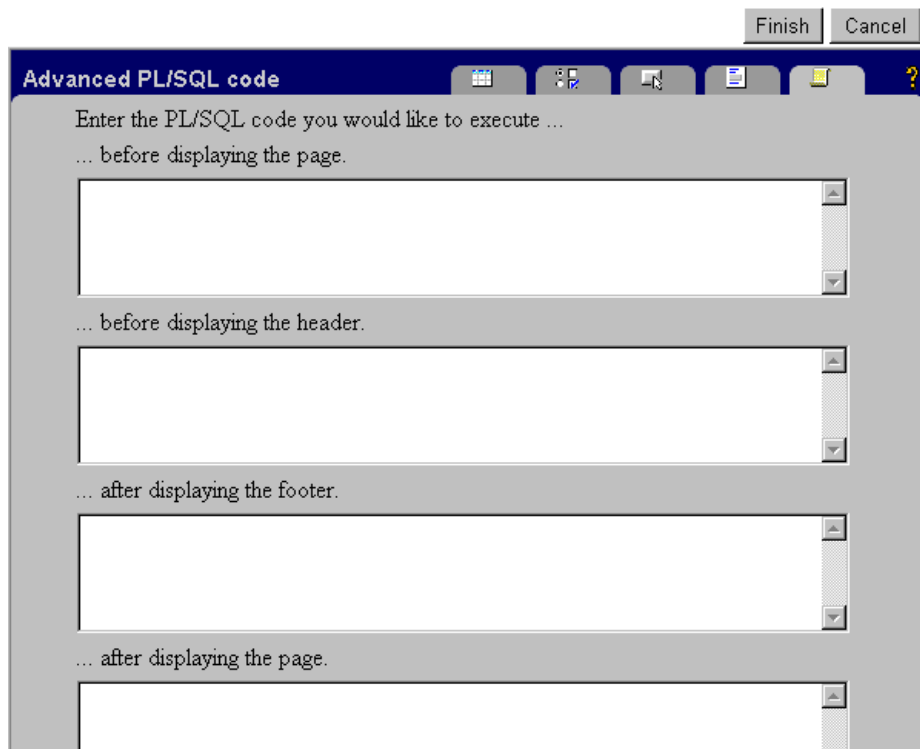
13. To view the help text you provided, click the question mark (?) icon at the top right of the form.
14. Click your browser's Back button to return to the form.

4.3.3 Adding advanced PL/SQL code

You can use PL/SQL to add more functionality to your forms. For example, you might want to display a custom header, or create a temporary table.

1. Click your browser's Back button to return to the Manage Component page.
2. Click **Edit** to display the Edit Form: Column Formatting and Validation page.

3. Click the  tab to display the Advanced PL/SQL code page. In this page, you can specify PL/SQL code that runs at different points during the execution of the HTML code that creates the form.



4. In the **before displaying the page** text box, type:

```
http.print(sysdate);
```

This will print today's date at the top of the page on which the form is displayed.

5. Click **Finish** to save your changes and display the Manage Component page.

6. Click **Run** to view your changes. Today's date is displayed above the form.



Use this form to add new employee information.

Insert	Reset
Employee Id	<input type="text"/>
Last Name	<input type="text"/>
Job	<input type="text"/>
Salary	<input type="text"/>
Department Id	<input type="text"/>

Elapsed Time = 0.34 seconds.

Red text indicates that the field is mandatory and you must enter a value.

4.4 Making a Component Available to Other Users

To enable other users to run a component, you need to provide the following:

- The URL of the page that contains the component, or a way of accessing that URL
- Execute privileges on the component

Members of the Human Resources department need to be granted execute privileges on TUTORIAL_FORM before they can run it.

1. Take a look at the URL of the page containing TUTORIAL_FORM. This is the URL your users need to run the form. Users can type the URL in the Address or Location field of their browser, or you could provide a link to the URL on another page that the user already knows how to access. The URL consists of:

`www.webserver.com:port/dad/your_schema.TUTORIAL_FORM.show`

where:

<code>www.webserver.com</code>	is the name of the web server where WebDB is installed.
<code>port</code>	is the port used to access the web server where WebDB is installed. If port 80 is used, this may be omitted.
<code>dad</code>	is the name of the <i>Database Access Descriptor (DAD)</i> used by WebDB to access the database. A DAD is a set of values that specify how WebDB connects to the database to fulfill an HTTP request. A DAD is automatically configured when you install WebDB.
<code>your_schema.TUTORIAL_FORM</code>	is the package that creates the component.
<code>show</code>	is the procedure that displays the component.

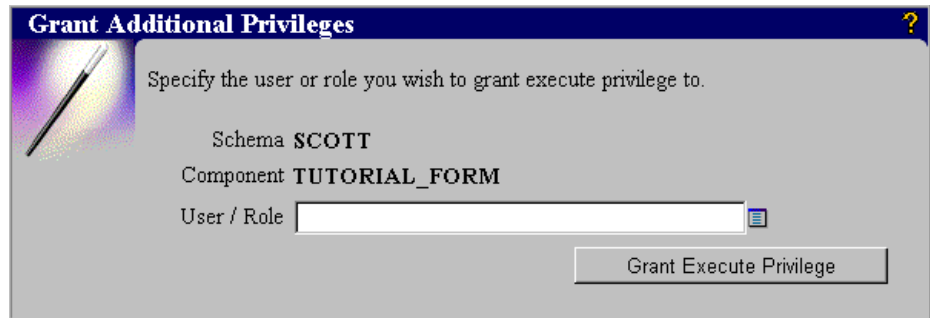
Note: The combination of the package that creates the component (for example, `your_schema.TUTORIAL_FORM`) and the procedure that displays the component (for example, `show`) is referred to as the *run link*. The run link of a component is displayed on the Manage Component page.


2. When users attempt to display the page containing the component, they will be prompted for their user name and password. To be able to use the component, the user must have execute privileges on the component.

Click your browser's Back button to return to the Manage Component page.

3. Click **Privileges**.

The page displayed is divided into two sections. In this exercise you will use the Grant Additional Privileges section.



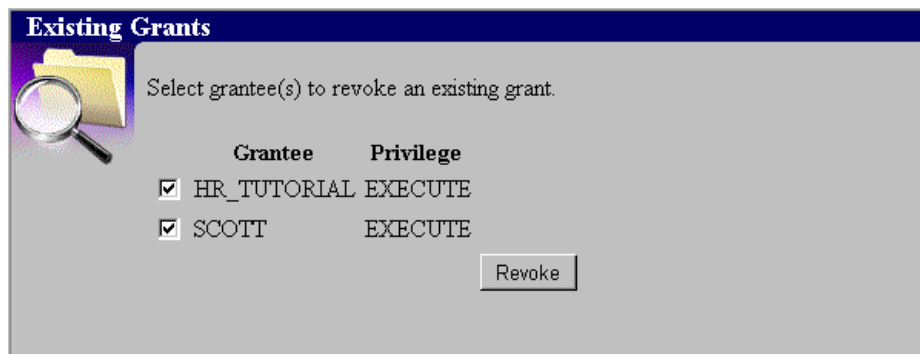
4. Click  to display a list of the users and roles to which you can grant execute privileges.
5. Click **Next** to page through the list if necessary and click **HR_TUTORIAL (Role)**.

Note: If HR_TUTORIAL is not listed, ask your DBA to create this role for you using the instructions in Appendix A, "Tutorial Setup Instructions".

HR_TUTORIAL is displayed in the **User/Role** text box in the Grant Additional Privileges section.

6. Click **Grant Execute Privilege**.

HR_TUTORIAL is displayed in the Existing Grants section.



Members of the HR_TUTORIAL role are now able to run TUTORIAL_FORM.

Note: If the form was part of a human resources application, you would need to grant the HR_TUTORIAL role execute privileges on all the components in the application.

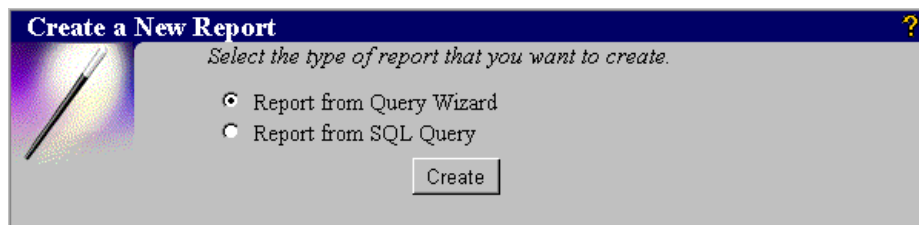
To revoke execute privileges from a user or role, make sure the check box next to the user or role is checked and click **Revoke**.

4.5 Building a Report

The Human Resources department has also requested a report that enables them to view employee information.



1. In the toolbar at the bottom of the page, click  .

The page displayed is divided into three sections. For this exercise you will use the Create a New Report section.



2. Make sure the **Report from Query Wizard** radio button is selected, and click **Create** to display the Create Reports Wizard.

The Create Reports Wizard produces a SQL query based on the information you provide as you step through the pages of the wizard. If you are familiar with SQL you can also create a report by writing the SQL query yourself.

3. Click the **Schema** drop down list and choose your own schema.
4. In the **Report Name** text box, type `TUTORIAL_REPORT`.
5. Click  to display the Tables and Views page.
6. Scroll down the **Tables/Views** list box, and choose `<YOUR_SCHEMA>.TUTORIAL_TABLE`, where `YOUR_SCHEMA` is the name of your own schema.
7. You can accept the default values on the remaining pages. Click  to create the report and display the Manage Component page.

- Click **Run** to display your report.

Report Results ?

Empno	Ename	Job	Sal	Deptno
1	KING	PRESIDENT	5250	10
2	BLAKE	MANAGER	3000	30
3	JONES	MANAGER	3500	20
4	ALLEN	SALESMAN	1500	30
5	CLARK	MANAGER	2625	10
6	MILLER	CLERK	1050	10
7	SCOTT	ANALYST	2000	20
8	WARD	SALESMAN	1250	30

Row(s) 1 - 8

Elapsed Time 1.34 second(s)
User SCOTT


4.6 Editing a Report

You can edit your report in the same way as you edited the form in Section 4.3, "Editing a Form" on page 4-7. For example, you can change the report display options, add text, and add PL/SQL code. You can also use the report edit options to produce more sophisticated reports, such as summary reports, break reports, and parameterized reports. The following exercises show you how to create these advanced reports.

4.6.1 Adding summary information to a report

The Human Resources department would like the total salary to be displayed on the report, so they can easily see how much is being spent on salaries.

- Click your browser's Back button to return to the Manage Component page.
- Click **Edit** to display the Edit Report: Table/View Columns page.

3. Click the  tab to display the Columns Formatting page. In this page, you can specify column alignment, a display format, and whether to add a summary of a column's values.

Finish Cancel

Columns Formatting

Choose how your columns will be displayed in the report.

Column	Column Heading Text	Sum	Align	Format mask	Fixed Size	Link
TUTORIAL_TABLE.EMPNO	Empno	<input type="checkbox"/>	Right		10	%
TUTORIAL_TABLE.ENAME	Ename	<input type="checkbox"/>	Left		20	%
TUTORIAL_TABLE.JOB	Job	<input type="checkbox"/>	Left		20	%
TUTORIAL_TABLE.SAL	Sal	<input type="checkbox"/>	Right		10	%
TUTORIAL_TABLE.DEPTNO	Deptno	<input type="checkbox"/>	Right		10	%

4. In the TUTORIAL_TABLE.SAL row:
 - a. Check the **Sum** check box.
 - b. In the **Format mask** text box, type \$999,999.99.
5. Click **Finish** to save your changes and display the Manage Component page.

- Click **Run** to view your changes. The report now shows the total salary.

Report Results ?

Empno	Ename	Job	Sal	Deptno
1	KING	PRESIDENT	\$5,250.00	10
2	BLAKE	MANAGER	\$3,000.00	30
3	JONES	MANAGER	\$3,500.00	20
4	ALLEN	SALESMAN	\$1,500.00	30
5	CLARK	MANAGER	\$2,625.00	10
6	MILLER	CLERK	\$1,050.00	10
7	SCOTT	ANALYST	\$2,000.00	20
8	WARD	SALESMAN	\$1,250.00	30
Page Sum			\$20,175.00	
Total Sum			\$20,175.00	

Row(s) 1 - 8

Elapsed Time .3 second(s)

User SCOTT

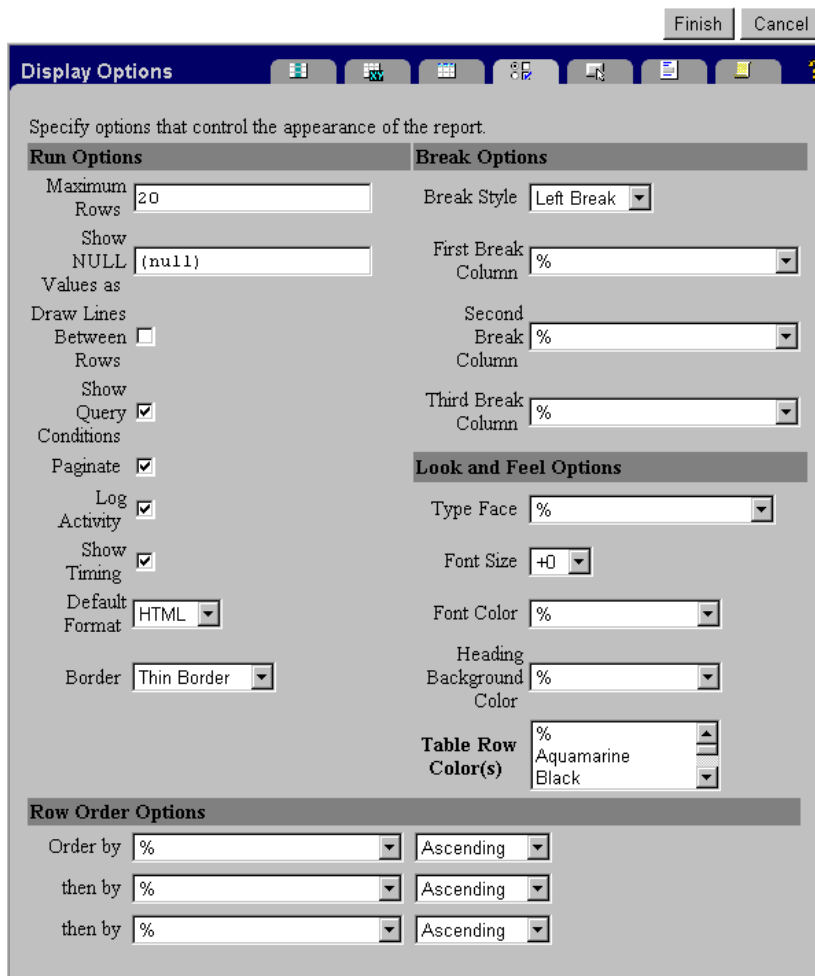
Company Name/Logo

4.6.2 Adding a break to a report

The Human Resources department has requested that the report be grouped by the different departments, to make it easier to view employees by department. You can create a break report to do this.

- Click your browser's Back button to return to the Manage Component page.
- Click **Edit** to display the Edit Report: Table/View Columns page.

- Click the  tab to display the Display Options page. In this page, you can specify options that control the appearance of the report.



Specify options that control the appearance of the report.

Run Options	Break Options
Maximum Rows: 20	Break Style: Left Break
Show NULL Values as: (null)	First Break Column: %
Draw Lines Between Rows: <input type="checkbox"/>	Second Break Column: %
Show Query Conditions: <input checked="" type="checkbox"/>	Third Break Column: %
Paginate: <input checked="" type="checkbox"/>	
Log Activity: <input checked="" type="checkbox"/>	Look and Feel Options
Show Timing: <input checked="" type="checkbox"/>	Type Face: %
Default Format: HTML	Font Size: +0
Border: Thin Border	Font Color: %
	Heading Background Color: %
	Table Row Color(s): % Aquamarine Black
Row Order Options	
Order by: % Ascending	
then by: % Ascending	
then by: % Ascending	

- Click the **First Break Column** drop down list, and choose **TUTORIAL_TABLE.DEPTNO**.
- For best results, you should also order the report by the columns you have chosen to break on.

At the bottom of the page, click the first **Order by** drop down list and choose **TUTORIAL_TABLE.DEPTNO**.

6. Click **Finish** to save your changes and display the Manage Component page.
7. Click **Run** to view your changes. The report is now grouped by department. The total salary is shown for each group as well as for the whole report.

Report Results ?

Deptno	Empno	Ename	Job	Sal
10	1	KING	PRESIDENT	\$5,250.00
	5	CLARK	MANAGER	\$2,625.00
	6	MILLER	CLERK	\$1,050.00
	sum			\$8,925.00
20	3	JONES	MANAGER	\$3,500.00
	7	SCOTT	ANALYST	\$2,000.00
	sum			\$5,500.00
30	2	BLAKE	MANAGER	\$3,000.00
	4	ALLEN	SALESMAN	\$1,500.00
	8	WARD	SALESMAN	\$1,250.00
	sum			\$5,750.00
	Page Sum			\$20,175.00
	Total Sum			\$20,175.00


Row(s) 1 - 8

Ordering Deptno ASC
Elapsed Time .53 second(s)
User SCOTT

Company Name/Logo

4.6.3 Adding parameters to a report

The Human Resources department has submitted another enhancement request for the report. They want to be able to display the report data for a single specified department. You need to create a parameter to enable them to specify the department.

1. Click your browser's Back button to return to the Manage Component page.
2. Click **Edit** to display the Edit Report: Table/View Columns page.
3. Click the  tab to display the Parameter Entry Form Display Options page. In this page, you can specify parameters that will be used to specify the data displayed in the report.

Parameter Entry Form Display Options

Choose parameters that will be used on the Report Parameter Entry Form to further constrain report results. Select "Value Required" if the parameter value has to be entered on the Report Parameter Entry Form. Otherwise the condition will be ignored when its value is not specified.

Value Required	Column Name	Prompt	LOV	Display LOV As
<input type="checkbox"/>	% <input type="text"/>	<input type="text"/>	<input type="text"/>	% <input type="text"/>
<input type="checkbox"/>	% <input type="text"/>	<input type="text"/>	<input type="text"/>	% <input type="text"/>
<input type="checkbox"/>	% <input type="text"/>	<input type="text"/>	<input type="text"/>	% <input type="text"/>
<input type="checkbox"/>	% <input type="text"/>	<input type="text"/>	<input type="text"/>	% <input type="text"/>

Select formatting options which will appear on the Report Parameter Entry Form.

Output Format
 Maximum Rows
 Break Columns
 Font Size
 Order By

Specify buttons that will be used on the Report Parameter Entry Form.

Show Button	Name	Location	Alignment
<input checked="" type="checkbox"/> Run	<input type="text" value="Run Report"/>	Top <input type="text"/>	Left <input type="text"/>
<input type="checkbox"/> Save	<input type="text" value="Save"/>	Top <input type="text"/>	Left <input type="text"/>
<input type="checkbox"/> Batch	<input type="text" value="Batch"/>	Top <input type="text"/>	Left <input type="text"/>
<input checked="" type="checkbox"/> Reset	<input type="text" value="Reset"/>	Top <input type="text"/>	Left <input type="text"/>

4. Click the **Column Name** drop down list and choose **TUTORIAL_TABLE.DEPTNO**.

5. In the **Prompt** text box, type `Department`.
6. Click **Finish** to save your changes and display the Manage Component page.
7. Click **Parameters** to display the parameter entry form for the report.

The parameter entry form prompts the end user for values to use to display the report. The `Department` parameter you created is the first field on the parameter entry form. Note that end users can also change the break column and order by settings for the report.

Report Parameters ?

Run Report
Reset

Department %

Order by Deptno Ascending

then by % Ascending

then by % Ascending

Break Columns Deptno % %

Output Format HTML

Maximum Rows/Page 20

Font Size +0

8. In the **Department** fields, choose `=` from the drop down list, and type `10` in the text box.

- Click **Run Report**. Now, your report only lists employees who work in Department 10.

Report Results



Deptno	Empno	Ename	Job	Sal
10	1	KING	PRESIDENT	\$5,250.00
	5	CLARK	MANAGER	\$2,625.00
	6	MILLER	CLERK	\$1,050.00
sum				\$8,925.00
Page Sum				\$8,925.00
Total Sum				\$8,925.00


Row(s) 1 - 3

Department = 10
Ordering Deptno ASC
Elapsed Time .55 second(s)
User SCOTT

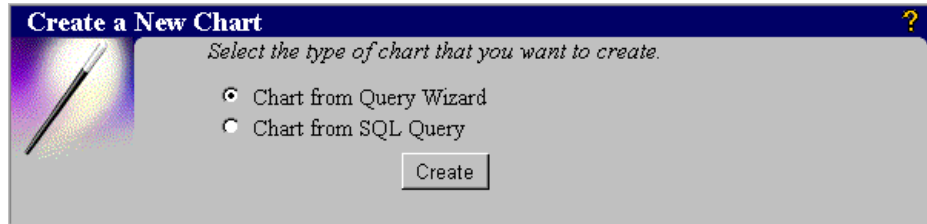
Company Name/Logo

4.7 Building a Chart

The Human Resources department has also requested a chart that shows the total salary for each department.



- Click your browser's Back button twice to return to the Manage Component page.
- In the toolbar at the bottom of the page, click  .

The page displayed is divided into three sections. For this exercise you will use the Create a New Chart section.



3. Make sure the **Chart from Query Wizard** radio button is selected and click **Create** to display the Create Charts Wizard.

The Create Charts Wizard produces a SQL query based on the information you provide as you step through the pages of the wizard. If you are familiar with SQL you can also create a chart by writing the SQL query yourself.

4. Click the **Schema** drop down list and choose your own schema.
5. In the **Chart Name** text box, type `TUTORIAL_CHART`.
6. Click  to display the Tables or Views page.
7. Click the **Tables/Views** drop down list, and choose `<YOUR_SCHEMA>.TUTORIAL_TABLE`, where `YOUR_SCHEMA` is the name of your own schema.
8. Click  to display the Table/View Columns page.
9. Click the **Label** drop down list and choose `DEPTNO`.

The values of the Label column are displayed along the axis of the chart.


10. Click the **Value** drop down list and choose `SAL`.

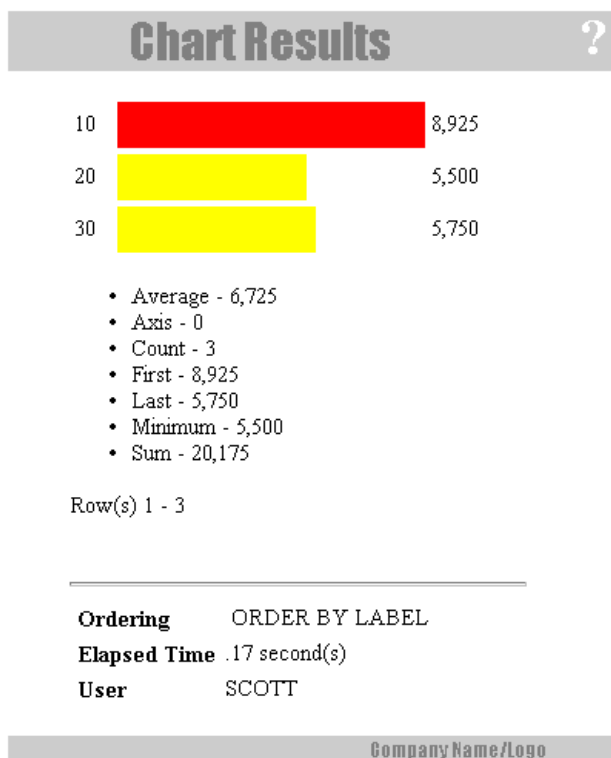
The values of the Value column are used to calculate the size of the bars in the chart.

Note: The default for **Value** is **1**. Choosing a value of 1 is useful if you also choose a group function. For example, you can choose the **JOB** column from **TUTORIAL_TABLE** as the label, 1 as the value, and **COUNT** as the group function. This creates a chart that displays the number of employees in each job classification.

11. Click the **Group Function** drop down list, and choose **SUM**.








The group function groups the Value column values by unique Label column values, and performs an operation on each group of values. In this case, the group function sums the salaries of each department.

12. You can accept the default values on the remaining pages. Click  to create the chart and display the Manage Component page.
13. Click **Run** to display your chart.



4.8 Building Shared Components

A *shared component* is a component element such as a link, List of Values, or image that can be used by multiple developers when creating forms, reports, and other WebDB components. You can create the following shared components in WebDB:

Icon	Shared Component	Description
	Color	Set the background color of a component and other component elements such as report headings and chart bars.
	Font	Set the font for text that appears in components, such as in labels and headings.
	Image	Add graphic image files to a component or its background.
	JavaScript	Perform field- or form-level validation of entry fields in the component.
	Link	Add hypertext links to jump between components.
	List of Values (LOV)	Add selectable parameters to component entry fields. The List of Values can be displayed in formats such as combo boxes, radio buttons, or check boxes.
	User Interface Template	Set the look and feel of a page on which a component is displayed.

Because these component elements are shared, they only need to be created once and will look and behave consistently across components. To use a shared component, you must have Build In privileges in the schema that owns the shared component. Any WebDB developer can create a shared component.


In the following exercises you'll learn how to create Lists of Values and use them in components. In Chapter 5, "Linking Components to Build Applications" you'll learn how to create and use links.

4.8.1 Building a List of Values (LOV)

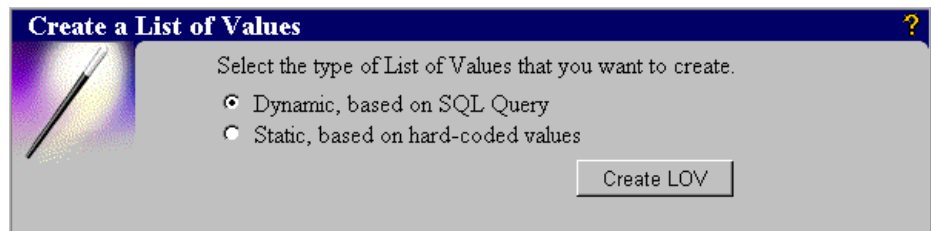
A List of Values (LOV) enables end users to select from a list of possible values rather than type values in entry fields on forms and component parameter entry forms. There are two types of LOV:

- **Dynamic LOV** A dynamic LOV is based on a SQL query that you code. The LOV is dynamically generated from a SQL query of a table column and contains all values in the column.
- **Static LOV** A static LOV contains values that you hard code when you create it.

The DEPTNO column in TUTORIAL_TABLE can have a value of 10, 20, or 30. Let's create a List of Values so that when the Human Resources staff need to enter a department number they can choose from a list.

1. Click your browser's Back button to return to the Manage Component page.
2. In the toolbar at the bottom of the page, click .
3. Click **Lists of Values (LOV)**.

The page displayed is divided into three sections. For this exercise you will use the Create a List of Values section.



4. Click the **Static** radio button and click **Create LOV** to display the Create Static List of Values page.

Create Static List of Values ?

Create this List of Values:

Owning Schema: SCOTT

Name: TESTLOV

Default Display Formats:

Default Format: Check box

Show Null Value: %

Display Value	Return Value	Display Order

Add LOV

5. Click the **Owning Schema** drop down list and choose your own schema.
6. In the **Name** text box, type TUTORIAL_LOV.
7. Complete the **Display Value**, **Return Value**, and **Display Order** text boxes using the information in the following table.
 - **Display Value** specifies what is displayed in the list.
 - **Return Value** is the actual value that is returned to the component when an item in the List of Values is chosen.

- **Display Order** specifies the order the items are displayed in the List of Values. If you do not specify a display order, the items are displayed in ascending alphabetic or numeric order.

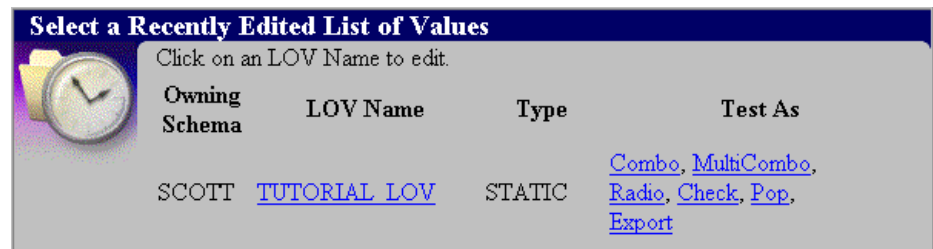
Display Value	Return Value	Display Order
Accounting	10	1
Research	20	2
Sales	30	3

8. Click **Add LOV** to create the List of Values and display the Manage Lists of Values page.

4.8.2 Testing a List of Values

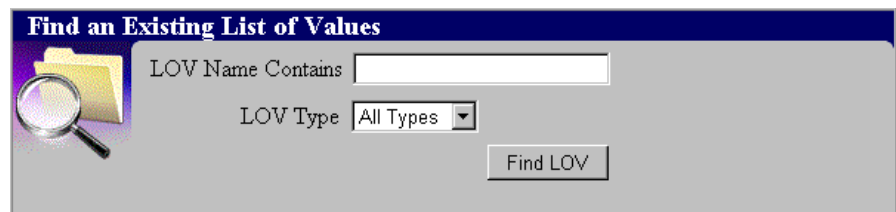
Once you have created a List of Values, you can test it to check how it will appear in a component.

1. Scroll down to the Select a Recently Edited List of Values section.



If TUTORIAL_LOV is not listed:

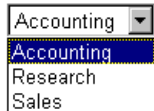
- a. Scroll up to the Find an Existing List of Values section.



- b. In the **LOV Name Contains** text box, type TUTORIAL_LOV.

- c. Click **Find LOV**.
2. Click **Combo** to test what TUTORIAL_LOV will look like as a combo box.

Display List of values: TUTORIAL_LOV
Owner: SCOTT
Type: COMBOBOX



A screenshot of a web form showing a dropdown menu. The menu is open, displaying three options: 'Accounting' (which is highlighted in blue), 'Research', and 'Sales'. The text 'Accounting' is also visible in the dropdown's header area.

3. Click your browser's Back button.
4. Click **Radio** to test what the List of Values will look like as a radio group.

Display List of values: TUTORIAL_LOV
Owner: SCOTT
Type: RADIOGROUP


- Accounting
- Research
- Sales

4.8.3 Using a List of Values in a component

In the previous exercise you created a List of Values. In this exercise you will use the List of Values in the form and report that you created in Section 4.2, "Building a Form Based on a Table" on page 4-3 and Section 4.5, "Building a Report" on page 4-19.

4.8.3.1 Using a List of Values in a form

Let's add the List of Values to the DEPTNO field in TUTORIAL_FORM.

1. In the toolbar at the bottom of the page, click  to display the Component Building page.

The Component Building page offers another way of finding components. Here you can search across different types of component.

Find an Existing Component ?

Enter search criteria to locate components to edit. Press the find button to start the search.

Schema: SCOTT Name Contains: _____

Calendars Charts Dynamic Pages
 Forms Frame Drivers Hierarchies
 Menus Reports


Shared Components: Java Scripts Links
 Lists of Values UI Templates

Sort By: Name Status: All Status Codes

Find

2. Click the **Schema** drop down list and choose your own schema.
3. In the **Name Contains** text box, type TUTORIAL.
4. Click **Find**.



WebDB searches for all components containing the text "tutorial" and lists them at the bottom of the Component Building page. You can use the check boxes to restrict the search further by specifying which type of components to search for.


5. Scroll down the Component Building page and click **TUTORIAL_FORM** to display the Manage Component page for the form.
6. Click **Edit** to display the Edit Form: Column Formatting and Validation page.
7. In the **Columns** list box, select **DEPTNO**.
8. Click the **Display As** drop down list and choose **ComboBox**.
9. Click  next to the **LOV** text box to list the available Lists of Values. You can only use Lists of Values stored in schemas on which you have Build In privileges.

10. Click **Next** to page through the Lists of Values if necessary and click **<YOUR_SCHEMA>.TUTORIAL_LOV**, where *YOUR_SCHEMA* is the name of your own schema.
11. Click **Finish** to save your changes and return to the Manage Component page.
12. Click **Run** to view your changes. The **Department Id** field is now a combo box where the end user can select a department by name, rather than having to know which number to type.

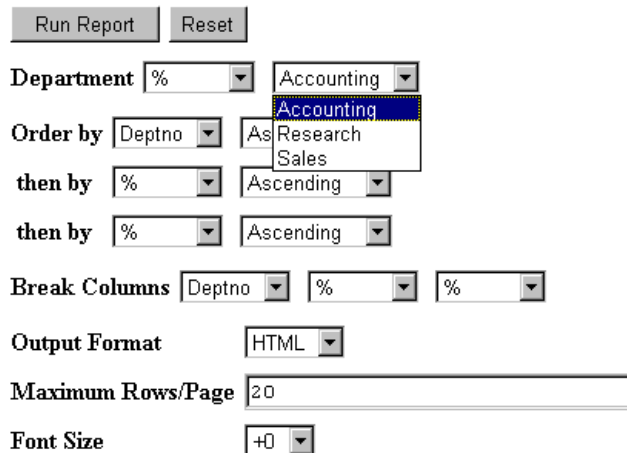
4.8.3.2 Using a List of Values in a report parameter entry form

Let's add the List of Values to the Department parameter field in the TUTORIAL_REPORT parameter entry form.

1. Click your browser's Back button to display the Manage Component page.
2. In the toolbar at the bottom of the page, click  to display the Component Building page.
3. Click the **Schema** drop down list and choose your own schema.
4. In the **Name Contains** text box, type TUTORIAL.
5. This time, let's just search for reports. Uncheck all the check boxes except for the **Reports** check box and click **Find**.
6. Scroll down the Component Building page and click **TUTORIAL_REPORT** to display the Manage Component page for the report.
7. Click **Edit** to display the Edit Report: Table/View Columns page.
8. Click the  tab to display the Parameter Entry Form Display Options page.

9. In the row for the Department parameter, click  next to the LOV text box to list the available Lists of Values.
10. Click **Next** to page through the Lists of Values if necessary and click `<YOUR_SCHEMA>.TUTORIAL_LOV`, where `YOUR_SCHEMA` is the name of your own schema.
11. Click the **Display LOV As** drop down list and choose **Combo box**.
12. Click **Finish** to save your changes and return to the Manage Component page.
13. Click **Parameters** to display the parameter entry form for the report.

The List of Values looks the same as the List of Values in TUTORIAL_FORM: the same values are listed in the same order. This improves the usability and consistency of an application, because the end user does not have to learn a different interface before being able to use the report. If you did not use a shared component in this situation, the List of Values might be ordered differently or use different names for the departments, which could confuse the end user.



Run Report Reset

Department % Accounting

Order by Deptno As Accounting

then by % Ascending

then by % Ascending

Break Columns Deptno % %

Output Format HTML

Maximum Rows/Page 20

Font Size +0

14. In the **Department** fields, choose = from the first drop down list and choose **Sales** from the second.
15. Click **Run Report** to show employees in the Sales department (Department 30).
16. Click your browser's Back button twice to return to the Manage Component page.

4.9 What's Next?

In this chapter, you learned how to:

- Create and edit a form
- Create and edit a report
- Create a chart
- Provide access to a component
- Create and use a List of Values (LOV)

In Chapter 5, "Linking Components to Build Applications" you will create menus and links to build applications from the individual components you have created.

Linking Components to Build Applications

Estimated completion time: 20 minutes

This chapter shows you how to use Oracle WebDB to build applications from the individual components you have created. Typically, you will build components as part of an application, not as standalone components. End users need to be able to easily access an application's components and the components themselves need to be able to link to each other and pass data between each other.

In this chapter you'll learn how to build menus to provide access to your application components and how to build links to add hypertext jumps and pass data between components.

This chapter includes the following sections:

Section	Location
"Before You Begin"	on page 5-1
"Building a Menu"	on page 5-2
"Editing a Menu"	on page 5-4
"Building a Link"	on page 5-8
"What's Next?"	on page 5-13

5.1 Before You Begin

- To complete this chapter, you must be a member of the `WEBDB_DEVELOPER` role. If you are not a member of the `WEBDB_DEVELOPER` role, you will not be able to access WebDB's component building features. If you want to be added to the `WEBDB_DEVELOPER` role, ask your DBA.

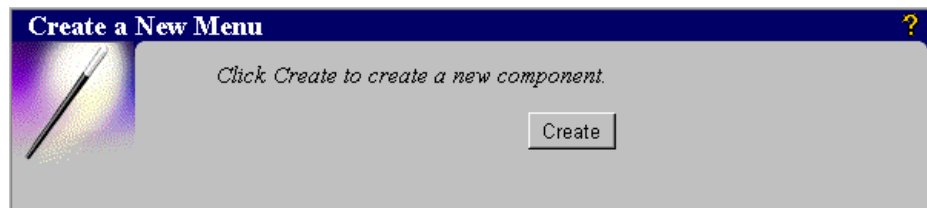
- You must have completed Section 4.2, "Building a Form Based on a Table" on page 4-3, Section 4.5, "Building a Report" on page 4-19, and Section 4.6.3, "Adding parameters to a report" on page 4-25 before starting this chapter.
- Your DBA must have created the HR_TUTORIAL role. Instructions for creating this role are provided in Appendix A, "Tutorial Setup Instructions".

5.2 Building a Menu

Menus enable users to navigate within an application and access the different components. Let's create a menu for the Human Resources application.


1. In the toolbar at the bottom of the page, click  .


The page displayed is divided into three sections. For this exercise you will use the Create a New Menu section.



2. Click **Create** to display the Create Menus Wizard.
3. Click the **Schema** drop down list and choose your own schema.

Note: Your schema name is the same as your user name.

4. In the **Menu Name** text box, type TUTORIAL_MENU.
5. Click  to display the Text Options page.

WARNING: Click  if you need to go back to a previous page of the wizard. Do not click your browser's Back button.

6. In the **Title** text box, type Tutorial Menu.

7. In the **Welcome Text** text box, type:

Welcome to the Tutorial Human Resources Application.

Choose an option from the list below.

8. In the **Footer Text** text box, type:

For enhancements, please email your_name.

9. Click  to display the Root Level Menu Items page.

10. In the **Menu Items** text box, type Add Employee.

This text will be displayed as a hypertext link in the menu.

11. In the **URLs (Optional)** text box, type

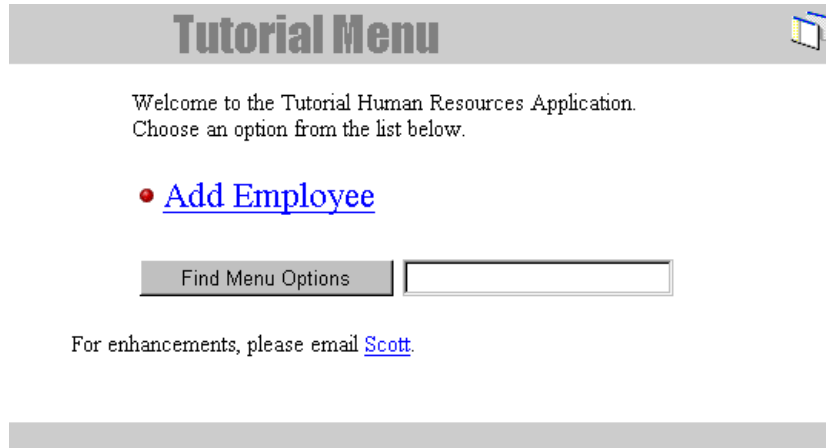
<YOUR_SCHEMA>.TUTORIAL_FORM.SHOW, where *YOUR_SCHEMA* is your own schema name.

This is the run link of the form and will be used to link to the form.

12. You can accept the default values on the remaining pages. Click  to create the menu and display the Manage Component page.

13. Click **Run** to view your menu. Note that the menu includes a Find Menu Options field on the top-level menu page like that displayed on the WebDB

home page. End users can use this field to find all the menu items that contain the text they type in the Find field.



14. Click **Add Employee** to display the form you created in Section 4.2, "Building a Form Based on a Table" on page 4-3.

5.3 Editing a Menu

Now let's add another item to the menu.

1. Click your browser's Back button twice to return to the Manage Component page.
2. Click **Edit** to display the Edit Menu Hierarchy page.



This page enables you to:

- View the menu (by clicking **Show Menu**)
- Edit the menu (by clicking the menu title, in this exercise **Tutorial Menu**)
- Edit existing menu items (by clicking the menu item title, in this exercise **Add Employee**)
- Add new menu items (by clicking **Add Child Menu**)

Let's add a new menu item.

3. Click Add Child Menu.

This enables you to add more items to the menu. The items you add can be components, including other menus, or any URL.

The page displayed is divided into three sections. For this exercise you will use the Menu Entry Links-To section.

Menu Entry Links-To:

Bullet Icon

Name

Link Text

Entry Description for this link:

Enter HTML text

4. In the **Name** text box, type View Employee Information.
5. In the **Link Text** text box, type `<YOUR_SCHEMA>.TUTORIAL_REPORT.SHOW_PARMS`, where *YOUR_SCHEMA* is your own schema name.
6. In the **Entry Description for this link** text box, type:
This report lists employees in a specified department.
7. Click **Insert** at the top of the page to return to the Edit Menu Hierarchy page.

8. Click **Show Menu** to view your changes. The description text you provided is displayed just below the menu link, describing to end users what the link will do.

Tutorial Menu

Welcome to the Tutorial Human Resources Application.
Choose an option from the list below.

- [Add Employee](#)
- [View Employee Information](#)
This report lists employees in a specified department.

For enhancements, please email [Scott](#).

9. Click **View Employee Information** to display the parameter entry form for the report you created in Section 4.6.3, "Adding parameters to a report" on page 4-25.

Note: The parameter entry form is displayed rather than the report itself because you used the `SHOW_PARMS` link rather than the `SHOW` link.

10. In the **Department** fields, choose = from the first drop down list and choose **Accounting** from the second.
11. Click **Run Report** to display a report of employees in the Accounting department (Department 10).

5.3.1 Adding role-level menu security

You can control who can view menu item links by adding role security.

1. Click your browser's Back button three times to return to the Edit Menu Hierarchy page.



2. Click **Add Employee**. For this exercise you will use the Menu Heading and Parent Information section of the Edit Menu Item page.

3. In the **Role Security** list box, select **HR_TUTORIAL**.

Note: If HR_TUTORIAL is not listed, ask your DBA to create this role for you using the instructions in Appendix A, "Tutorial Setup Instructions".

4. Click **Update** at the top of the page to save your changes.


Now only members of the HR_TUTORIAL role will be able to view the links on the menu.

Note: Even though you have enabled members of the HR_TUTORIAL role to view the links on the menu, you still need to grant end users execute privileges on the individual components themselves to enable them to run the components linked to from the menu. You will also need to grant end users execute privileges on the menu.

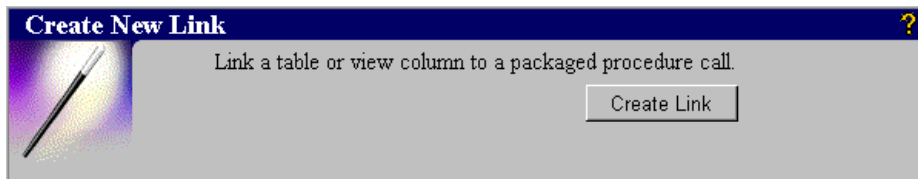
5.4 Building a Link

WebDB links are shared components that enable you to jump from one WebDB component to another component, parameter entry form, or web page. For more information about shared components, see Section 4.8, "Building Shared Components" on page 4-30. You create links to add hypertext jumps between components. These jumps enable end users of the component to navigate to other WebDB components, providing quick and easy access to additional information. You can also use links to pass data between components or to link to any web page.

Let's create a link that passes a department number to TUTORIAL_REPORT. This link can then be used in other components to display TUTORIAL_REPORT.

1. In the toolbar at the bottom of the page, click  .
2. Click **Links**.



The page displayed is divided into three sections. For this exercise you will use the Create New Link section.



3. Click **Create Link** to display the Create Link Wizard.
4. Click the **Schema** drop down list and choose your own schema.
5. In the **Link Name** text box, type TUTORIAL_LINK.

6. Click  to display the Link Target Type and Name page.

Here, you identify where the link will jump to when it is clicked. It can jump to a component, and optionally pass values to the component to specify what is displayed in the component. You can also link to a component parameter entry form where the end user can specify the values to use to display the component, or to any web page.

7. Click the **WebDB Component** radio button to identify the target as a component.
8. Click  next to **The name of the component or page you are linking to** text box to list the components to which you can link.
9. Click **Next** to page through the list if necessary and click `<YOUR_SCHEMA>.TUTORIAL_REPORT`, where *YOUR_SCHEMA* is the name of your own schema.
10. Click  to display the Link Target Inputs page.

This page lists the parameters and display options associated with the chosen component that the link can pass values to.

Note: If you clicked the **WebDB Component Parameter Form** or **HTML Link** radio buttons, clicking  on the Link Target and Name page displays the last page of the Create Link Wizard, because links pass values only to components.


11. In the Parameters section, in the row for the `TUTORIAL_TABLE.DEPTNO` parameter:
 - a. Click the **Condition** drop down list and choose `=`.
 - b. Click the **Value Type** drop down list and choose **Column**.

This specifies that the link passes the value of a column to the component. You can also choose **Literal** and specify a static value so that the link always passes the same value to the component.

- c. In the **Value** text box, type DEPTNO.

The link passes the values of this column to the component.

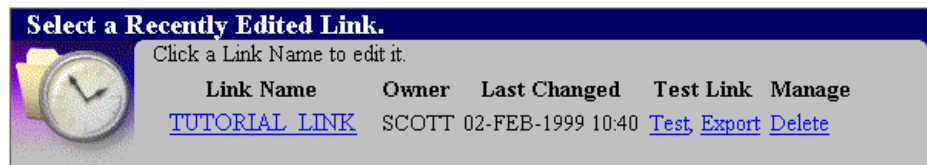
Note: In this page, you can also specify values for display options, such as Maximum Rows/Page, Output Format, and Font Size. If you do not change these values, the component is run using whatever display options were specified when the component was created.

- 12. Click  to display the Create Link page.
- 13. Click **OK** to create the link and return to the Manage Links page.

5.4.1 Testing a link

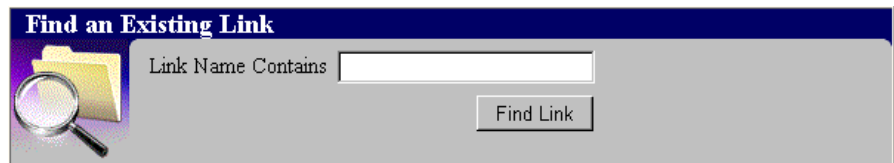
Once you have created a link, you can test it to check how it will appear in a component.

- 1. In the Manage Links page, scroll down to the Select a Recently Edited Link section.



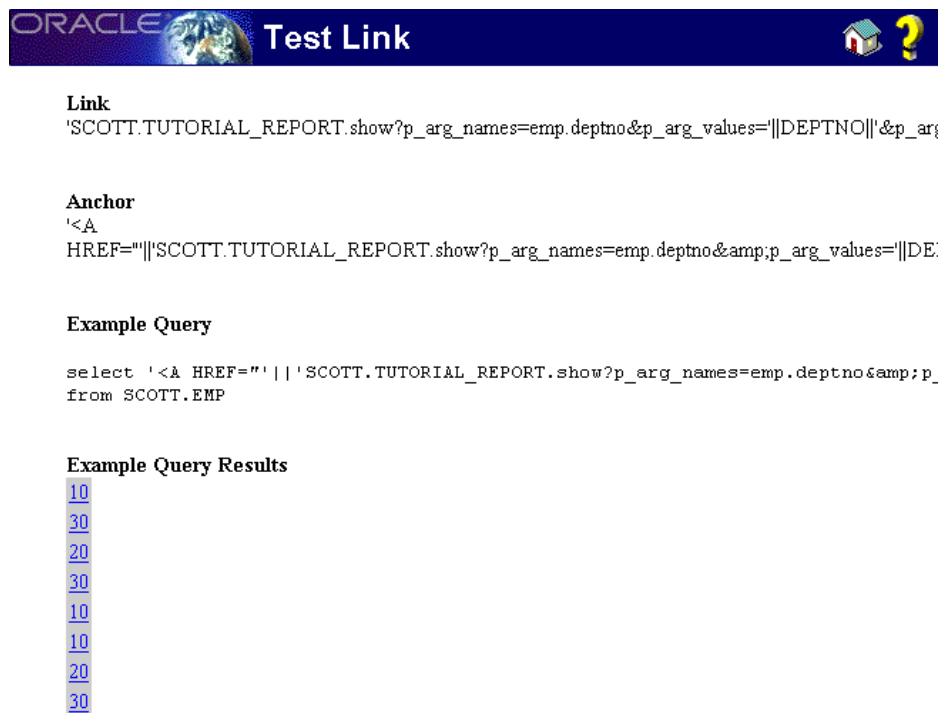
If TUTORIAL_LINK is not listed:

- a. Scroll up to the Find an Existing Link section.



- b. In the **Link Name Contains** text box, type TUTORIAL_LINK.
- c. Click **Find Link**.

- Click **Test** to test the behavior of TUTORIAL_LINK.



Link
'SCOTT.TUTORIAL_REPORT.show?p_arg_names=emp.deptno&p_arg_values=||DEPTNO||&p_arg

Anchor
'<A
HREF="||SCOTT.TUTORIAL_REPORT.show?p_arg_names=emp.deptno&p_arg_values=||DE.

Example Query

```
select '<A HREF="' || SCOTT.TUTORIAL_REPORT.show?p_arg_names=emp.deptno&p_
from SCOTT.EMP
```


Example Query Results

[10](#)
[30](#)
[20](#)
[30](#)
[10](#)
[10](#)
[20](#)
[30](#)

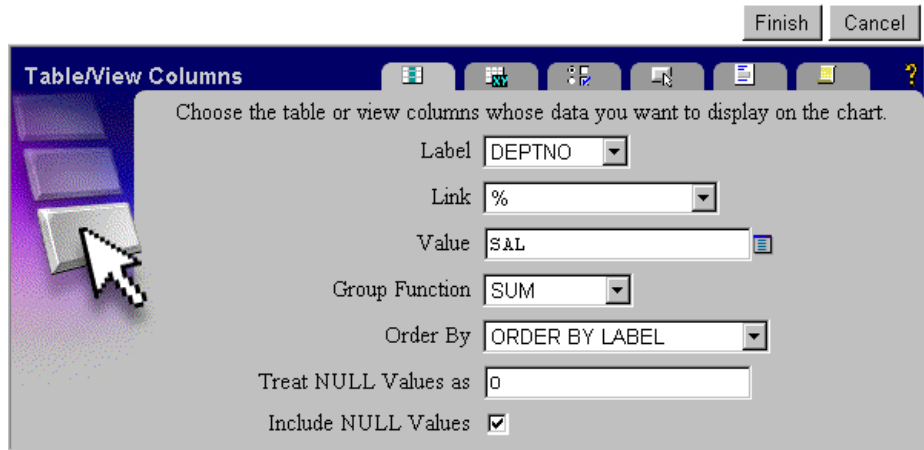
- Click **30** to display TUTORIAL_REPORT with the Department parameter set to 30.

5.4.2 Using a link in a component

In the previous exercise you created a link to TUTORIAL_REPORT. In this exercise you will add the link to TUTORIAL_CHART so that users can quickly display a report that lists the employees in a department, based on the department number that they click in the chart. Rather than having to exit the chart and run the report separately, users can get straight to the information they want from the chart.

- Click your browser's Back button to return to the Test Link page.
- In the toolbar at the bottom of the page, click .
- Click the **Schema** drop down list and choose your own schema.
- In the **Name Contains** text box, type TUTORIAL.

5. Uncheck all the check boxes except for the **Charts** check box, and click **Find**.
6. Click **TUTORIAL_CHART** to display the Manage Component page for the chart.
7. Click **Edit** to display the Edit Chart: Table/View Columns page.



8. Click the **Link** drop down list and choose **TUTORIAL_LINK**.
9. Click **Finish** to save your changes and return to the Manage Component page.
10. Click **Run** to view your changes.

The department number is underlined, identifying it as a link.

<u>10</u>		8,925
<u>20</u>		5,500
<u>30</u>		5,750

11. Click **30** to display TUTORIAL_REPORT showing all employees in Department 30.

5.5 What's Next?

In this chapter, you learned how to:

- Build a menu to provide access to the components in an application
- Create a link between components in an application

This concludes the application building part of the tutorial. Now you're ready to build your own applications. For more information about any subject you've learned in this chapter and others, see the WebDB online help.

If you will be using WebDB to build web sites, see Chapter 6, "Creating WebDB Sites".

If you will be designing or adding content to WebDB sites, see Chapter 7, "Designing WebDB Sites".

Part III

Building WebDB Sites

Complete This Chapter	If You Will Be Using Oracle WebDB To
Chapter 6, "Creating WebDB Sites"	Create Oracle WebDB sites. Note To complete this chapter, you must have completed some of the exercises in Chapter 2, "Managing Users".
Chapter 7, "Designing WebDB Sites"	Design the structure, design the style, or control access to one or more folders of a WebDB site.
Chapter 8, "Managing WebDB Site Content"	Add, edit, or delete WebDB site content. Note To complete this chapter, you must have completed some of the exercises in Chapter 7, "Designing WebDB Sites". We recommend that you complete all the exercises in Chapter 7 before starting this chapter.

Creating WebDB Sites

Estimated completion time: 30 minutes

This chapter shows you how to use Oracle WebDB to create web sites. You create a WebDB site within a schema in an Oracle database. Storing web sites in the database means that backing up the database backs up all of the data in your site. It also means that to move the site from one database to another, you simply export the schema that owns the site and import it into a new database.

When you create a WebDB site, you also install all the tools needed for designing and maintaining the site. These tools can then be accessed from within the site itself, using a web browser. No other software needs to be installed.

In this chapter, you'll learn how to create a WebDB site in a database, using WebDB's Site Creation Wizard. You'll then learn how to assign a site administrator to manage the design and maintenance of the site.

This chapter includes the following sections:

Section	Location
"Before You Begin"	on page 6-1
"Creating a WebDB Site in the Database"	on page 6-2
"Assigning a Site Administrator"	on page 6-7
"What's Next?"	on page 6-11

6.1 Before You Begin

- To complete this chapter, you must be a member of the DBA role. If you are not a member of the DBA role, you will not be able to access WebDB's site creation features.


- At least one tablespace must exist to store site objects and to be used for temporary operations. If this tablespace does not already exist, create it now. We recommend that you create two tablespaces called USERS and TEMP.

For information about how to create tablespaces, see your Oracle server documentation.

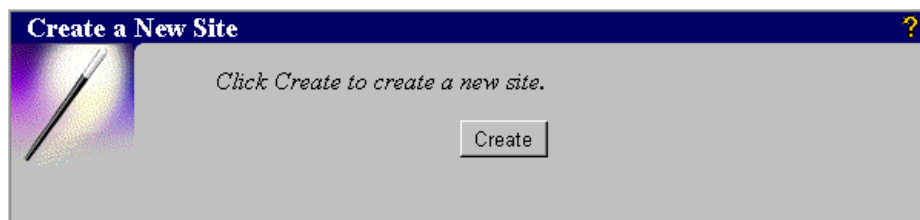
- You must have completed Section 2.2, "Creating a New User" on page 2-2 before starting this chapter.


6.2 Creating a WebDB Site in the Database

Your company wants a web site for providing information, such as product information to its employees and customers. As DBA, it is your job to create the web site in the database.

1. Click  at the top right of the page if you are not already on your WebDB home page.
2. Click **Sites**.

The page displayed is divided into three sections. For this exercise you will use the Create a New Site section.



Tip: You can also click  in the toolbar at the bottom of any page to display the Site Building page.

3. Click **Create** to display the Site Creation Wizard.
4. In the **Site Name** text box, type `Tutorial Site`.

5. Click  to display the Select Owning Schema page.

WARNING: Click  if you need to go back to a previous page of the wizard. Do not click your browser's Back button.

6. In the **Owning Schema** text box, type `<NAME>_SITE`, where *NAME* is your own user name.

WebDB will create the web site in the specified schema.


Note: This schema must not already exist. WebDB creates it for you.

WebDB also creates two users, `<NAME_SITE>_PUBLIC` and `<NAME_SITE>_ADMIN`, where *NAME_SITE* is the name you specified in the **Owning Schema** text box.


- The `<NAME_SITE>_PUBLIC` user is granted public access to the site.
- The `<NAME_SITE>_ADMIN` user is granted site administrator privileges on the site.

WebDB also configures two Database Access Descriptors (DADs). A DAD is a set of values that specify how WebDB connects to the database to fulfill an HTTP request.

- The `<NAME_SITE>` DAD is used to provide public access to the site and automatically log users on as `<NAME_SITE>_PUBLIC`.
- The `<NAME_SITE>S` DAD is used to provide authorized access to the site. This DAD is not configured with a user name and password. Thus, when users click the **Log On** link, they have to provide a valid user name and password before they can continue.

7. Click  to display the Language page.
8. Click the drop down list and choose the desired language for the text in the web site, for example **American**.

WARNING: Make sure you choose the correct language. You cannot change the language setting once you have chosen it in the Site Creation Wizard.


9. Click  to display the Select Tablespaces page.
10. In the **User Tablespace** text box, type the name of the tablespace (for example USERS) to be used to store any site objects.

You, or another DBA, should have created this tablespace before you started this chapter.

11. In the **Temporary Tablespace** text box, type the name of the tablespace (for example, TEMP) to be used for temporary operations.

You, or another DBA, should have created this tablespace before you started this chapter.

WARNING: Make sure you choose the correct tablespaces. You cannot change the tablespace settings once you have chosen them in the Site Creation Wizard.

12. Click  to display the Select Demos page.
13. Check **The Traveler** check box to include the WebDB demo in your site.

The Traveler is an example WebDB site that can be included as a folder in your sites. You can use The Traveler to learn about and experiment with the features of WebDB sites.

14. Click  to display the Create Site page.

The Create Site page displays the following information:

- The options you selected in the wizard.
- The name of the Owning Schema that will be created. The password is the same as the name.

IMPORTANT: For security purposes, it is very important that you change the Owning Schema password immediately after creating the site.

- The user name of the public access user that will be created. The password is the same as the user name.

- The user name of the administrator user that will be created. The password is the same as the user name.

IMPORTANT: For security purposes, it is very important that you change the administrator user password immediately after creating the site.

- The URLs of the web site that will be created.

The first URL provides public access to the site. This is the URL you will provide to the users of the site.

The second URL provides authorized access to the site when users click the **Log On** link. When users try to access this URL they are prompted for a user name and password.

The URLs consist of:

`hostname:port/dad/`

where:

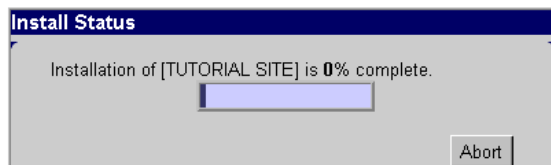
<code>hostname</code>	is the name of machine where the site is installed.
<code>port</code>	is the port to use to access the machine where the site is installed. If port 80 is used, this may be omitted.
<code>dad</code>	is the name of the Database Access Descriptor (DAD) used to access the database where the site is installed. Two DADs are automatically configured for each WebDB site you create: one for public access to the site and one for when users log on to the site.

15. Note down the public access URL of the web site and the user name for the administrator user. You will need this information to log on to the site later.

16. Click **Finish** to display the WebDB Site Install Status page.

WebDB Site Install Status

This screen shows the status of the site installation process. This process may take several minutes to complete. Once the process has finished click the 'Done' button to continue.



WebDB executes a series of operations to create the site and install the site development tools in the Owning Schema. The WebDB Site Install Status page lists these operations as they are being executed and informs you of the progress of the site creation process.

17. When the site creation process finishes, the **Abort** button changes to a **Done** button. Click **Done** to display the WebDB Site Install Menu page.



Use these menu options to access the selected WebDB Site.



[Site Administration](#)

You can access the Administrator menu to design the layout and organization of your site.



[Site Home Page](#)

You can access your Site by clicking on this link.

WebDB has now created the site in the Owning Schema you specified. All the tools needed to design and maintain the site have also been installed in the schema. All that web site users require to view and edit the site is the URL for public access to the site (you noted this down in Step 15).

Note: Once the WebDB site has been created in the database, all site development and maintenance tasks are performed within the site itself.

6.3 Assigning a Site Administrator

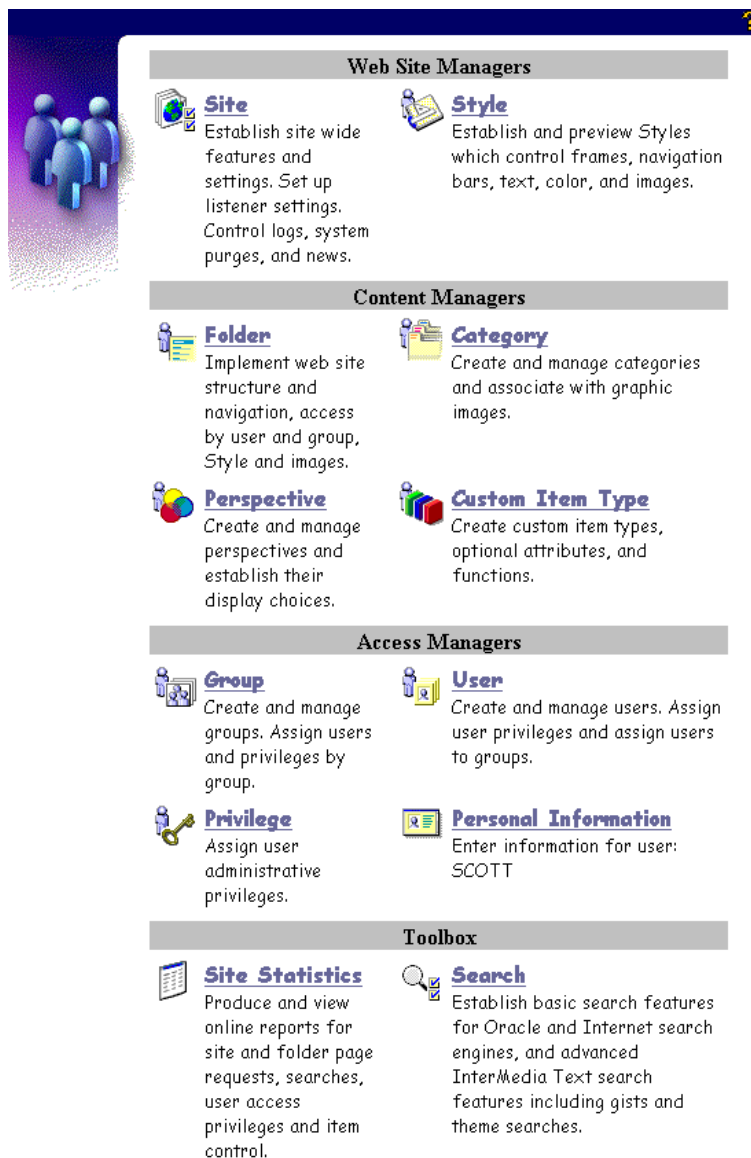
When you create a WebDB site, WebDB creates an administrator user that you can use to log on to the site as site administrator. A site administrator is responsible for managing a site. This includes designing the structure of the information accessed from the site, designing the style of the pages in the site, and granting other users access to the site. Typically, you will want to transfer this responsibility to another user or users. You can do one of the following:

- Provide the administrator user name and password created by WebDB to another user who will be a site administrator.
- Log on to the site yourself using the administrator user name and password and assign another user as a site administrator.

Let's log on to the site you just created and assign MILLER, the user you created in Section 2.2, "Creating a New User" on page 2-2, as a site administrator.

1. In the WebDB Site Install Menu page, click **Site Administration**.
2. You will be prompted for a user name and password.
 - a. In the log on dialog box, type the administrator user name that you noted down in Step 15 of the previous exercise and the password. The password is the same as the user name.
 - b. Click **OK**.

The site's Administration page is displayed.

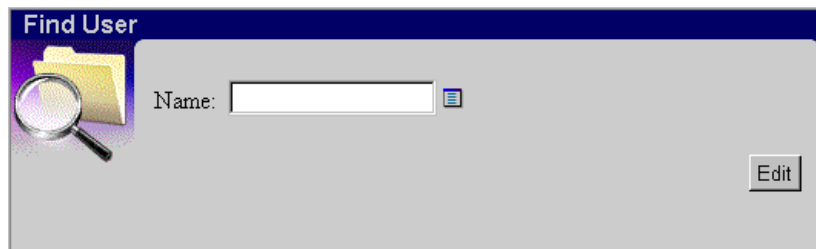



The screenshot displays the Oracle WebDB Administration page, which is organized into several functional categories. On the left side, there is a vertical image of three stylized human figures. The main content area is divided into five sections, each with a grey header bar and a question mark icon in the top right corner:

- Web Site Managers**
 - Site**: Establish site wide features and settings. Set up listener settings. Control logs, system purges, and news.
 - Style**: Establish and preview Styles which control frames, navigation bars, text, color, and images.
- Content Managers**
 - Folder**: Implement web site structure and navigation, access by user and group, Style and images.
 - Category**: Create and manage categories and associate with graphic images.
 - Perspective**: Create and manage perspectives and establish their display choices.
 - Custom Item Type**: Create custom item types, optional attributes, and functions.
- Access Managers**
 - Group**: Create and manage groups. Assign users and privileges by group.
 - User**: Create and manage users. Assign user privileges and assign users to groups.
 - Privilege**: Assign user administrative privileges.
 - Personal Information**: Enter information for user: SCOTT
- Toolbox**
 - Site Statistics**: Produce and view online reports for site and folder page requests, searches, user access privileges and item control.
 - Search**: Establish basic search features for Oracle and Internet search engines, and advanced InterMedia Text search features including gists and theme searches.

IMPORTANT: While you are logged on to the site as the administrator user, you should also change the default passwords for the site owning schema and the administrator user that were set during site creation. For information about how to change passwords, refer to the WebDB site online help.

3. In the Access Managers section, click **User** to display the User Manager page.
4. The page displayed is divided into two sections. For this exercise, you will use the Find User section.



5. Click  to display the Search window.
6. In the text box, type M%.
7. Click **Find** to display a list of the users you can assign as site administrator.
8. Click **MILLER_<NAME>**, where *NAME* is your own user name to choose the user you created in Section 2.2, "Creating a New User" on page 2-2.
MILLER_<NAME> is displayed in the **Name** text box in the Find User section.

9. Click **Edit** to display the User Manager: Details page.

User : MILLER ?
Details Details Groups

Administrator Privileges

Assign administrator privileges, establish a password, create a personal folder, and edit information about the user.

Site, Style and News Administrator

Style Administrator

News Administrator

Values and Images

Password:

Confirm Password:

Create Personal Folder

Personal Information

First name:

Last name:

Nickname:

E-mail:

Telephone:

Fax:

City:

State:

Postal code:

Country:

Manager:

Office:

Photograph:

10. In the Administrator Privileges section, check the **Site, Style and News Administrator** check box.

There are three types of administrator:

- **Site Administrator** Site administrators have the highest level of privileges in a WebDB site. They can view and modify anything on the site. Site administrators can create users, groups of users, and control access to the site. Site administrators can also perform all style and news administrator functions.
- **Style Administrator** Style administrators establish the look and feel of the WebDB site. They have control over color schemes, text, fonts, and background images for pages used on the site. For more information about styles, see Section 7.3, "Controlling the Style of a WebDB Site" on page 7-13.
- **News Administrator** News administrators have the authority to add news to the home page, approve news submitted by public users, and perform other functions related to site wide news management. News is a special type of WebDB site content, for more information see Section 8.3, "Adding a News Item" on page 8-7.

11. Click  to save your changes and return to the User Manager page.

6.4 What's Next?

In this chapter you learned how to:

- Create a WebDB site in the database.
- Assign administrators to design and maintain a WebDB site.

If you will be designing or adding content to a WebDB site, see Chapter 7, "Designing WebDB Sites".

If you will be using WebDB to build applications, see Chapter 3, "Building and Browsing Database Objects".

Designing WebDB Sites

Estimated completion time: 45 minutes

This chapter shows you how to design your WebDB site. You'll learn how to define site structure, style, and access.

You should complete this chapter if you are a WebDB site administrator or you are the owner of one or more folders in a WebDB site.

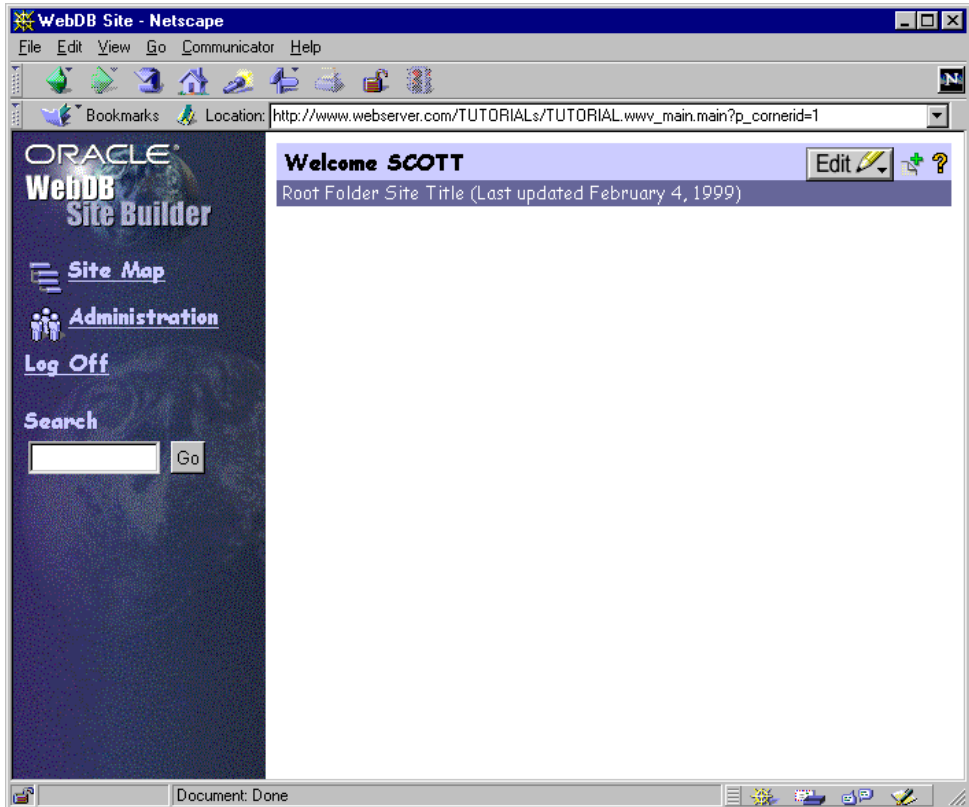
This chapter includes the following sections:


Section	Location
"Before You Begin"	on page 7-1
"Designing the Structure of a WebDB Site"	on page 7-3
"Controlling the Style of a WebDB Site"	on page 7-13
"Providing Access to a Web Site"	on page 7-22
"What's Next?"	on page 7-31

7.1 Before You Begin

- To complete this chapter you need to use the Tutorial Web Site. Obtain the URL of this web site from your DBA. You should be set up as a site administrator of the Tutorial Web Site. Instructions for creating the Tutorial Web Site and assigning users as site administrators are provided in Appendix A, "Tutorial Setup Instructions".
- Your DBA or site administrator must have created the TUTORIAL_USER user. Instructions for creating this user are provided in Appendix A, "Tutorial Setup Instructions".


- To modify a WebDB site, you need to be logged on to the site. If you have not already logged on to the Tutorial Web Site, follow the instructions in "Oracle WebDB Basic Concepts, Displaying an Oracle WebDB Site" on page xxiv.



- You also need a *personal folder* within the Tutorial Web Site to keep your work separate from that of other tutorial users. A personal folder is an area of a WebDB site set aside for your own personal use. If you do not already have a personal folder in the Tutorial Web Site, follow the instructions below.
 1. In the navigation bar of the Tutorial Web Site, click  to display the Administration page.
 2. In the Access Managers section, click **Personal Information** to display the Personal Information Manager page.

3. In the Settings section, check the **Create Personal Folder** check box.

Note: If you can't see the **Create Personal Folder** check box, this means you already have a personal folder in the Tutorial Web Site and do not need to create one.

4. Click  to save your changes and return to the Administration page.

Note: Although some of the exercises in this chapter take place in your personal folder, the techniques you learn in those exercises can be applied to any folder you own, including the root folder if you are a site administrator.

7.2 Designing the Structure of a WebDB Site

The structure of your WebDB site determines how easily users can find the information they need.

7.2.1 Creating folders

A WebDB site is divided into folders. A folder is a collection of related items, including files, URLs of other web pages, and links to other folders. For example, a travel web site might include folders for Africa, Americas, and Europe. Dividing your web site into these distinct areas means you can structure your site, and organize content logically. This makes it much easier for end users to find the information they need. You can make folders containing general information accessible to anyone who displays the site. Or, you can restrict access to folders containing sensitive information to specific users who must first log on to the site.



Each folder has a *folder owner*, who is responsible for the content of that folder. Delegating responsibility in this way means that each folder is maintained by someone who is familiar with the information and is able to keep that information accurate and up-to-date.

Note: The main page of the site itself is in fact a folder, called the *root folder*. Site administrators own the root folder.

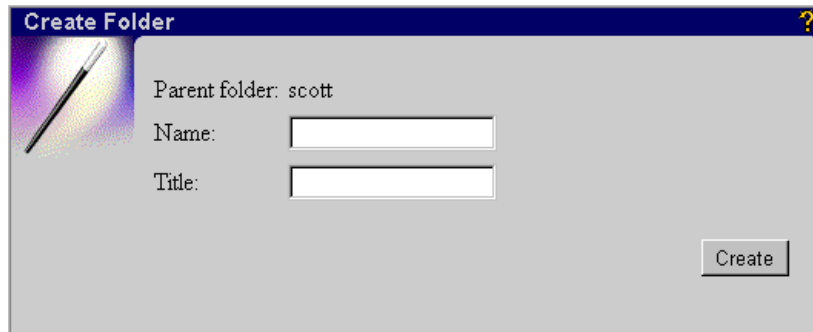
Site administrators can also maintain any other folder in the site.

Site administrators can create folders anywhere in the WebDB site. Folder owners can create folders within the folders they own.

Let's create a folder to contain general information about the products offered by your company. For the purposes of this tutorial, let's create this folder in your personal folder.

1. To create a folder, you must first navigate to the folder that you want to create the new folder in. When you are logged on to a WebDB site, the home page displays a list of all the folders you own.
 - a. If you are not already on the Tutorial Web Site's home page, at the top of the navigation bar click the site logo to display the home page.
 - b. Scroll down the home page and under the **Owned folders** banner, click your user name to display your personal folder.
2. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.
3. In the folder dashboard, click  to display the Folder Manager page.

The page displayed is divided into two sections. For this exercise you will use the Create Folder section.




The screenshot shows a 'Create Folder' dialog box. The title bar is dark blue with the text 'Create Folder' and a question mark icon. The main area is light gray. On the left, there is a pencil icon. The text 'Parent folder: scott' is displayed. Below this, there are two text input fields: 'Name:' and 'Title:'. A 'Create' button is located at the bottom right.


4. In the **Name** text box, type PRODUCTS<NAME>, where *NAME* is your own user name.

For the purposes of this tutorial, you add your own user name to the end to give this folder a unique name and to identify it as one created by you, rather than one created by another tutorial user.

5. In the **Title** text box, type Products.


6. Click **Create** to create the folder.
7. Click  to return to your personal folder.
8. A link to the Products folder you just created is included in your personal folder.
9. Click **Products** to display the new Products folder.
10. You can also create folders through the Administration page. Let's create another folder, in the Products folder to contain confidential information about the products offered by your company.

Note: Although you can nest folders to any level, we recommend that you create no more than five levels of folders. If you have more than five levels of folders, end users will have to click too many links to get to the information they want.

In the navigation bar, click  to display the Administration page.

11. In the Content Managers section, click **Folder** to display the Folder Manager site map page which lists all of the folders to which you have access.

Note: You are a site administrator, so you have access to all the folders in the site.

12. Expand the **Personal Folders** node.
13. Expand the node for the first letter of your user name.
14. Expand your personal folder node.
15. In the toolbar to the right of the **Products** node, click  to display the Folder Manager page.
16. In the Create Folder section:

- a. In the **Name** text box, type `CONFIDENTIAL<NAME>`, where *NAME* is your own user name.

For the purposes of this tutorial, you add your own user name to the end to give this folder a unique name and to identify it as one created by you, rather than one created by another tutorial user.

- b. In the **Title** text box, type `Confidential`.


- c. Click **Create** to create the folder.
17. At the top of the navigation bar, click the site logo to display the home page.
18. Scroll down the home page and under the **Owned folders** banner, click **Confidential** to display the Confidential folder.

You will add items to the Confidential folder in Chapter 8, "Managing WebDB Site Content".

7.2.2 Creating categories

Most items added to a WebDB site are assigned to a *category*. A category is a grouping of items that answers the content-specific question, "What is this item?". For example, a travel web site might include categories for Flights, Lodgings, and Restaurants. Categories provide a way of further organizing the content of a WebDB site, so that users can quickly and easily find the information they want. An item can be assigned to only one category.

Note: Only site administrators can create categories.

1. In the navigation bar, click  to display the Administration page.
2. In the Content Managers section, click **Category** to display the Category Manager page.

Note: If you cannot see the **Category** link, you are probably not a site administrator of the Tutorial Web Site. Ask your DBA or site administrator to set you up as a site administrator. Instructions for assigning users as site administrators are provided in Appendix A, "Tutorial Setup Instructions".

The page displayed is divided into two sections. For this exercise you will use the Create Category section.



3. In the **Name** text box, type Tutorial Items <NAME>, where *NAME* is your own user name.

For the purposes of this tutorial, you add your own user name to the end to identify the category as one created by you, rather than one created by another tutorial user.

4. Click **Create**. You remain on the Category Manager page, where you can create more categories or find and edit existing categories.

Note: You can edit the category to add an image that can be displayed on the navigation bar.


When a user adds an item for the tutorial, the item can be added under the Tutorial Items category.

You will add items under this category in Chapter 8, "Managing WebDB Site Content".

7.2.3 Creating perspectives

Each item added to a WebDB site can optionally be assigned to one or more *perspectives*. A perspective is a cross-folder, cross-category grouping of items that answers the question "Who will be interested in this item?". For example, a travel web site might include Beach, Safari, and Skiing perspectives.

Note: Only site administrators can create perspectives.

1. In the navigation bar, click  to display the Administration page.
2. In the Content Managers section, click **Perspective** to display the Perspective Manager page.

The page displayed is divided into two sections. For this exercise you will use the Create Perspective section.



The screenshot shows a dialog box titled "Create Perspective". On the left side, there is a small icon of a pencil. To the right of the icon is a text input field with the label "Name:". In the bottom right corner of the dialog, there is a button labeled "Create".

3. In the **Name** text box, type `Tutorial Users <NAME>`, where *NAME* is your own user name.

For the purposes of this tutorial, you add your own user name to the end to identify the perspective as one created by you, rather than one created by another tutorial user.

4. Click **Create**. You remain on the Perspective Manager page, where you can create more perspectives or find and edit existing perspectives.

Note: You can edit the perspective to add an image that can be displayed next to the title of an item that is assigned to the perspective.

When a user adds an item that would be of interest to tutorial users, the item can be associated with the Tutorial Users perspective. Tutorial users can view the site by

the Tutorial Users perspective, or can search for items associated with the Tutorial Users perspective.


You will associate items with this perspective in Chapter 8, "Managing WebDB Site Content".

7.2.4 Creating custom item types

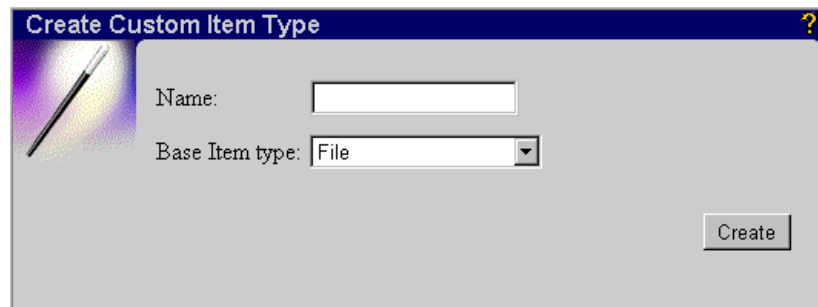
An *item type* defines the display and functional characteristics of items that a user adds to a WebDB site. WebDB sites support the following item types: URL, File, Text Item, Imagemap, Folder Link, WebDB Component, and PL/SQL Call. In addition, you can create your own *custom item types*, which enable you to customize the existing item types to make them map more specifically to the items you include in your site.

Note: Only site administrators can create custom item types.

Let's create a custom item type that enables users to add notes about a text item and to specify a string to pass to a search engine.

1. In the navigation bar, click  to display the Administration page.
2. In the Content Managers section, click **Custom Item Type** to display the Custom Item Type Manager page.

The page displayed is divided into two sections. You will first use the Create Custom Item Type section.



The screenshot shows a window titled "Create Custom Item Type" with a question mark icon in the top right corner. On the left side of the window is a pencil icon. The main content area contains two input fields: "Name:" followed by a text box, and "Base Item type:" followed by a dropdown menu showing "File". A "Create" button is located in the bottom right corner of the window.

3. In the **Name** text box, type Tutorial Type <NAME>, where *NAME* is your own user name.

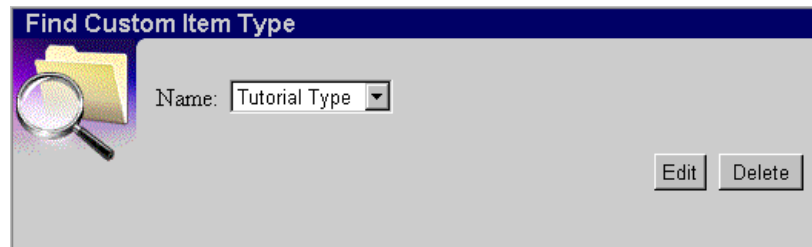
For the purposes of this tutorial, you add your own user name to the end to identify the custom item type as one created by you, rather than one created by another tutorial user.

4. Click the **Base Item type** drop down list and choose **Text**.

When you first create a custom item type, it is exactly the same as the base item type. You then edit the custom item type to customize it meet your specific requirements.

5. Click **Create**. You remain on the Custom Item Type Manager page, where you can create more custom item types or find and edit existing custom item types.

You will now use the Find Custom Item Type section of the Custom Item Type Manager.



6. Make sure **Tutorial Type** <NAME> is chosen in the **Name** drop down list.
7. Click **Edit** to display the Custom Item Type Manager: Main page.

- Click the **Attribute List** tab to display the Attribute List page.

Custom Item Type : Tutorial Type
Attribute List

Specify attribute and argument names and default values, and choose display, pass and required options.

Apply Reset

Features and Values				
Name	Default Value	Display	Pass to Procedure	Required
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Custom item type attributes enable you to add more information about an item, or to pass values to a PL/SQL or HTTP procedure. In this exercise, you will add two attributes to the Tutorial Type custom item type: one to enable users to add notes about the item and one to pass a string to a search engine.

- In the **Name** text box, type `Notes`.
A text box labeled **Notes** will be added the Optional page of the Item Wizard and Item Manager for this type of item.
- Click **Apply** to insert another row to the Features and Values section.
- In the **Name** text box, type `p`.
- Check the **Pass to Procedure** check box to identify the `p` attribute as a procedure argument.
- Check the **Required** check box so that when users add an item of this type, they have to specify a value for the `p` attribute.
A text box labeled `p` will be added to the Required page of the Item Wizard and Item Manager for this type of item.

14. Click the **Procedure** tab to display the Procedure page.

Finish

Custom Item Type : Tutorial Type
Procedure

Main Attribute List Procedure

Specify the type of procedure and the text of the link displayed to execute the procedure.

Apply Reset

Features and Values

Procedure type: PL/SQL
 HTTP

Link text:

Procedure call:

Display Procedure Results With Item.
 Pass Item ID to Procedure
 Pass Folder ID to Procedure

15. Click the **Procedure type: HTTP** radio button.


16. In the **Link text** text box, type:

Search

This text is displayed as a hypertext link next to the item title. When an end user clicks the text, a call is made to the procedure using the value specified in the **p** text box when the item was added.

17. In the **Procedure call** text box, type:

`http://search.yahoo.com/bin/search?p=`

18. Click  to save your changes and return to the Custom Item Type Manager page.

When a user adds an item, the item can be added as a Tutorial Type type item. The user must specify search text and can optionally add notes about the item which


other users will be able to view when they edit the item. End users can click on the link next to the item title to search for other web sites and web pages identified containing the search text.


You will create an item of this type in Chapter 8, "Managing WebDB Site Content".

7.3 Controlling the Style of a WebDB Site

The style of your WebDB site determines how the site looks. Site and Style Administrators can create styles that control the location and appearance of the navigation bar and the text, color, and images used in the site. Folder owners can choose an existing style to apply to their folders. In addition, site administrators can grant folder owners privileges to create their own styles.

7.3.1 Designing the style of a WebDB site

The following exercise shows you how to use the Style Manager to create a style to control the appearance of a WebDB site. The exercise illustrates some of the style options. For more information about any of the other options in the Style Manager, click the small  button to access entry field help.

1. Click  in the navigation bar to display the Administration page.
2. In the Web Site Managers section, click **Style** to display the Style Manager.

The page displayed is divided into two sections. You will first use the Create Style section.



3. In the **Name** text box, type tutorial style *<NAME>*, where *NAME* is your own user name.

For the purposes of this tutorial, you add your own user name to the end to give this style a unique name and to identify it as one created by you, rather than one created by another tutorial user.

4. Click the **Based on Style** drop down list, and choose **Main Site Style**.

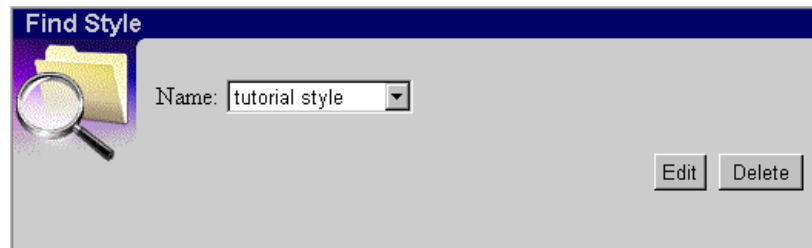
Using a base style provides you with a starting point. The new style will be created with the same settings as the main site style. You then edit the new style and change the settings to your own preferences.

5. Click the **Access: Private** radio button.

The style will be available only to you. Once you have finished designing the style, you can make it available for other folder owners to use, if desired.

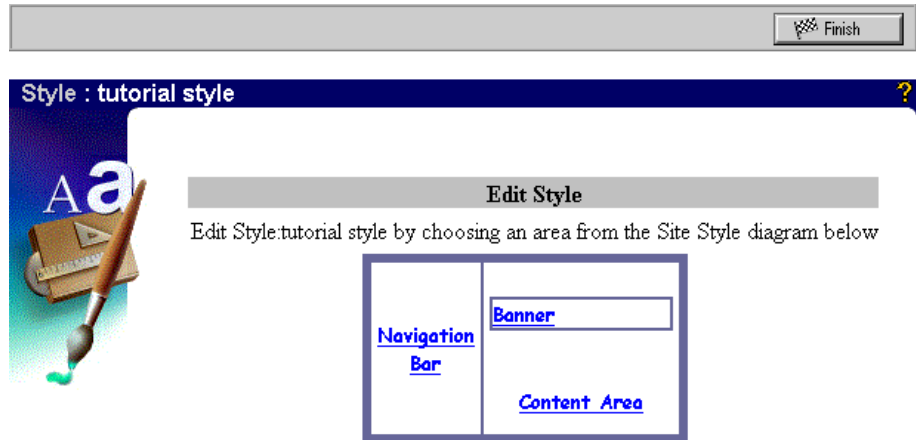
6. Click **Create**. You remain on the Style Manager page where you can create more styles or find and edit existing styles.

You will now use the Find Style section of the Style Manager page.



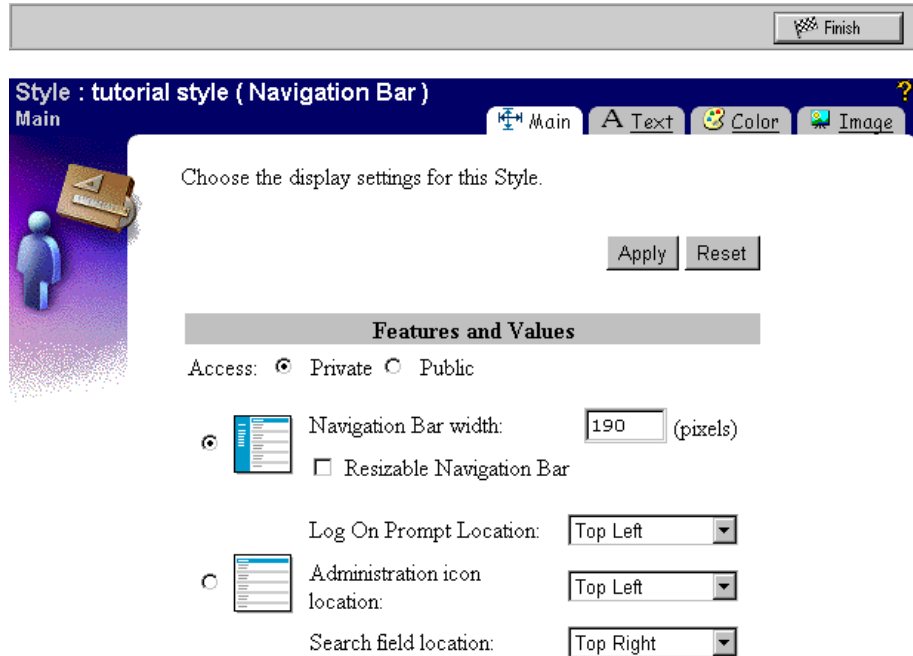
7. Make sure **tutorial style** <NAME> is chosen in the **Name** drop down list.


- Click **Edit** to display the Style Editor page.



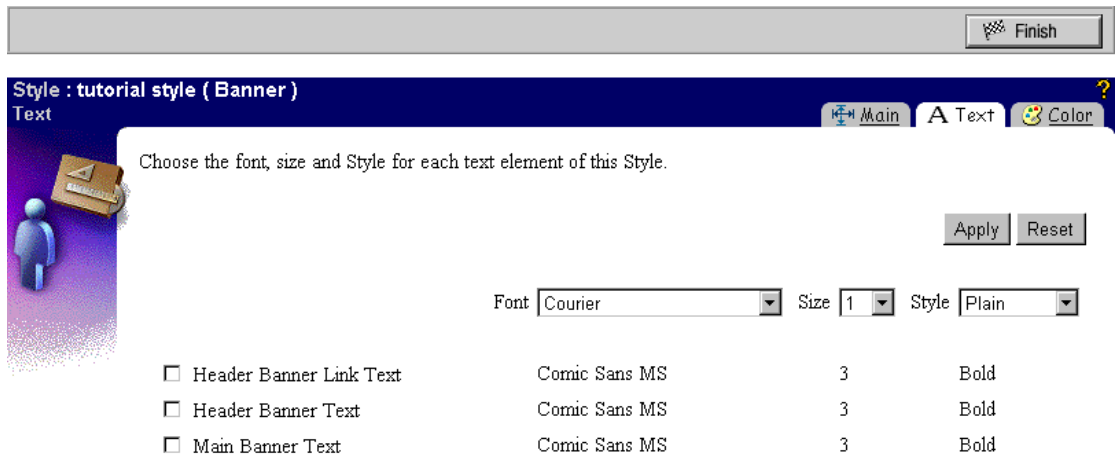
In the Style Editor page you choose which area of the site you want to change the style settings for: Navigation Bar, Banner, or Content Area.

9. Click **Navigation Bar** to display the Style Manager: Main page for the navigation bar.



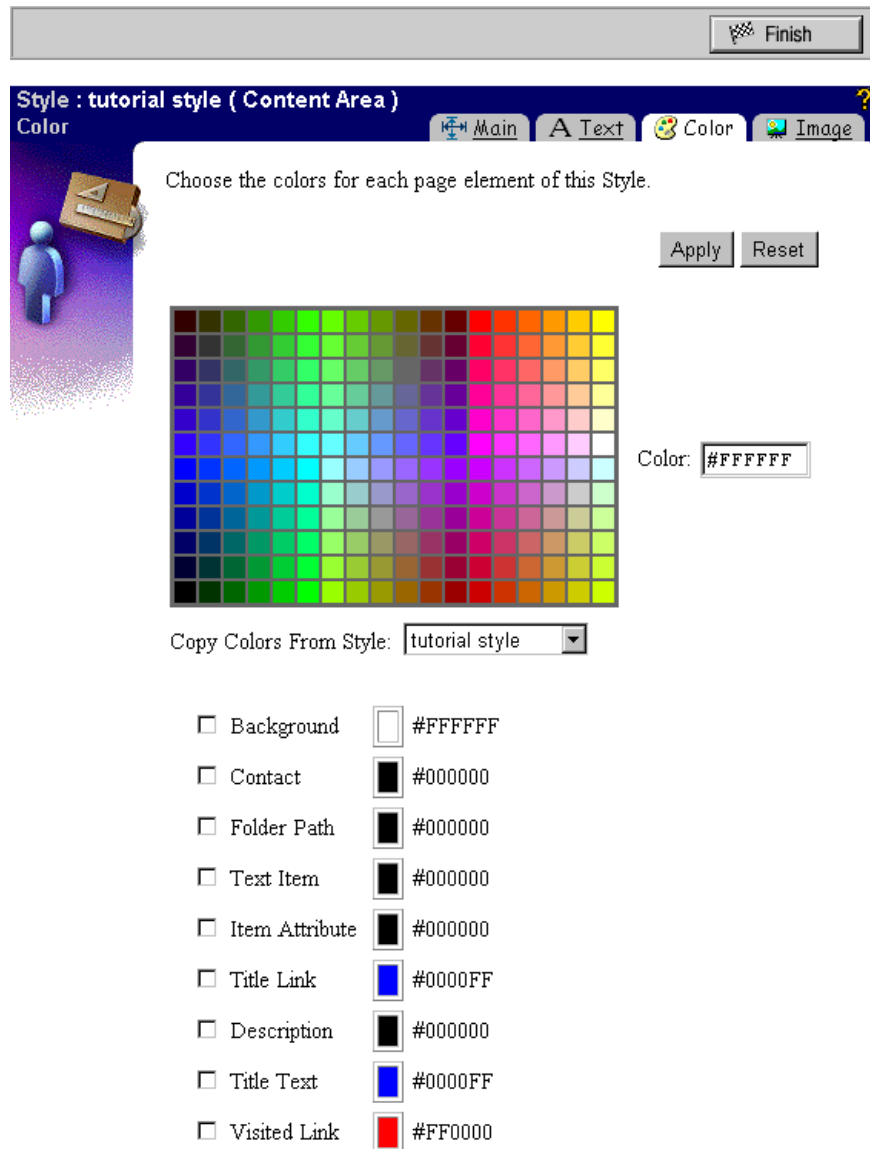
10. Check the **Resizable Navigation Bar** check box to enable users to resize the navigation bar by dragging the frame border.
11. Click  to save your changes and return to the Style Editor page.
12. Click **Banner** to display the Style Manager: Main page for the banner.

- Click the **Text** tab to display the Text page.





- Click the **Font** drop down list and choose a font other than the current setting, for example **Times New Roman**.
- Click the **Size** drop down list and choose **4**.
- Click the **Style** drop down list and choose **Bold Italic**.
- Check the **Main Banner Text** and **Sub Banner Text** check boxes.
- Click to change Main Banner Text and Sub Banner Text to the settings specified in the drop down lists and return to the Style Editor page.
- Click **Content Area** to display the Style Manager: Main page for the content area.

20. Click the **Color** tab to display the Color page.





21. In the color palette, choose a green color. The value of the color is displayed in the **Color** text box next to the palette.

22. Check the **Title Link** check box.
23. Click **Apply** to change the Title Link color to green.
24. In the color palette, choose a light yellow color.
25. Uncheck the **Title Link** check box and check the **Background** check box.
26. Click  to change the Background color to light yellow and return to the Style Editor page.
27. Click  to return to the Style Manager page.


7.3.2 Applying a style to a folder

At the moment, the folders you created in Section 7.2, "Designing the Structure of a WebDB Site" on page 7-3 use the Main Site Style. Let's apply the style you just created to the Products folder.

1. At the top of the navigation bar, click the site logo to display the home page.
2. Scroll down the home page and under the **Owned folders** banner, click **Products** to display the Products folder.
3. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.
4. In the folder dashboard, click  to display the Style Editor page for the Products folder where, depending on your privileges, you can:
 - Choose an existing style
 - Edit the current style
 - Create a new style

Path: / RootFolder / personal folders / s / scott / products Finish

Style : Main Site Style ?



Apply Reset

Change Style

Current Style: Main Site Style

Change Folder Style: Main Site Style

Edit Style

Edit Style: Main Site Style by choosing an area from the Site Style diagram below

Navigation Bar	Banner
	Content Area


Create Style

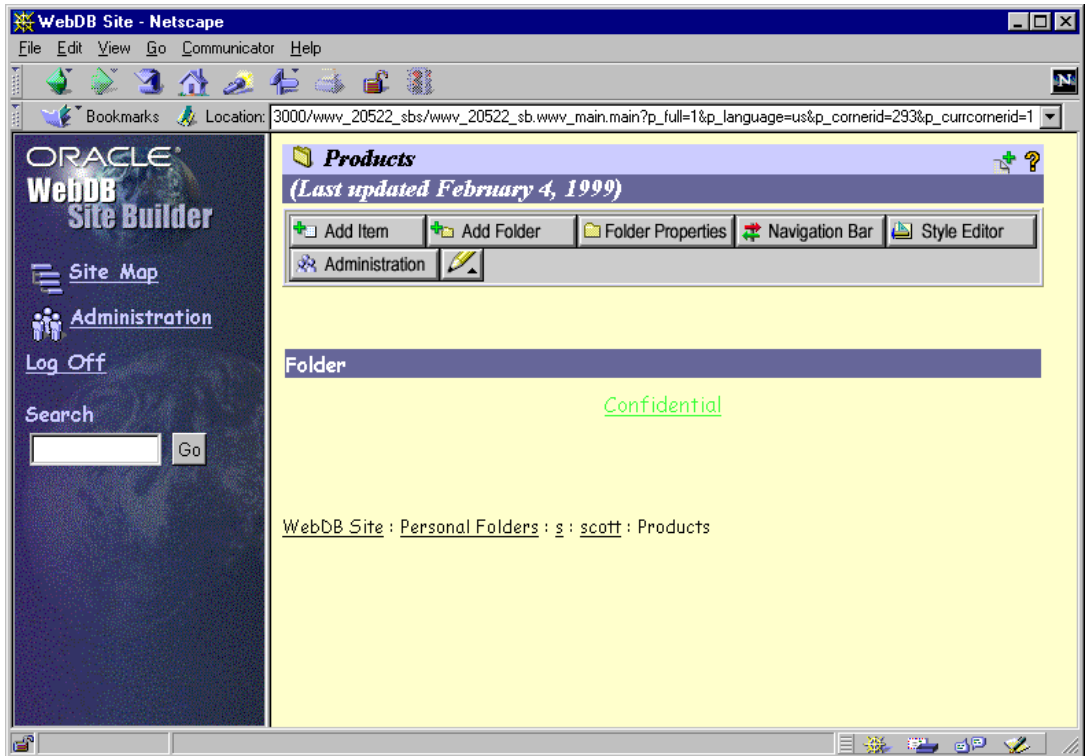
Name: Create

Based on Style: Main Site Style

Access: Private Public

5. In the Change Style section, click the **Change Folder Style** drop down list and choose **tutorial style <NAME>**, where *NAME* is your own user name.

6. Click  to save your changes and return to the Products folder.



The Products folder now uses the style you specified in tutorial style: the text in the banners at the top of the page is the font you specified, title links in the content area are green, and the content area itself is light yellow. You can also resize the navigation bar.

7.4 Providing Access to a Web Site

When users first display a WebDB site, they can only view items in public folders.

For greater access to the web site, users must log on to the site using their database user name and password.


Once users are logged on to the site, the tasks they can perform on a folder depend upon the privileges they have been granted for that folder.


Privilege	Description
Own	User may grant folder privileges to other users.
View	User may view any item in the folder.
Style	User may make changes to the style of the folder.
Manage Items	User may create, edit, or delete items in the folder.
Create with approval	User may add new items to the folder. Items that are created using this privilege must be approved by the folder owner before they are displayed.







7.4.1 Providing public access to a folder


You want your company's customers to be able to view items in the Products folder. To make the items in a folder available to all users, including those who are not logged on to the site, you must make the folder a public folder.



1. In the folder dashboard, click  to display the Folder Manager: Main page for the Products folder.

Path: / RootFolder / personal folders / s / scott / products 

Folder : Products 

Main  Main  Style  Image  Navigation Bar  Users  Groups

 Specify folder values and settings, publish the folder and make it available to public users. You can also choose to display links to any folders contained in this folder.

Features and Values

Name: products

Title:





Description:


Display This Folder To Public Users

Folders Inside This Folder

Display These Folders


Select Display Order

2. Check the **Display This Folder To Public Users** check box.
3. Click  to save your changes.

4. To view the site as a public user, you need to log off the site.

In the navigation bar, click **Log Off** to log off the site.

5. Click  to list the folders that you can view as a public user. You can only view folders specified as public folders. The Products folder is listed as one of the folders you can view, but the Confidential folder is not.

7.4.2 Granting folder access privileges to a user



If you do not want everyone be able to access the items in a folder that you own, you must grant the appropriate access privileges only to the users you **do** want to have access. For example, if the information in your folder is of a confidential nature, you might want only a few users to be able to view it. Or, you might want to enable members of your department to add items to a folder.

You want to use the Confidential folder in the Products folder to make confidential product information available to your company's employees, but you do not want your company's customers to be able to see this information. For now, let's enable a single user (TUTORIAL_USER) to view the items in the Confidential folder.

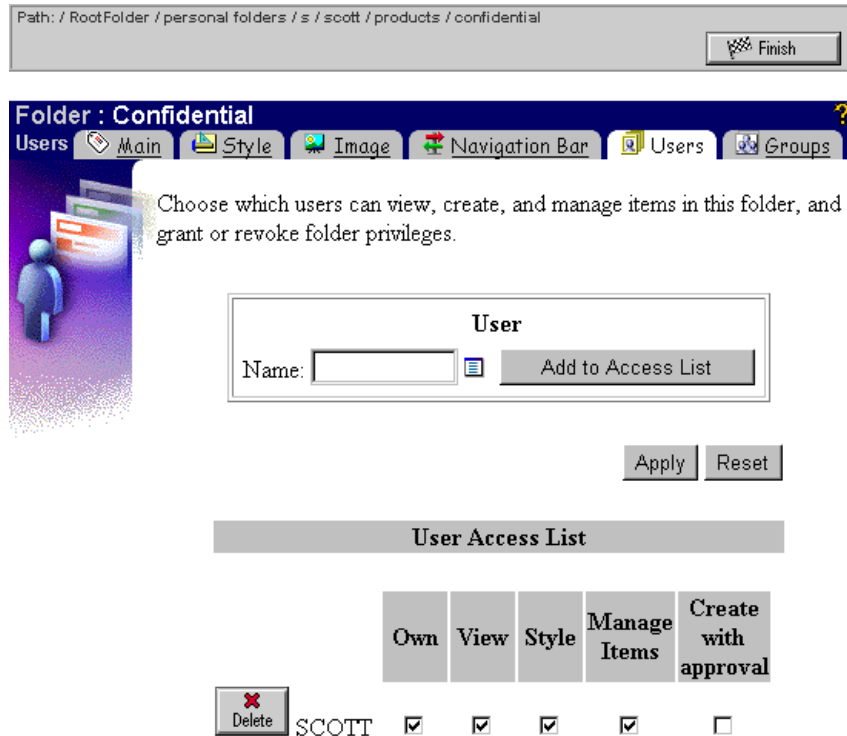
1. You need to be logged on to the site to edit the Confidential folder.

Log back on to the site using your own user name and password.

Tip: If you can't remember how to do this, follow the instructions in "Oracle WebDB Basic Concepts, Displaying an Oracle WebDB Site" on page xxiv.

2. Scroll down the home page and under the **Owned folders** banner, click **Confidential** to display the Confidential folder.
3. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.
4. In the folder dashboard, click  to display the Folder Manager: Main page for the Confidential folder.


5. Click the **Users** tab to display the Users page.





6. Click to display the Search window.
7. Click **Find** to list all the users to whom you can grant access privileges.
8. Click **TUTORIAL_USER**.

Note: If TUTORIAL_USER is not listed, ask your DBA or site administrator to create this user for you. Instructions for creating TUTORIAL_USER are provided in Appendix A, "Tutorial Setup Instructions".

TUTORIAL_USER is displayed in the **Name** text box on the Folder Manager: Users page.

9. Click **Add to Access List**. TUTORIAL_USER is added to the User Access List and is automatically given privileges to view items in the folder.
10. Click  to save your changes and return to the Confidential folder.
TUTORIAL_USER can now view the contents of the Confidential folder.
11. To view the site as TUTORIAL_USER, you need to log on to the site as TUTORIAL_USER.
In the navigation bar, click **Log Off** to log off the site.
12. Log back on to the site using the user name TUTORIAL_USER and the password TUTORIAL.

Note: If your browser displays an error message, check that you've typed the information correctly, or ask your DBA or site administrator to verify the password for TUTORIAL_USER.


13. In the navigation bar, click  to list the folders that you can access as TUTORIAL_USER.
14. Expand the **Products** node. The Confidential folder is listed as one of the folders TUTORIAL_USER can access.
15. Click **Confidential** to display the folder. You only gave TUTORIAL_USER view privileges, so there is no  button in the banner at the top of the page. TUTORIAL_USER can view the folder, but cannot edit it.

7.4.3 Granting folder access privileges to a group of users


Sometimes, you may want to grant the same privileges to multiple users. For example, you may want to allow all of the members of your department to add items to your department's folder. Rather than granting each user the Create with Approval privileges individually, you can create a group of users and grant the privileges to all of the members of the group in a single operation.

7.4.3.1 Creating a group

First you need to create the group.

1. Click **Log Off** in the navigation bar to log off the site as TUTORIAL_USER.
2. Log back on to the site using your own user name and password.
3. In the navigation bar, click  to display the Administration page.

- In the Access Managers section, click **Group** to display the Group Manager. The page displayed is divided into two sections. You will first use the Create Group section.

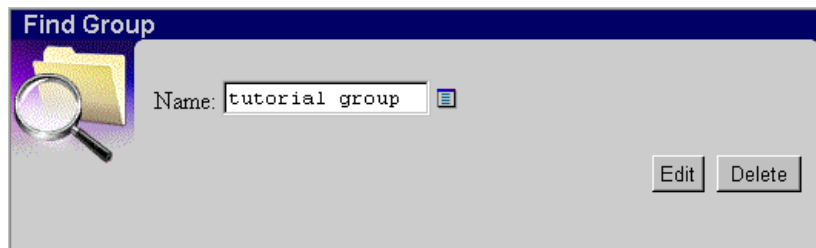


- In the **Name** text box, type `tutorial group <NAME>`, where *NAME* is your own user name.

For the purposes of this tutorial, you add your own user name to the end to give this group a unique name and to identify it as the one created by you, rather than one created by another tutorial user.

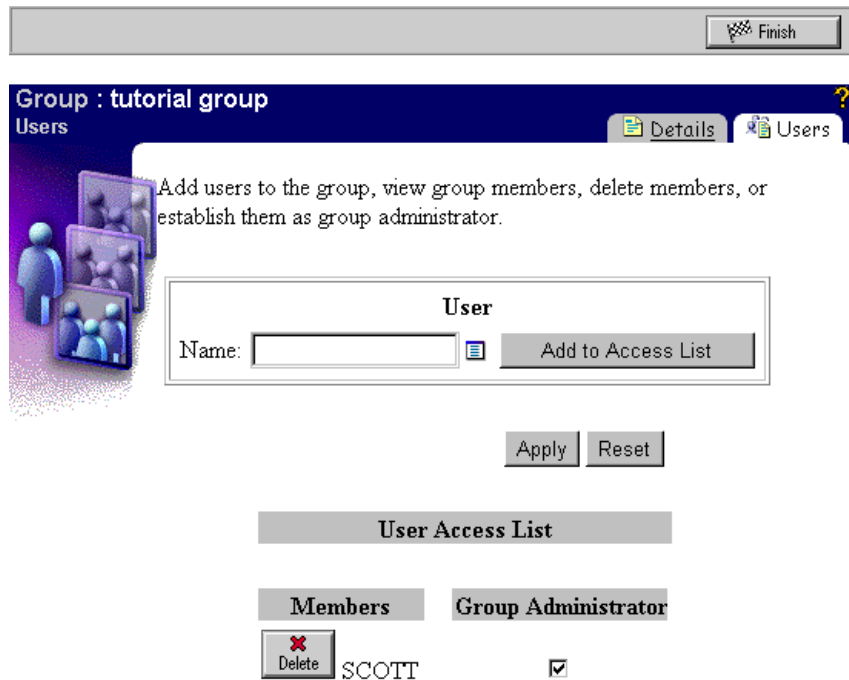
- Click **Create**. You remain on the Group Manager page where you can create more groups, or find and edit existing groups.



You will now use the Find Group section of the Group Manager page.



- Make sure **TUTORIAL GROUP <NAME>** is chosen in the **Name** text box.
- Click **Edit** to display the Group Manager: Details page.



- Click the **Users** tab to display the Users page.

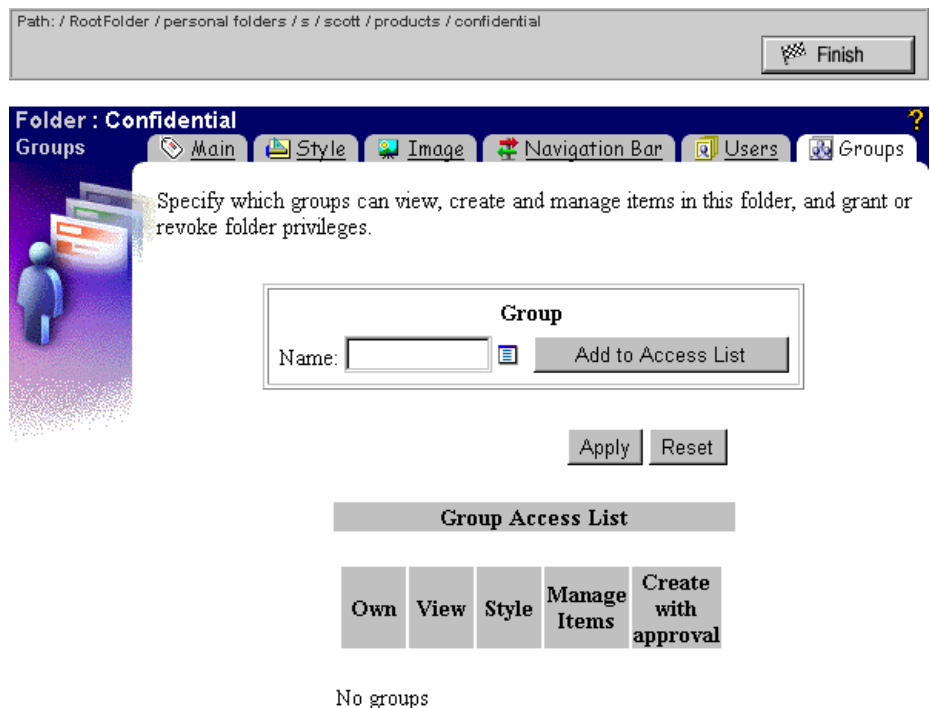



- Click  to display the Search window.
- Click **Find** to list all the users you can add to the group.
- Click **TUTORIAL_USER**.
TUTORIAL_USER is displayed in the **Name** text box on the Group Manager: Users page.
- Click **Add to Access List**. TUTORIAL_USER is added to the User Access List.
To add more users to the group, you would repeat Steps 10 through 13 for each user.
- Click  to save your changes and return to the Group Manager page.

7.4.3.2 Granting folder access privileges to a group

Now that you have created a group, you can grant folder access privileges to all the members of that group in a single operation.


1. At the top of the navigation bar, click the site logo to display the home page.
2. Scroll down the home page and under the **Owned folders** banner, click **Confidential** to display the Confidential folder.
3. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.
4. In the folder dashboard, click  to display the Folder Manager: Main page for the Confidential folder.
5. Click the **Groups** tab to display the Groups page.



6. Click  to display the Search window.
7. Click **Find** to list all the groups to which you can grant access privileges.

8. Click **TUTORIAL GROUP <NAME>** to choose the group you created earlier in the exercise.

TUTORIAL GROUP <NAME> is displayed in the **Name** text box on the Folder Manager: Groups page.

9. Click **Add to Access List**. TUTORIAL GROUP <NAME> is added to the Group Access List and is automatically given privileges to view items in the folder.
10. Check the **Create with approval** check box to enable members of the group to add items to the folder, subject to approval from the folder owner.
11. Click  to save your changes and return to the Confidential folder.

Members of the tutorial group can now add items to the folder. However because you only granted the group Create with Approval privileges, these items will not become visible until you, the folder owner, approve them. This enables folder owners to delegate content creation while remaining in control of the information that is displayed in the folder.


12. To view the site as TUTORIAL_USER, you need to log on to the site as TUTORIAL_USER.

In the navigation bar, click **Log Off** to log off the site.

13. Log back on to the site using the user name TUTORIAL_USER and the password TUTORIAL.

14. In the navigation bar, click  to display the Site Map.

15. Expand the **Products** node.

16. Click **Confidential** to display the Confidential folder. Now that TUTORIAL_USER has Create with Approval privileges (as a member of the TUTORIAL GROUP <NAME> group), the  button is displayed in the banner at the top of the page. TUTORIAL_USER can now add items to the folder. You will learn how to add items to a folder and how to approve items in Chapter 8, "Managing WebDB Site Content".

17. In the navigation bar, click **Log Off** to log off the site.

7.5 What's Next?

In this chapter, you learned how to:

- Create a folder
- Create a category
- Create a perspective
- Create a custom item type
- Define a style and apply that style to a folder
- Grant a user access to a folder
- Create a group and grant that group access to a folder

In Chapter 8, "Managing WebDB Site Content", you will find out how to add items to a site.

Managing WebDB Site Content

Estimated completion time: 30 minutes

The content of a WebDB site is made up of items. You can add the following types of items to a WebDB site:

- URL of another web page
- File, such as a document or an image
- Text
- Imagemap
- Folder link
- WebDB component
- PL/SQL call

When you add an item to a folder, the item title is displayed as a hypertext link on the folder page. Clicking the title navigates to the item itself.

Note: If you specify that an item should be displayed in place, the item itself is displayed on the folder page, **not** a link to the item.

Each item can be added to the site as one of the following:



- **1 Regular item** A regular item title is displayed on the folder page, it receives no special treatment to make it stand out on a page.
- **2 News item** A news item title is displayed before any regular item titles, under the **News** banner. News items are usually items that are of current interest. For example, in a travel site you might have a news item for a special offer.
- **3 Announcement item** An announcement item title is displayed at the top of the page, just under the quickpicks. Announcement items are usually items that require special attention. For example, in a travel site you might have an announcement for an airline strike.
- **4 Quickpick item** A quickpick item title is displayed at the top of the page. Quickpick items are usually items that users will frequently want to access. For example, in a travel site you might have a quickpick item for a currency converter.

This chapter includes the following sections:

Section	Location
"Before You Begin"	on page 8-3
"Adding a Regular Item"	on page 8-3
"Adding a News Item"	on page 8-7
"Adding a Quickpick Item"	on page 8-11
"Creating an Item with Approval"	on page 8-13
"Editing an Item"	on page 8-19
"What's Next?"	on page 8-23

8.1 Before You Begin

- You must have completed Section 7.2, "Designing the Structure of a WebDB Site" on page 7-3 and Section 7.4.2, "Granting folder access privileges to a user" on page 7-24 before starting this chapter.



Note: The exercises in this chapter take place in your personal folder. However, the techniques you learn here can be applied to any folder for which you have permission to add or edit items.

8.2 Adding a Regular Item

Most of the items in your web site will be regular items.

1. Log on to the tutorial web site using your own user name and password.

Tip: If you can't remember how to do this, follow the instructions in "Oracle WebDB Basic Concepts, Displaying an Oracle WebDB Site" on page xxiv.

2. Scroll down the home page and under the **Owned folders** banner, click **Confidential** to display the Confidential folder.
3. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.
4. In the folder dashboard, click  to display the Item Wizard.
5. In the Item Type section, click the **Item type** drop down list and choose **Text Item**.
6. In the Display Option section, make sure the **Regular Item** radio button is selected.
7. Click **Next** to display the Text Item: Required Settings and Values page.

Note: Click **Previous** if you need to go back to a previous page of the wizard. Do **not** click your browser's Back button.

8. In the **Text** text box, type:

This item might contain product information that sales personnel could use when visiting customer sites.

9. In the **Title** text box, type Tutorial Text Item.
10. Click the **Category** drop down list and choose **Tutorial Items <NAME>**, where *NAME* is your own user name. This is the category you created in Section 7.2.2, "Creating categories" on page 7-6.

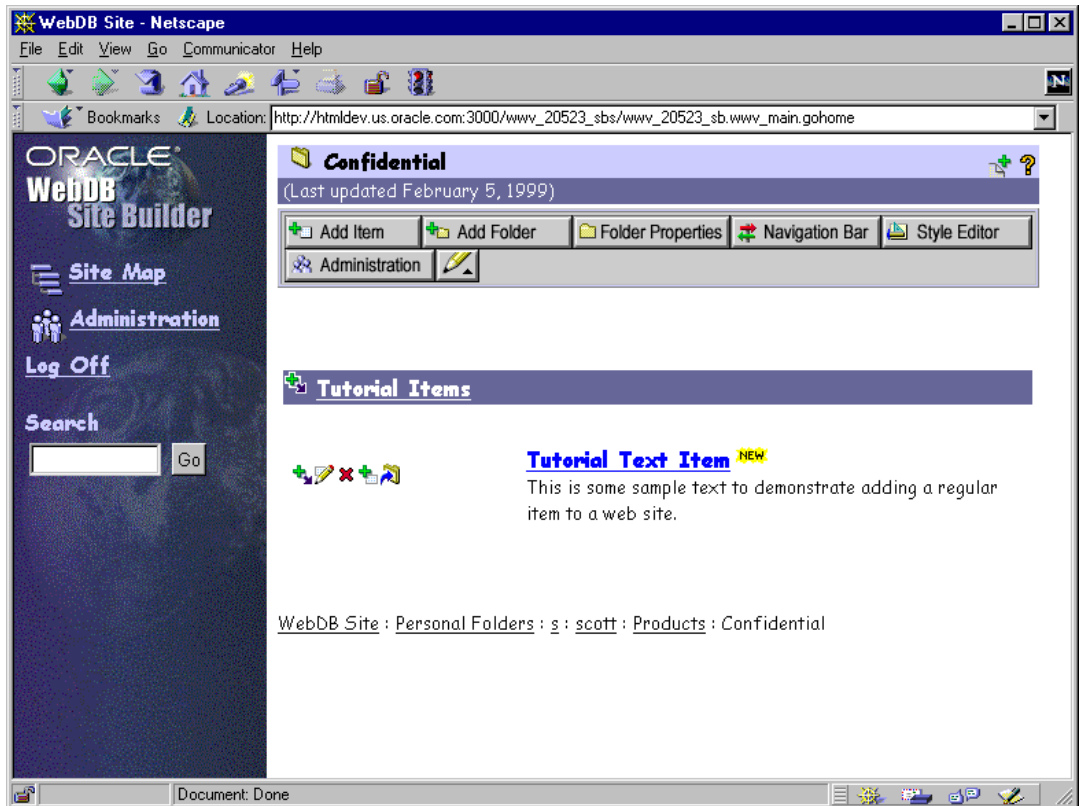
Note: All regular items must be assigned to one category.

11. In the **Description** text box, type:

This is some sample text to demonstrate adding a regular item to a web site.

12. Click **Next** to display the Text Item: Optional Settings and Values page.
13. In the **Perspectives** list box, choose **Tutorial Users <NAME>**, where *NAME* is your own user name. This is the perspective you created in Section 7.2.3, "Creating perspectives" on page 7-8.

14. Click **Finish** to add the item and return to the Confidential folder.




The item title **Tutorial Text Item** is displayed as a hypertext link on the folder page, under the **Tutorial Items** category banner.

15. Click **Tutorial Text Item** to display the item.


8.2.1 Adding a custom item type item

Now let's add a regular item of a custom item type.

1. Click your browser's Back button to return to the Confidential folder.
2. In the **Tutorial Items** category banner, click  to display the Item Wizard.

3. In the Item Type section, click the **Item type** drop down list and choose **Tutorial Type <NAME>**, where *NAME* is your own user name. This is the custom item type you created in Section 7.2.4, "Creating custom item types" on page 7-9.
4. In the Display Option section, make sure the **Regular Item** radio button is selected.
5. Click **Next** to display the Tutorial Type: Required Settings and Values page.
6. In the **p** text box, type `Oracle`.

This is one of the attributes that you defined in the custom item type. This attribute passes a value to a procedure that calls an internet search engine.
7. In the **Text** text box, type:

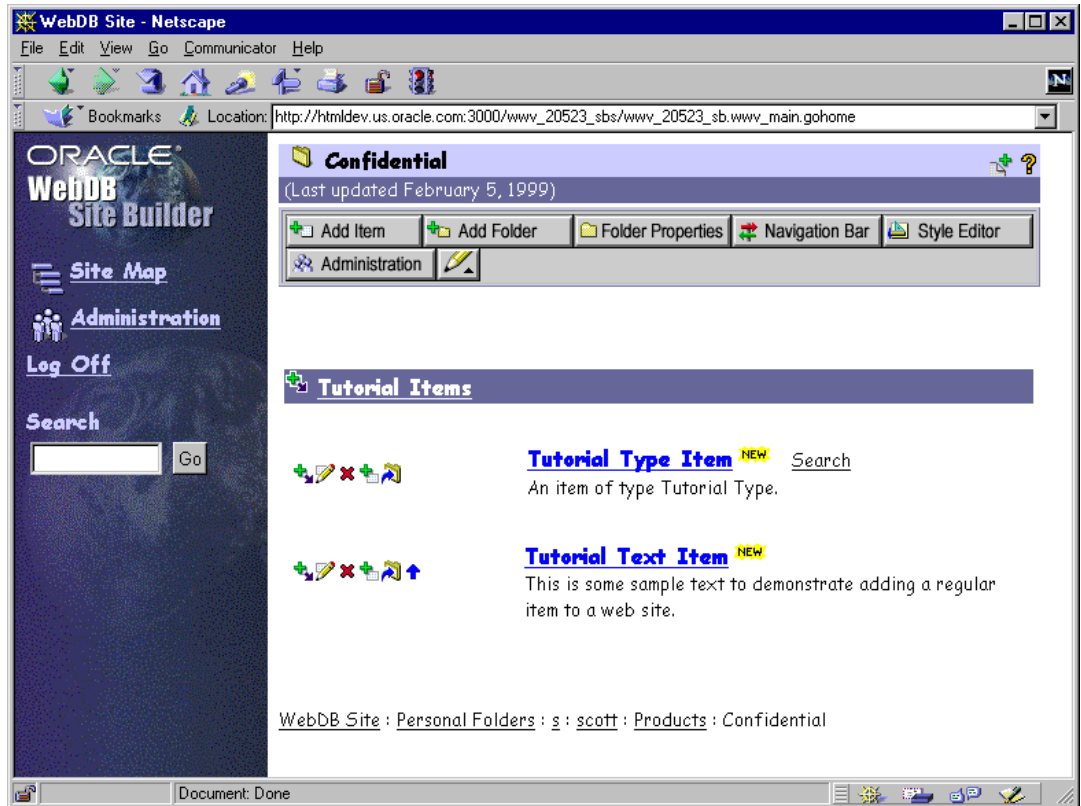
`This is a text item about Oracle Corporation.`
8. In the **Title** text box, type `Tutorial Type Item`.
9. Note that in the **Category** drop down list, **Tutorial Items <NAME>** is already chosen. This is because clicking  in a category banner like the **Tutorial Items** banner automatically adds the item to that category.
10. In the **Description** text box, type:

`An item of type Tutorial Type.`
11. Click **Next** to display the Tutorial Type: Optional Settings and Values page.
12. In the **Perspectives** list box, choose **Tutorial Users <NAME>**.
13. In the **Notes** text box, type:

`This item enables end users to search for web sites and web pages about Oracle Corporation.`

This is the other attribute that you defined in the custom item type. Because you did not check the **Required** check box when you defined this attribute, it is displayed on the Optional Settings and Values page.

14. Click **Finish** to add the item and return to the Confidential folder.



The link **Search** is displayed next to the item title **Tutorial Type Item**.

15. Click **Search** to pass the string that you specified in the **p** text box ("Oracle") to the search engine.

8.3 Adding a News Item

You can add items that are of current interest as news items. Typically a news item will only be displayed for a short time, before some other news takes its place.

1. Click your browser's Back button to return to the Confidential folder.
2. In the folder dashboard, click  to display the Item Wizard.

3. In the Item Type section, click the **Item type** drop down list and choose **URL**.
4. In the Display Option section, click the **News** radio button.
5. Click **Next** to display the URL: Required Settings and Values page.
6. In the **URL** text box, type:
`http://www.cnn.com/world`
7. In the **Title** text box, type `CNN World Headlines`.
8. In the **Description** text box, type:
`The latest news from around the world.`
9. Click the **Expires in** drop down list and choose **7 days**.

Use expiration dates when you only want the item to appear in the web site for a limited time. After the time specified, the item will no longer be displayed on the site. Thus, you do not have to remember to remove it yourself.

Note: The item is not deleted from the database until the site administrator purges expired items.


10. Click **Finish** to add the item and return to the Confidential folder.



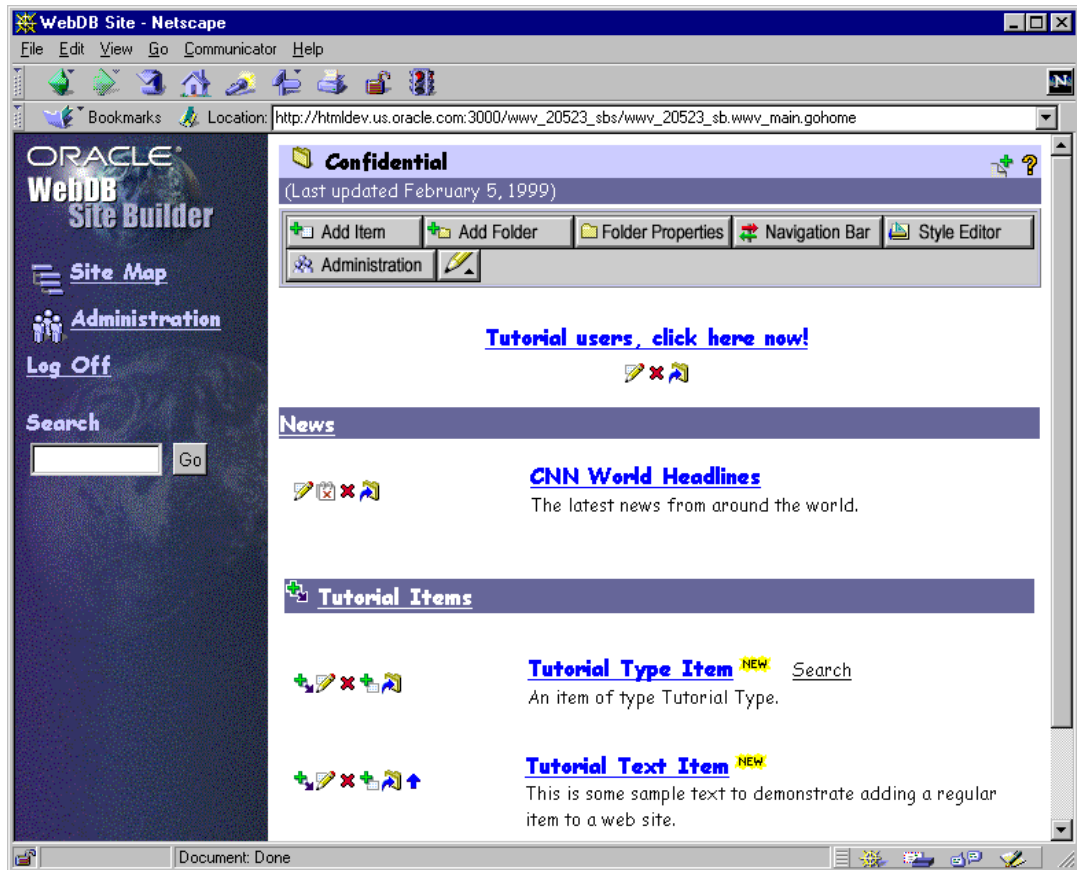
The news item title **CNN World Headlines** is displayed as a hypertext link under the **News** banner, above the regular items.

8.4 Adding an Announcement Item

You can add items that require special attention as announcement items.

1. In the folder dashboard, click  to display the Item Wizard.
2. In the Item Type section, click the **Item type** drop down list and choose **Text Item**.
3. In the Display Option section, click the **Announcement** radio button.


4. Click **Next** to display the Text Item: Required Settings and Values page.
5. In the **Text** text box, type:
Important Announcement:
You've almost finished the tutorial.
6. In the **Title** text box, type Tutorial users, click here now!.
7. Click **Finish** to add the item and return to the Confidential folder.



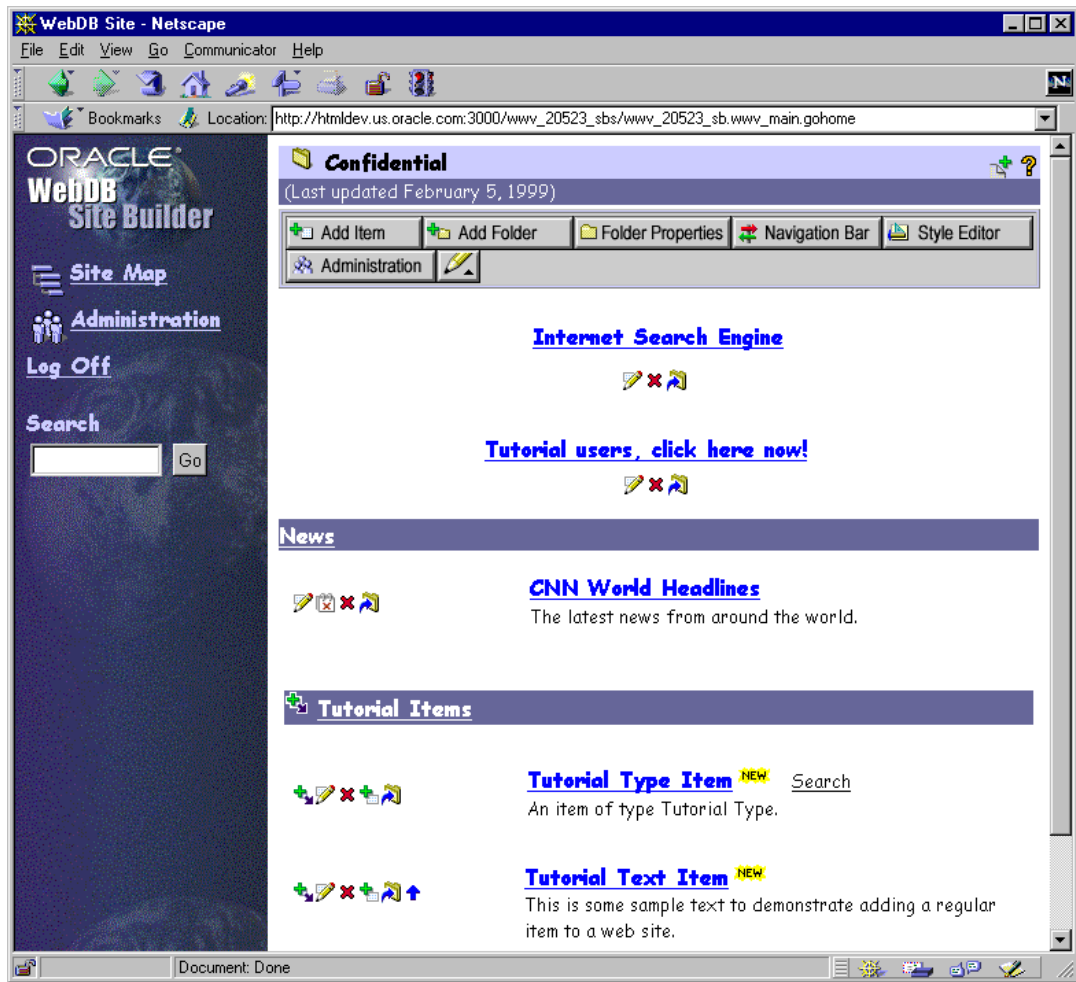
The announcement item title **Tutorial users, click here now!** is displayed as a hypertext link above the regular items and news item.

8.5 Adding a Quickpick Item

You can create frequently used items as quickpick items, enabling users to access them quickly and easily.

1. In the folder dashboard, click  to display the Item Wizard.
2. In the Item Type section, click the **Item type** drop down list and choose **URL**.
3. In the Display Option section, click the **Quickpick** radio button.
4. Click **Next** to display the URL: Required Settings and Values page.
5. In the **URL** text box, type:
`http://www.yahoo.com`
6. In the **Title** text box, type Internet Search Engine.

7. Click **Finish** to add the item and return to the Confidential folder.



The quickpick item title **Internet Search Engine** is displayed as hypertext above all the other items.

8.6 Creating an Item with Approval

If you own a folder, or if you have been granted Manage Items privileges on a folder, you can add, edit, move, and delete items in that folder. When you create an item, that item is immediately visible in the folder. If you have Create with Approval privileges, you can only add items to the folder. When you create an item that requires approval, the item does not become visible to other users until the folder owner approves it. This enables the folder owner to maintain control of the folder content.

8.6.1 Adding an item that requires approval

Adding an item that requires approval is the same as adding any other item. The only difference is that once you have added the item, it only becomes visible to other users when the folder owner approves it.


In Section 7.4.3, "Granting folder access privileges to a group of users" on page 7-26, you granted Create with Approval privileges on the Confidential folder to TUTORIAL_USER. In the following exercise you will add an item as TUTORIAL_USER, and then approve the item as yourself (the folder owner).


1. To add an item as TUTORIAL_USER, you first need to log on to the site as TUTORIAL_USER.

In the navigation bar, click **Log Off** to log off the site.

2. Log back on to the site using the user name TUTORIAL_USER and the password TUTORIAL.


Tip: If you can't remember how to do this, follow the instructions in "Oracle WebDB Basic Concepts, Displaying an Oracle WebDB Site" on page xxiv.

3. In the navigation bar, click  to display the Site Map.
4. Expand the **Products** node.
5. Click **Confidential** to display the Confidential folder. TUTORIAL_USER has Create with Approval privileges on this folder.

6. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.

Note: When you enter Edit Mode as TUTORIAL_USER, the toolbars for editing existing items are not displayed next to the item titles. This is because TUTORIAL_USER has privileges only to add items, and cannot edit existing items.

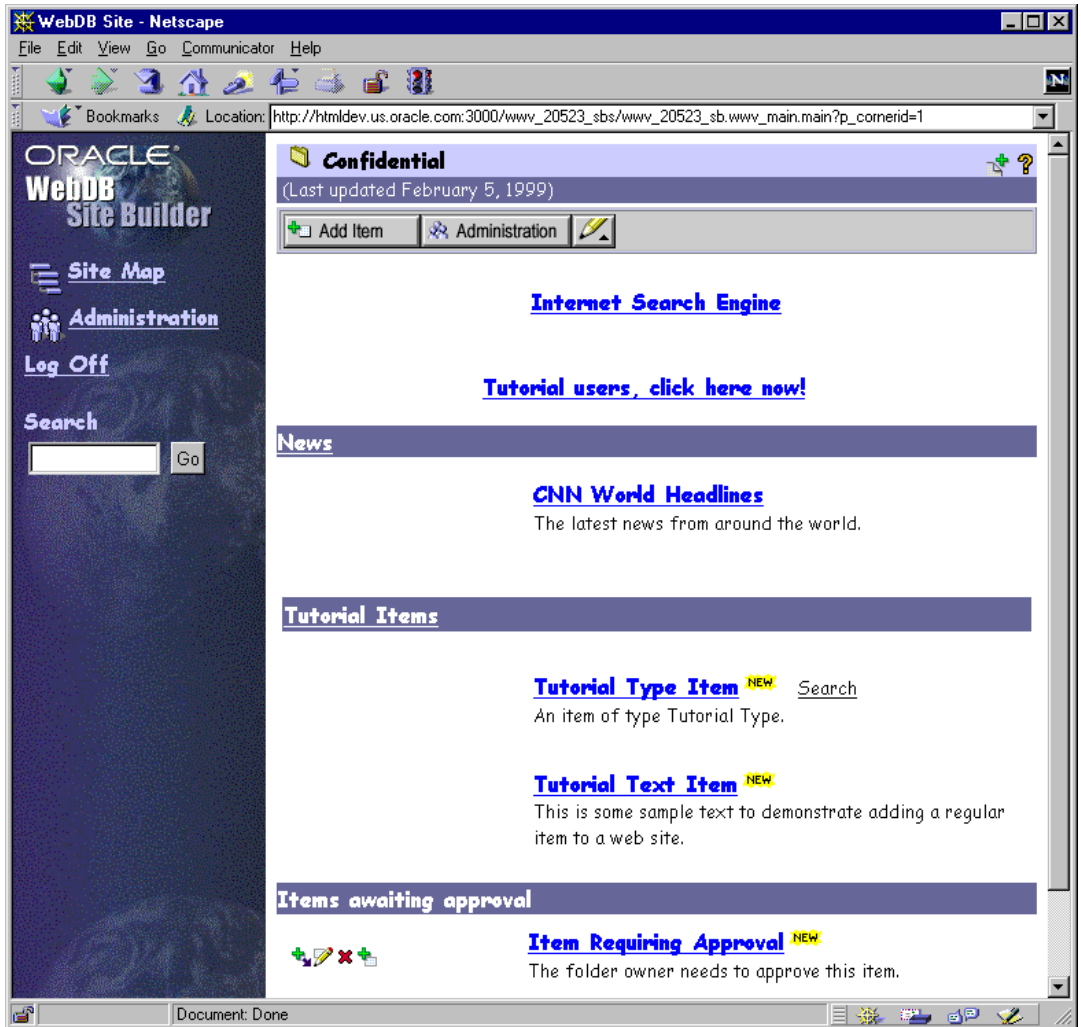
Also, there are fewer tools offered in the folder dashboard. This is because TUTORIAL_USER is not a site administrator and does not own this folder, and thus cannot perform folder administration tasks, such as creating folders within the Confidential folder or changing the style of the folder.

7. In the folder dashboard, click  to display the Item Wizard.
8. In the Item Type section, click the **Item type** drop down list and choose **Text Item**.
9. In the Display Option section, make sure the **Regular Item** radio button is selected.
10. Click **Next** to display the Text Item: Required Settings and Values page.
11. In the **Text** text box, type:

This is some sample text to demonstrate adding an item that requires approval.
12. In the **Title** text box, type Item Requiring Approval.
13. In the **Description** text box, type:

The folder owner needs to approve this item.

14. Click **Finish** to add the item and return to the Confidential folder.

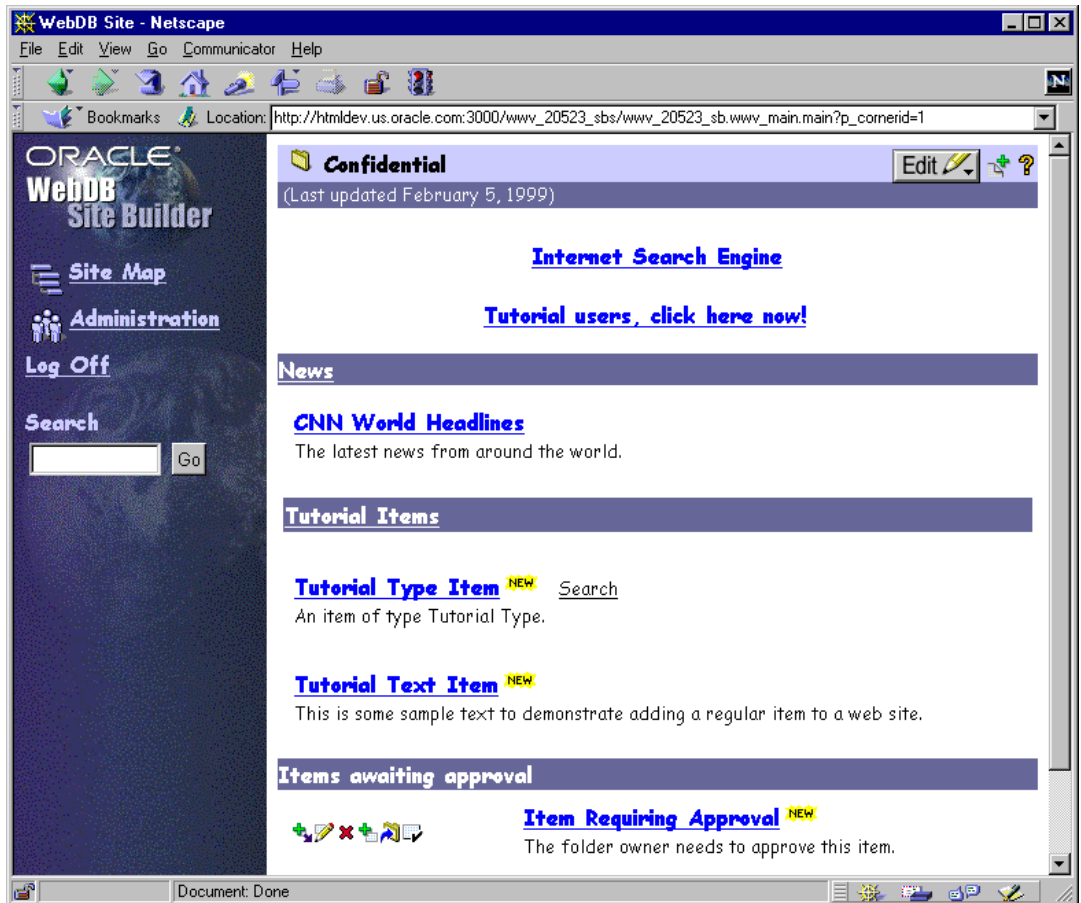


The item title **Item Requiring Approval** is displayed as a hypertext link under the **Items awaiting approval** banner.


8.6.2 Approving an item

When an item that requires approval is added to a folder, the folder owner must review that item and decide whether to make it visible to other users or not.

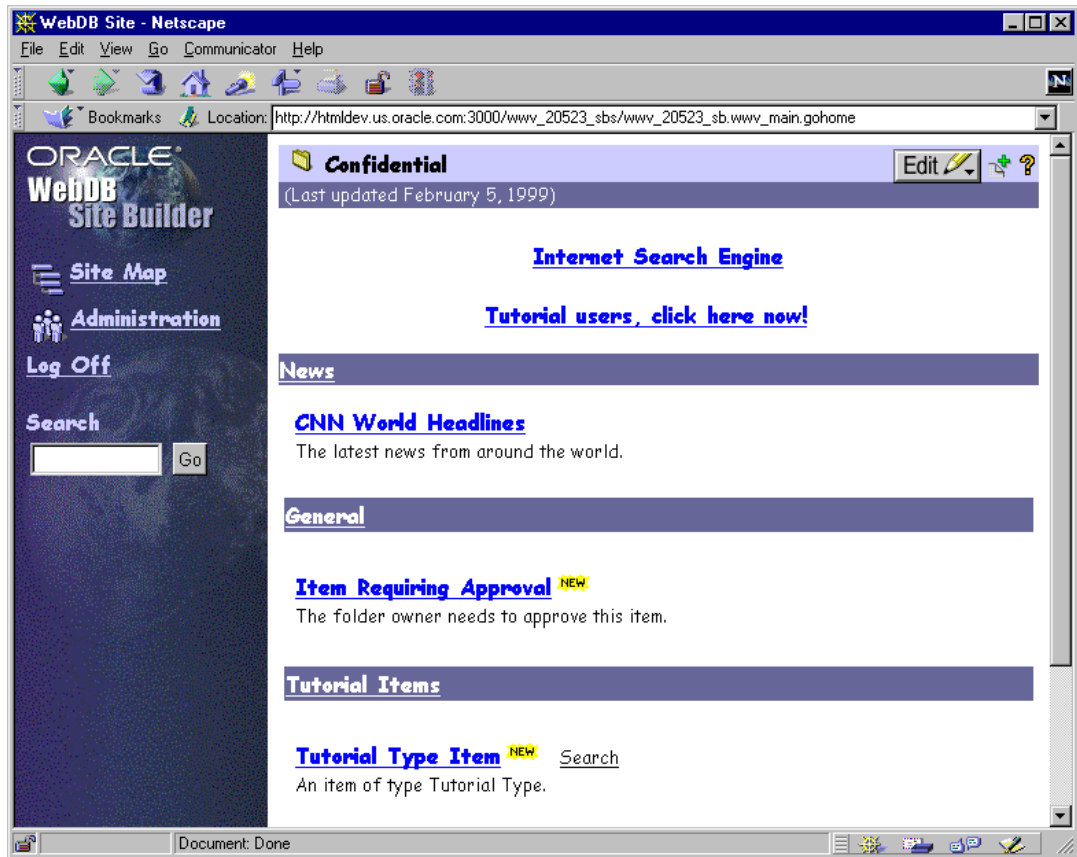
1. To approve the item, you need to be logged on to the site as the folder owner.
In the navigation bar, click **Log Off** to log off the site.
2. Log back on to the site using your own user name and password.
3. Scroll down the home page and under the **Owned folders** banner, click **Confidential** to display the Confidential folder.



The item you created in the previous exercise is displayed under the **Items awaiting approval** banner. The only users who can view this item are the original creator, the folder owner, and site administrators.

4. Click  to approve the item.

Note: You do not need to enter Edit Mode to approve an item.





The item is now displayed under the **General** category banner. Any user with access to the Confidential folder can now view the item.

Note: You can also edit the item, move it to a different folder, or delete it.

8.7 Editing an Item

If you have Manage Items privileges, you can also edit existing items in the web site.

Note: When you edit an item in WebDB, you edit how the item is displayed in the site. Except for items of type Text Item, you do not edit the actual content of the item itself.

5. In the banner at the top of the page, click  to enter Edit Mode and display the folder dashboard.
1. Click  next to **CNN World Headlines** to display the Edit URL: Required page.

2. Click the **Optional** tab to display the Optional page.

Finish

Edit URL : CNN World Headlines
Optional

Required Optional

Type the values and choose the settings.

Optional Settings and Values

Apply Reset

Perspectives: Tutorial Users

Image: Browse...

Basic Search Keywords:


Author: SCOTT



Display in full browser window

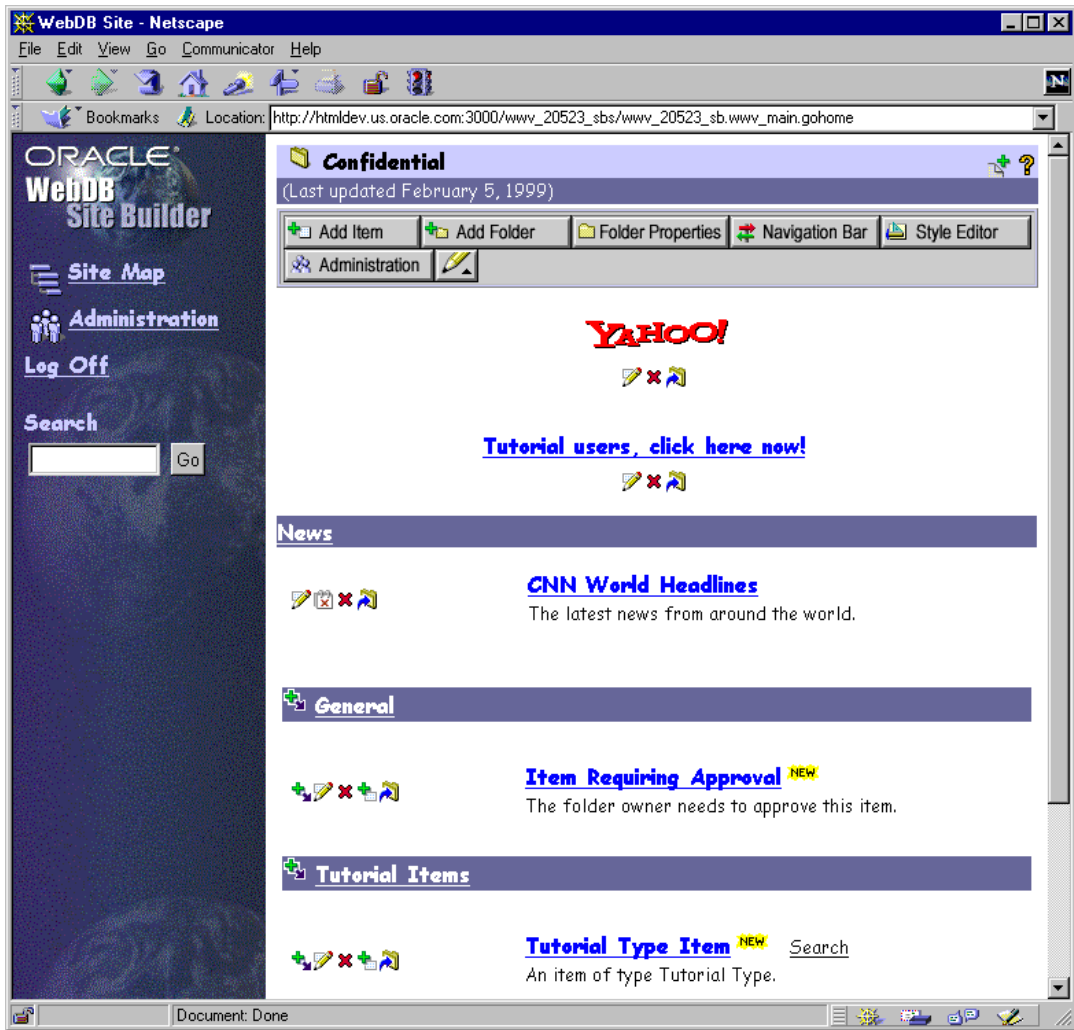
Enable item check-out

3. Check the **Display in full browser window** radio button.

Selecting this option means that when an end user clicks the item title, the item will fill the whole browser window, rather than the current frame. The user can then view more of the item without having to scroll, but the site navigation bar will no longer be displayed.

4. Click  to save your changes and return to the Confidential folder.
5. Click **CNN World Headlines**. The item is displayed in the full browser window.
6. Click your browser's Back button to return to the Confidential folder.

7. You can add images to items, to make them stand out more on the page. First let's find an image to use for the Internet Search Engine quickpick.
 - a. Open a new browser window and go to the following URL:
`http://us.yimg.com/i/recipe/lyahoo.gif`
 - b. Save the image to your local file system, making a note of the directory where you save the image.
 - c. Close the browser window.
8. In the Confidential folder, click  under **Internet Search Engine** to display the Edit URL: Required page.
9. Click the **Optional** tab to display the Optional page.
10. Click **Browse** next to the **Image** text box and use the dialog box to locate the image you saved in Step 7.
11. Click  to save your changes and return to the Confidential folder.



The quickpick **image** is now displayed at the top of the page instead of the title.

8.8 What's Next?

In this chapter, you learned how to:

- Add a regular item to a WebDB site
- Add a custom item type item to a WebDB site
- Add a news item to a WebDB site
- Add an announcement item to a WebDB site
- Add a quickpick item to a WebDB site
- Add an item requiring approval to a WebDB site
- Approve an item
- Edit an item in a WebDB site

This concludes the web site development part of the tutorial. Now you're ready to add items to your own web site, without having to rely on a webmaster. This means that you can take responsibility for your own web site content and keep it accurate and up-to-date. For more information about any subject you've learned in this chapter and others, see the online help.

Part IV

Appendix

Complete the tasks in Appendix A, "Tutorial Setup Instructions" if you will be setting up the tutorial for other users.

Tutorial Setup Instructions

Before you begin the exercises in this tutorial, you or your DBA must set up the tutorial environment.

To complete these tutorial setup tasks, you must be a member of the DBA role. If you are not a member of the DBA role, you will not be able to access the appropriate WebDB features.


Tutorial users must have a user name set up in the database where WebDB is installed. For information about how to create database users, refer to the WebDB online help.

A.1 Creating HR_TUTORIAL

In Section 4.4, "Making a Component Available to Other Users" on page 4-16, tutorial users need to grant execute privileges to the HR_TUTORIAL role. You can create this role using the CREATE ROLE SQL statement, or using WebDB.


For information about creating a role using the CREATE ROLE SQL statement, refer to your SQL reference documentation.

The following steps describe how to create the HR_TUTORIAL role using WebDB.

1. Start WebDB.
2. In the toolbar at the bottom of the page, click  to display the Administer page.
3. Click **Role Manager**.
4. In the Create a New Role section:
 - a. In the **Role** text box, type HR_TUTORIAL.
 - b. Click **Create**.

A.2 Creating the Tutorial Web Site

In Chapter 7, "Designing WebDB Sites" and Chapter 8, "Managing WebDB Site Content", tutorial users need to be site administrators of a WebDB site. The following steps describe how to create the Tutorial Web Site.

1. Start WebDB.
2. In the toolbar at the bottom of the page, click  in the toolbar at the bottom of the page to display the Site Building page.
3. Click **Create** to display the Site Creation Wizard.
4. In the **Site Name** text box, type `Tutorial Site` and go to the next page.
5. In the **Owning Schema** text box, type `TUTORIAL` and go to the next page.

Note: If a schema called `TUTORIAL` already exists in the database where Oracle WebDB is installed, you will need to choose a different Owning Schema name.

6. Click the **Language** drop down list, choose the desired language for the text in the web site, and go to the next page.
7. In the **User Tablespace** text box, type the name of the tablespace (for example `USERS`) to be used to store any site objects.
8. In the **Temporary Tablespace** text box, type the name of the tablespace (for example, `TEMP`) to be used for temporary operations and go to the next page.
9. Leave **The Traveler** check box unchecked and go to the next page.
10. Note down the administrator user name and the public access URL.
11. Click **Finish**.
12. When the site creation process has finished, click **Done**.


A.2.1 Assigning a user as Site Administrator

Each tutorial user needs to be a site administrator of the tutorial web site. The following steps describe how to assign an existing user site administration privileges.

1. Display the Tutorial Web Site in your web browser.
2. In the navigation bar, click **Log On**.

3. In the log on dialog box, type the administrator user name you noted down during the site creation process. The password is the same as the user name.
4. Click **OK**.
5. In the navigation bar, click to display the Administration page.
6. In the Access Managers section, click **User** to display the User Manager page.
7. In the Find User section:
 - a. In the **Name** text box, type the user name of the tutorial user.

Note: The tutorial user must have a user name in the database where you created the tutorial web site. If the tutorial user does not have a user name in the database, you will need to create one for them.

- b. Click **Edit** to display the User Manager: Details page.
8. In the Administrator Privileges section, check the **Site, Style and News Administrator** check box.
9. Click  .

A.3 Creating TUTORIAL_USER

In Chapter 7, "Designing WebDB Sites" and Chapter 8, "Managing WebDB Site Content", tutorial users need to be able to log in as a different user (TUTORIAL_USER) to view the site with different privileges. The following steps describe how to create the TUTORIAL_USER user.

1. Display the Tutorial Web Site in your web browser.
2. In the navigation bar, click **Log On**.
3. In the log on dialog box, type the administrator user name you noted down during the site creation process. The password is the same as the user name.
4. Click **OK**.
5. In the navigation bar, click to display the Administration page.
6. In the Access Managers section, click **User** to display the User Manager page.

7. In the Create User section:
 - a. In the **Name** text box, type TUTORIAL_USER.
 - b. In the **Password** text box, type TUTORIAL.
 - c. In the **Confirm Password** text box, type TUTORIAL to confirm that this is the password you want to use.
 - d. Click the **Temporary Tablespace** drop down list and choose the tablespace (for example, TEMP) to use for temporary operations.
 - e. Click the **Profile** drop down list and choose the profile (for example DEFAULT) for the user.
 - f. Click **Create**.

Part V

Glossary

Glossary

advanced search

Advanced searches are performed by end users using *interMedia* Text, a feature of Oracle 8i or by ConText in previous Oracle database products. Site Administrators can choose to implement the advanced search feature in a WebDB site, which allows end users to perform Boolean and document section searches, and limit searches to specific categories, perspectives or folders.

announcement

A display option selected in the Item Wizard (or Item Manager) which causes the title of the item to be prominently displayed, directly below News on a WebDB home or folder page. Announcements, like News items, can be any type of item. Unlike News, announcements are not automatically archived.

application

In WebDB, a group of components connected to one another by links, designed to fulfill a particular business need. For example, a form can be linked a chart that, in turn, allows an end user to drill down to detailed reports about items displayed in the chart.

activity log

A database table that provides a record of end user requests for WebDB components. The log includes information about the time of the request, the user who made the request, and the machine and browser type that originated the request.

banner

In WebDB, a banner is a .gif file containing a colored, horizontal bar with a title and optional graphic elements displayed on a web page. Banners are used in WebDB pages to break the visual flow of a page and group the related items below.

basic search

A WebDB site feature that allows end users to enter key words in a text box, displayed at the discretion of the Site Administrator or folder owner in the navigation bar. The search is based on key words, which are entered when an item is added to the site, and can be edited at any time.

batch job

Running a component in the background using the WebDB batch job facility. An end user can run a component in batch mode by selecting options on the parameter entry form for the component. Batch processing is useful if the component is based on a large amount of data, or if the component displays many rows of data.

bind variable

A variable in a SQL statement that must be replaced with a valid value or address of a value in order for the statement to execute successfully. WebDB component developers typically use bind variables to display a parameter entry field in a component's parameter entry form. The entry field allows end users to choose the data that the component will display.

body

In WebDB, the part of a web page where the banners, items and images are displayed.

bookmark

A method provided by web browsers for navigating to pages whose locations (URLs) you've saved. In WebDB, you bookmark pages as a personal link?

Browse In privilege

A WebDB-specific privilege that allows a developer to search schemas for objects such as tables, views, and procedures on which WebDB components will be based. To view an object in WebDB, a developer must have Browse In privileges (or Build In privileges, which automatically includes the Browse In privilege) in the schema that owns it.

Browse Mode

The usual mode of viewing and interacting with a web site, as opposed to edit mode, which is used to perform item management tasks.

browsing

Searching the database for objects. In WebDB, you can browse the database using object names, object types, the schemas owning the objects, or any combination of these search criteria.

Build In privilege

A WebDB-specific privilege that allows a developer to build a component in a schema. Developers must have Build In privileges in at least one schema, including their own, to build a component. The schema will own the finished component.

calendar

A WebDB component that displays the results of a SQL query in calendar format. At least one of the table columns in the query must have the DATE datatype.

category

A grouping of items on a WebDB site. A category answers the content-specific question, 'What is this item?' for the end user. For example, in a travel web site you might have categories of maps, snapshots, or hotel reviews. Each item added to a WebDB web site must be assigned a category.

chart

A WebDB component that displays the results of a SQL query as a bar chart. Charts are based on at least two table or view columns: one that identifies the bars on the chart and another that calculates the size of the bars on the chart.

check box

A control that can appear alone or in groups on WebDB forms and parameter entry forms. Each check box can be switched either "On" or "Off." WebDB provides options for displaying Lists of Values as check boxes in forms and component parameter entry forms.

cluster

A database object used to store tables that are related to one another and that are often joined together in the same area on disk.

color palette

Subset of available colors, used to assign colors to elements in a web site layout including background, links, banners and other items displayed on a web page. The hex value for each color is displayed in the palette.

Common Gateway Interface (CGI)

The industry-standard technique for running applications on a Web server. Whereas standard HTML documents retrieved from a Web server are static (the exact same text is retrieved every time), CGI enables a program running on the Web server to communicate with another computer to dynamically generate HTML documents in response to user-entered information.

component

A PL/SQL stored procedure created by a WebDB component build wizard; for example, a chart, report, or form. Executing the stored procedure creates the HTML code used to display the component.

component schema

Any database schema in which a WebDB developer can build a component.

create with approval privilege

A permission that allows a user who is not the folder owner to add new items to the folder. Items that are added by a user with this privilege must be approved by the folder owner before they are displayed.

custom item type

A user-defined item type created by users which includes user-defined values or functions that further control the display or functionality of the item. Custom item types are often function calls. These can be calls to PL/SQL functions that exist in your own database schema, or they can be external, or HTTP calls which are accessible only through an HTML or browser interface using a URL and parameter values. Custom item types are built upon the base item types defined in WebDB.

database access descriptor (DAD)

A set of values that specify how WebDB connects to the Listener or some other type of database server to fulfill an HTTP request. The information in the DAD includes the user name (which also specifies the schema and the privileges), the user password, connect string, error log file, standard error message, and NLS parameters.

database administrator (DBA)

A WebDB user having the DBA role. The DBA role provides the user access to all WebDB menus and all privileges, including creating and dropping users, assigning build and browse privileges to users, and assigning roles to users.

database object

See *object*.

edit mode

A mode that enables an authorized user who has logged in to a WebDB site to manage the web site and folder content, including adding, modifying, moving and deleting items.

end user

In WebDB, a WebDB user who executes a component. The user has been granted execute privileges by the owner of the component.

In WebDB sites, a user who browses and views a WebDB site without logging in; that is, views the site the way web sites are normally viewed and used. The structure and content that is revealed is only that which has been published, and made public.

execute privilege

A permission that allows an end user to execute a procedure. In WebDB, the execute privilege is typically granted to allow an end user to execute a component stored in the database as a procedure.

expiration period

The number of days before an item is automatically deleted from a WebDB site during a system purge. After an item expires, it is viewable only by the item's owner and the site administrator.

export

To store a copy of an object, module, selected text or image to a file or a remote database.

field-level validation

A method for verifying that correct values have been entered into entry fields in components and parameter entry forms. Field-level validation is performed when the end user causes the OnBlur condition to occur after entering a value in an entry

field, for example, when tabbing to another entry field. See also, form-level validation.

file

A file item is a file which has been uploaded to a WebDB site and stored in the host database, using the Item Wizard. The title of each file item is displayed on its folder page (or the home page) as a link. When the item is clicked by an end user, the file is downloaded to their computer through their web browser.

folder

Folders in a WebDB site have similar properties as folders on a desktop computer. They can be created, deleted, and organized hierarchically. In WebDB, folders are containers for items and page templates. These folders form the structure of each WebDB site. WebDB automatically generates web pages for each folder. To generate a page, WebDB relies on the properties in the page template to display titles, descriptions and the contents of each item in the folder.

folder link

A folder link is an item which has been created using the Item Wizard. The title of each folder link is displayed on its folder page (or the home page) as a link. When the item is clicked by an end user, the web page this item references is displayed in their browser.

folder owner

A user with the folder owner privilege. A folder owner controls the folder and its contents, and can grant folder access to other users.

folder path

A folder path is a chain of folder reference names separated by colons, starting at the root folder and ending at the object folder. Used to describe the complete directory path of the object folder and create URLs for folder links.

folder reference name

An identifier initially generated from the folder title that allows WebDB to uniquely identify each folder and its contents. The reference name is established when the folder is created and cannot be changed.

foreign key

A value or column(s) in a table that refers to a primary key in another table.

form

A WebDB component that provides an interface to one or more database tables, views, or procedures.

form-level validation

A method for verifying that correct values have been entered into entry fields in components and parameter entry forms. Form-level validation occurs after the user enters a value in an entry field and submits all values on the page, for example, when clicking an OK button.

frame driver

A WebDB component consisting of a web page divided into with two frames. One frame (the driving frame) contains a SQL query that drives the contents of a second target frame.

frames view

A tree displaying a hierarchical view of WebDB menus and pages. End users can click nodes in the tree to navigate to WebDB menus and pages. The frames view is accessible from the WebDB home page.

function

In WebDB, PL/SQL subprograms that perform a specified sequence of actions, and then return a value.

In WebDB sites, a program written in PL/SQL (and stored in a database or server as a stored procedure), that returns a value. End users execute can execute functions in a WebDB site by clicking on the title of a PL/SQL item, or a custom item. Functions are usually small, very specific code written to perform a specific task within the scope of a larger application. Functions are executed via a function call, which sends the values to be used during execution, and receives the results of execution.

generate

To save a procedure containing a WebDB component to a file or database in a binary format so that it can be executed in run-time and batch mode.

grant

A privilege or role given to a WebDB user.

group

A collection of users who have access to a WebDB site and share a common need or interest. Users are assigned to groups based on their common responsibilities or access requirements.

group administrator

A user who has the privilege to create a group and add to it other users as members.

header

An optional region in an HTML-based web page that contains introductory material for the page. In WebDB, the header can include text, graphics, data, and computations. The header appears first before the body.

hierarchy

A WebDB component that displays data from a self-referencing table or view (at least two columns in the table must share a recursive relationship). A hierarchy can contain up to three levels and displays data such as employees in an organization chart, or the hierarchical relationship between menus in a web site.

home page

A PL/SQL procedure that, when executed, creates a web page that is the entry point to the WebDB product. A Listener setting specifies the default home page for WebDB.

HTML

Acronym for Hypertext Markup Language. A tag-based ASCII language used to specify the content, format, and links to other pages on Web servers on the Internet. WebDB consists of a collection of PL/SQL procedures that, when executed, generate HTML.

HTTP function

See *function*.

hypertext link

In WebDB, a reference from some point in a component or web site to some point in another component or web site.

image

A bitmapped object that can be stored and loaded into a component or web site, and displayed using a web browser.

index

An optional structure associated with a table used to locate rows of the table quickly, and (optionally) to guarantee that every row is unique.

***interMedia* Text**

Advanced gist, theme and text retrieval services offered in Oracle 8i that enables organizations to manage text information as quickly and easily as structured data. See also advanced search.

IP address

A four-part number with no more than three digits in each part that uniquely identifies a computer on the Internet, or on a local LAN.

item

Items are the basic unit of content (such as text, files and links) that folder owners place on WebDB site pages. When users add items to folders in a WebDB site, they are stored in the site's host database. The item title and its content (or results of execution, in the case of a link or function call) is displayed on automatically-generated web pages by WebDB. Each item must be defined as one of the seven item types (or custom item types if they have been created), so that WebDB knows how to display the item and how to execute it.

item ID

A local database reference to the contents of an item. An item ID value is used in custom item types to pass items to PL/SQL functions. The function uses the item ID to access the contents of the item.

item title

The item title is a required attribute of each item added to a WebDB site, using the Item Creation Wizard. The title is the main descriptive text that identifies each item. An item is identified on the home or folder page by displaying the item's title and description fields.

item type

There are seven item types provided by WebDB: text, file, URL, multiple files, PL/SQL, video, and WebDB Component. When a new item is added to a WebDB site, the user specifies the base item type to control item display and functional characteristics. Custom item types are created by users, based on the seven basic item types provided by WebDB.

join condition

Combining data from two (or more) tables or views in a single SQL SELECT statement.

JavaScript

A scripting language developed by Netscape that allows generation of dynamic components in otherwise static HTML. WebDB allows you to use JavaScript to create applications that validate entry fields in components and parameter entry forms.

library

A collection of one or more PL/SQL program units that are stored together in a database, and can be referenced by several applications at once.

link

A shared component that allows developers to add hypertext jumps between components.

link text

Text (usually displayed in color) which is "hot", or hypertext. End users click on the text to display the web page specified in the HTML code. For example, in the HTML code `Travel The World`, 'Travel The World' is the link text displayed in color. end users click it to jump to the www.traveltheworld.com web site.

List of Values (LOV)

A shared component that allows developers to add selectable values to entry fields in components and parameter entry forms. An end user selects from the list one or more values for the entry field. A single List of Values can be displayed in different formats such as combo boxes, radio buttons, or check boxes.

lock

A setting automatically applied to a component when it is being edited. The setting prevents other users from editing the component.

keyword search

see *basic search*.

manage items privilege

A folder privilege that allows a user to make changes to existing items in a folder.

master-detail form

A WebDB component that displays a master table row and multiple detail rows within a single HTML page. Values in the master row determine which detail rows are displayed for querying, updating, inserting, and deleting.

menu

A WebDB component that displays a web page containing options that end users can click to navigate to other menus, WebDB components, or URLs.

mime type

A file format defined by the Multipurpose Internet Mail Extensions standard. A mime type describes the type of file being transferred to the web browser.

navigation bar

In WebDB sites, graphic images and text links displayed in framed browsers as the left frame, or in unframed browsers at the top of each folder or home page. These graphic images and text links display the features made available to end users by the Site Administrator or folder owner, along with selected folders, categories and perspectives.

navigation toolbar

1. Buttons located along the bottom of WebDB that allow users to navigate to other WebDB pages.



2. Graphics elements and buttons in a web site created using WebDB that allow users to navigate to other pages in the site. The buttons and graphic elements can be displayed at the top, sides, or bottom of a page.

news

A display option selected in the Item Wizard (or Item Manager) which causes the title of the item to be prominently displayed on a WebDB site home or folder page. News items can be automatically archived. News can be any type of item. For example, a news item on a travel web site could be a link to a web page that temporarily advises against traveling to the Caribbean because of hurricane warnings.

news administrator

A user who has special privileges to maintain and approve all news items on a web site.

null value

The absence of a value in a table column.

object

A structure used to store data in the database. Developers can create objects using object build wizards provided by WebDB, or using Oracle database commands.

Although WebDB components are stored in the database as package objects, the term component is used to refer to charts, reports, forms, etc. Object is used when referring to tables, packages, triggers, etc.

object information

Information that WebDB provides about a database object, including its owner, type, and dependencies on other objects.

object schema

A schema that owns the objects on which WebDB components are based. To build a component based on an object, the schema where the component is being built must be granted explicit privileges on the object, such as SELECT, INSERT, UPDATE, DELETE, and EXECUTE.

Oracle Connect String

A Listener setting that can be used to set up a TNS names alias for a remote database installed on Windows NT.

Oracle HOME

An environment variable that indicates the root directory of Oracle products.

own privilege

One of the folder privileges. A user with the own privilege has the authority to perform all functions on this folder, and to grant other users any privileges for this folder. Site Administrators automatically are granted the own privilege for every folder in a WebDB site.

Owning Schema

The WebDB site schema created by the Site Creation Wizard at site creation time. The schema must be new. The Wizard will grant appropriate privileges to the account. Two users are created: a public one, by adding the suffix '_PUBLIC', and a second, private administrative schema, by adding the suffix '_ADMIN'.

package

A database object consisting of a specification and a body. The specification includes the datatypes and subprograms that can be referenced by other program units. The body includes the actual implementation of the package.

page request

In WebDB, an end user request for a WebDB component.

In WebDB sites, a web browser request sent to a web server to transmit a web page for display. Each time a page request is fulfilled, a log entry is made. These log entries can be queried in reports using the Site Statistics Manager to determine which pages on a web site are most often requested.

page element

Page elements are visible objects on a web page which users can control by setting attribute values. Using the Layout Manager, an authorized user can set banner colors, text size, and other visual attributes of many page elements on pages in a WebDB site.

parameter entry field

A field on a parameter entry form that allows end users to enter values that will be passed to a WebDB component.

parameter entry form

A page that prompts end users for values to pass to a WebDB component. End users can view the parameter entry form for a component, if one has been created, by choosing the Run with Parameters option in WebDB.

parent-child relationship

See *recursive relationship*.

personal folder

A private folder for each authorized user. A personal folder is created when a WebDB site is created, and named using the owner's authorized user name. Each

personal folder is listed alphabetically under personal folders in the site map. If an authorized user is created after the WebDB site has been created, the site administrator can create a personal folder directly in the WebDB site. Only the owner can see the web pages in their personal folder unless they grant the View privilege to other users.

perspective

A cross-category grouping of an item. By assigning a perspective, you answer the question 'Who will be interested in this item?'. For example, you can add links to diverse vacation spots around the world and assign perspectives like 'Vacations for Nordic Enthusiasts', 'Archeology Expeditions', and 'Extreme Vacations for Adventurers'. Perspectives are not required, and more than one perspective can be assigned to an item.

PL/SQL item

An item containing a PL/SQL block. The title of each PL/SQL item is displayed as a link, along with the description. When an end user clicks the link the block is executed, and the result is returned to the browser and displayed on the web page.

PL/SQL function

See *function*.

port

A number that TCP uses to route transmitted data to and from a particular program.

primary key

A column in a database table consisting of unique values that can be used to identify rows in a table.

privilege

The right to perform an action on the database. These can either be general (system privileges) or specific to particular database objects (object privileges). They can also be grouped into roles. A user with the DBA role grants privileges in WebDB.

procedure

A PL/SQL subprogram that performs a specified sequence of actions.

profile

The system and Oracle database resources that are available to the user.

public folder

Any folder of a WebDB site whose web pages are viewable by end users without logging on.

Query by Example (QBE) form

A WebDB component that provides an interface allowing end users to query or insert values into a database table or view. The Query by Example form contains entry fields that correspond to the columns in the database table or view on which the form is built.

query

A SQL SELECT statement that specifies which data to retrieve from one or more tables or views in a database.

quickpick

A display option selected in the Item Wizard which causes an item's title to be displayed centered at the top of a WebDB site home or folder page as an announcement. Quickpicks are often designated for items that are very important to your audience, and are often displayed as graphic links. Like news, a quickpick can be any type of item.

radio button

A control (similar to a check box) appearing in sets of two or more, only one of which may be either "on" or "off" at any given time. WebDB provides options for displaying Lists of Values as radio buttons in forms or component parameter entry forms.

recursive relationship

A relationship that occurs when the values in a table column can be related to those in another column in the same table or another table; for example, between a primary key and foreign key.

remote database

A database running on a separate machine that can be accessed over the network.

report

A WebDB component that displays the results of a SQL query in a tabular format.

role

A group of database object privileges that can be granted and revoked as a unit. The DBA assigns a role to a group of users in order to grant them the database object privileges associated with the role.

rollover image

A second image that is displayed whenever the end user moves the cursor over an image in a WebDB site.

row

A set of values in a table; for example, the values representing one employee in the SCOTT.EMP table.

schema

A collection of components and database objects under the control of a given database user. The schema has the same name as the user who owns it.

search

See *basic search*.

search engine

An application for searching for web pages on the web. Yahoo! is a popular search engine which anyone can use. In WebDB sites, end users can perform basic searches, or advanced searches using *interMedia Text*, provided as part of Oracle 8i.

sequence

A database object used to automatically generate numbers for table rows.

session

The period between logging on and logging off WebDB.

shared components

Building blocks used by WebDB developers to create components. Shared components include links, Lists of Values, JavaScripts, and look and feel elements. Each shared component can be used by multiple developers to create WebDB components.

site

See *WebDB site*.

site administrator

One of three site privileges, which provides a user the full set of privileges for an entire web site. The site administrator privilege is granted automatically to the user name that created the WebDB site using the Site Creating Wizard.

site contact

The e-mail address of the person (or generic job title) designated as the primary contact for the WebDB site. The e-mail address displays at the bottom of each page as the webmaster's address. The default value is 'Webmaster'.

site log

A table of all events and related information gathered during the usage of a WebDB site. Used to generate site statistics reports and graphs.

site map

A WebDB site feature that displays the hierarchical organization of all folders in a WebDB web site that the user have privileges to view or access. Users can click any folder link in the hierarchy to display that folder's main page.

site privileges

Privileges which are granted to site-wide functionality. There are three site privileges: News Administrator, Layout Administrator, and Site Administrator.

site statistics

Report tables and bar graphs to provide detailed and summary information on page requests, users and groups, item requests and searches.

snapshot

A table that contains the results of a query on one or more tables, called master tables, in a remote database.

snapshot log

A table associated with the master table of a snapshot. It tracks changes to the master table.

status code

See *version*.

stored procedure

See *procedure*.

structured U/I template

A shared component that controls the look and feel of WebDB components. Structured U/I templates display the same image and text in the same location on every component that uses the template.

style

A set of values and parameters that controls the look and feel of web pages in a WebDB site. Styles can control the look and feel of all the pages in the entire site, or they can be stored in folders and control only those pages within that folder.

style administrator

A user who has special privileges to maintain and enforce display settings and site wide settings that affect the look and feel of a web site.

style privilege

One of three site privileges that allows a user to make changes to the look and feel of WebDB site pages.

substitution tag

A tag used to create unstructured U/I templates. When the HTML code that creates the template executes, substitution tags dynamically embed components, titles, headings, and other elements into the template.

SYLK

The file format used by the Microsoft Excel program to define formulas and data in spreadsheet, as well as transfer spreadsheet content from one file to another.

synonym

A name assigned to a table or view that can thereafter be used to refer to it.

system purge

Causes all items in a WebDB site that are marked as deleted or expired to be deleted from the database.

table

The basic storage structure in a relational database.

tablespace

An allocation of space in the database that can contain objects.

temporary tablespace

An allocation of space in the database used for the creation of temporary table segments for operations such as sorting table rows.

text item

A text item is text (up to 32KB) which has been stored in a WebDB site's host database using the Item Wizard. Each text item is displayed by its title on the home page or folder page where it was added, as a link to the text itself. When the item is clicked by an end user, the text is displayed by the web browser.

tree view

see *site map*.

trigger

A stored procedure associated with a table. It executes before or after one or more specified events.

unstructured U/I template

A shared component that controls the look and feel of WebDB components. Unstructured U/I templates are based on HTML code that, when executed, dynamically embeds components, titles, headings, and other elements.

URL item

An item defined as type 'URL' when it was created using the Item Wizard, and stored in the site's host database. The title of the item is displayed as a link. End users click the link to display the web site page that the link references.

user name

In WebDB, identical to a schema name. A unique string of characters identifying an authorized user's account on an Oracle database. User accounts are created and managed by the database administrator, or directly in a WebDB site by the site administrator. A user who logs into WebDB with the user name Scott can by default create components in the SCOTT schema

user interest list

A set of links displayed in a folder owner's personal home page under the User Interest List banner.

user interface component

See *component*.

user interface (U/I) template

A shared component that controls the look and feel of WebDB components. Selecting a U/I template when building a component automatically selects a title on the page where the component is displayed, a title background, links to other web pages, and background colors and images.

version

Indicates the status of a stored procedure that contains a WebDB component. For example, ARCHIVE indicates an old version of the component that is being saved in the database. PRODUCTION with VALID PACKAGE indicates the most recent version of the component, which will run without errors. PRODUCTION with INVALID PACKAGE indicates that the most recent version of the component contains errors. There can be multiple versions of the same component.

version control

Archiving WebDB site items based on creation dates. If version control is enabled, a new copy of an item is created whenever a change is made to the original.

view

A virtual table whose rows do not actually exist in the database, but which is based on a table that is physically stored in the database.

view privilege

A privilege that allows a user to view any item in a folder, except items that have expired or have been deleted.

visited link

A link which is displayed in a different color than unvisited links to signify that the user has clicked it at least once before during this browser session.

web server

A program that delivers web pages.

WebDB Component

See *component*.

WebDB Component Item

A WebDB Component item is a WebDB Component which has been created using the and stored in the host database, using the Item Wizard. The title is displayed on the item's folder page (or the home page) as a link. When the item is clicked by an end user, the WebDB Component executes, and end users see the results charts, forms, reports, etc.) displayed in their web browser.

WebDB roles

Two special types of roles that control the user's view of the WebDB product. The DBA role provides the user access to all WebDB menus and all privileges. The WEBDB_DEVELOPER role provides the user access to all WebDB menus except System Administration and Monitoring. Users with this role can build components in the their own schema, plus any schemas in which the DBA has granted build and browse privileges.

WebDB site

A WebDB site is a web site created using the Site Creation Wizard in WebDB. Each WebDB site contains all of the site management tools provided by WebDB. Authorized users develop the site structure by creating and organizing folders, which are containers for the web site content, identified as items. WebDB uses the contents of each folder to automatically generate home and main folder pages, and other pages as required.

wildcard

In WebDB, the percent (%) character, which is used to mean any single character or a contiguous set of characters within a word or phrase.

wizard

A graphical interface that guides a user step by step through a process. In WebDB, there are wizards for creating of creating components, objects, web sites, and items within web sites.

Part VI

Index

Index

A

access

- component, 4-16
- database object, 2-10
- menu, 5-7
- schema, 2-8
- WebDB site, 7-22
- WebDB site folder, 7-22, 7-24, 7-26

announcement item

- adding to a WebDB site, 8-9

application

- building, 5-1

Arabic characters, 1-68

B

break report

- building, 4-22

Browse In privileges

- granting, 2-8

Build In privileges

- granting, 2-8

C

category

- creating in a WebDB site, 7-6

chart

- building, 4-27

color

- adding to a component, 4-9

Common Gateway Interface (CGI)

- about, 1-3

- setting up, 1-57

component

- access, 4-16
- building, 4-1
- building a chart, 4-27
- building a form, 4-3
- building a menu, 5-2
- building a report, 4-19
- building shared components, 4-30
- editing a form, 4-7
- editing a menu, 5-4
- editing a report, 4-20
- linking to other components, 5-1
- using a link, 5-11
- using a List of Values, 4-34

Create Charts Wizard, 4-27

Create Forms Wizard, 4-3

Create Procedure Wizard, 3-5

Create Reports Wizard, 4-19

Create Table Wizard, 3-3

custom item type

- creating in a WebDB site, 7-9

custom item type item

- adding to a WebDB site, 8-5

D

database object

- browsing, 3-1
- building, 3-1
- building a procedure, 3-5
- building a table, 3-3
- executing a procedure, 3-11
- granting privileges, 2-10

- querying a table, 3-6
- date and time configuration, 1-68
- deinstalling
 - on Solaris, 1-52
 - on Windows NT, 1-22

E

- Edit Mode, xxvi
- environment variables
 - setting after installation, 1-62

F

- field label
 - changing in a form, 4-8
- folder
 - access privileges, 7-24, 7-26
 - applying a style, 7-19
 - creating in a WebDB site, 7-3
 - granting access to a group, 7-29
 - public access, 7-22
- form
 - adding color, 4-9
 - adding PL/SQL, 4-13
 - adding supporting text, 4-11
 - building, 4-3
 - changing field label, 4-8
 - editing, 4-7
 - using a List of Values, 4-34

G

- group
 - creating, 7-26
 - granting folder access privileges, 7-29
 - granting WebDB site folder access privileges, 7-26

I

- installation
 - Solaris, 1-23
 - Windows NT, 1-4
- interMedia Text

- configuring, 1-63
- creating indexes, 1-66
- item
 - adding a custom item type item, 8-5
 - adding a news item, 8-7
 - adding a quickpick item, 8-11
 - adding a regular item, 8-3
 - adding an announcement item, 8-9
 - adding an item requiring approval, 8-13
 - adding to a WebDB site, 8-3, 8-5, 8-7, 8-9, 8-11, 8-13
 - approving, 8-16
 - editing, 8-19

L

- link
 - building, 5-8
 - testing, 5-10
 - using in a component, 5-11
- List of Values
 - building, 4-31
 - testing, 4-33
 - using in a component, 4-34
 - using in a form, 4-34
 - using in a report, 4-36
- listener
 - about, 1-3
 - configuring after installation, 1-53
 - installing on remote machine, 1-54
 - Solaris typical installation, 1-34
 - starting manually, 1-69
 - Windows NT custom install, 1-19
- LOV
 - building, 4-31
 - testing, 4-33
 - using in a component, 4-34
 - using in a form, 4-34
 - using in a report, 4-36

M

- menu
 - adding role-level security, 5-7
 - building, 5-2

editing, 5-4

N

news item

adding to a WebDB site, 8-7

O

online help

accessing, xxvii

Oracle Application Server (OAS)

configuring the PL/SQL cartridge, 1-59

Oracle WebDB

accessing online help, xxvii

exiting, xx

installing, 1-4, 1-23

navigating, xxi

overview, xvii

starting, xix

Oracle WebDB privileges

granting, 2-8

Oracle WebDB role

adding a user, 2-5

Oracle WebDB site

access, 7-22

adding an item, 8-3, 8-5, 8-7, 8-9, 8-11, 8-13

Administration page, xxvi

assigning a site administrator, 6-7

creating in the database, 6-2

designing, 7-1

displaying, xxiv

editing an item, 8-19

entering Edit Mode, xxvi

logging on, xxv

managing content, 8-1

structure, 7-3

style, 7-13

P

parameterized report

building, 4-25

perspective

creating in a WebDB site, 7-8

PL/SQL

adding to a component, 4-13

PL/SQL cartridge

about, 1-3

adding to OAS server, 1-59

PL/SQL Gateway

configuring after installation, 1-53

PL/SQL web toolkit

Solaris custom installation, 1-45

Solaris typical installation, 1-33

Windows NT installation, 1-17, 1-29

privileges

Browse In, 2-8

Build In, 2-8

database object, 2-10

execute component, 4-16

WebDB site folder, 7-22, 7-24, 7-26

procedure

building, 3-5

executing, 3-11

public access

to a WebDB site folder, 7-22

public WebDB site folder, 7-22

Q

quickpick item

adding to a WebDB site, 8-11

R

regular item

adding to a WebDB site, 8-3

report

adding a parameter, 4-25

adding breaks, 4-22

adding summary information, 4-20

building, 4-19

editing, 4-20

using a List of Values, 4-36

required support files, 1-20

role

adding a user, 2-5, 2-14

creating, 2-12

Role Manager

- using to add users to a role, 2-14
- using to create a role, 2-12

S

- shared components
 - building, 4-30
 - building a link, 5-8
 - building a List of Values, 4-31
 - testing a link, 5-10
 - testing a List of Values, 4-33
 - using a link, 5-11
 - using a List of Values, 4-34
- site administrator
 - assigning, 6-7
- Site Creation Wizard, 6-2
- Solaris
 - installation, 1-23
- structure
 - of WebDB sites, 7-3
- style
 - applying to a WebDB site folder, 7-19
 - designing for a WebDB site, 7-13
- summary report
 - building, 4-20
- system requirements, 1-2

T

- table
 - building, 3-3
 - querying, 3-6
- TNS names alias, 1-54
- troubleshooting, 1-69

U

- user
 - adding to a role, 2-5, 2-14
 - creating, 2-2
 - granting Browse In and Build In privileges, 2-8
 - granting component execute privileges, 4-16
 - granting database object privileges, 2-10
 - granting WebDB site folder access
 - privileges, 7-24

- managing, 2-1
- User Manager
 - using to add a user to a role, 2-5
 - using to create a user, 2-2
 - using to grant Browse In and Build In
 - privileges, 2-8
 - using to grant database object privileges, 2-10

W

- web server, 1-3
- WebDB
 - accessing online help, xxvii
 - exiting, xx
 - installing, 1-4, 1-23
 - navigating, xxi
 - overview, xvii
 - starting, xix
- WebDB listener
 - starting manually, 1-69
- WebDB privileges
 - granting, 2-8
- WebDB role
 - adding a user, 2-5
- WebDB site
 - access, 7-22
 - adding an item, 8-3, 8-5, 8-7, 8-9, 8-11, 8-13
 - Administration page, xxvi
 - assigning a site administrator, 6-7
 - creating in the database, 6-2
 - designing, 7-1
 - displaying, xxiv
 - editing an item, 8-19
 - entering Edit Mode, xxvi
 - logging on, xxv
 - managing content, 8-1
 - structure, 7-3
 - style, 7-13
- Windows NT
 - installing on, 1-4